Development of Prototype

Occupational Information Network (O*NET)

Content Model

O*NET
The Occupational Information Network

Volume II: Appendices

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NOTICE


This report, submitted by The American Institutes for Research as a major deliverable under this contract, describes the types of occupational information that will be included in the prototype as well as the procedures used in their development. This "content model" will provide the framework for continued development of the DOT replacement system – O*NET, The Occupational Information Network.

Because of the developmental nature of O*NET, the information presented in this report should be considered as "work in progress" and subject to revision and refinement as O*NET development continues.
Acknowledgements

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Norman G. Peterson, American Institutes for Research, Project Director
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APPENDIX A

SKILLS QUESTIONNAIRE
Skills Questionnaire
Instructions for Making Skill Ratings

In this questionnaire you will be presented with a list of 46 skills. Some of the skills are developed over time and are used not only to do work but to learn other skills; examples include Reading Comprehension, Writing, and Speaking. Other skills are important for performance on many jobs; examples include Idea Generation, Troubleshooting, and Time Management.

For each skill, please make the following three ratings: **LEVEL**, **IMPORTANCE**, and **JOB ENTRY REQUIREMENT**.

(1) **LEVEL.** Ask yourself, "What level of this skill is needed to perform this job?" To help you make this judgment, the LEVEL scale includes descriptions of activities requiring high, medium, and low levels of the skill. These are only examples, so they may or may not apply to the specific job you are describing.

Use the example descriptions to select the number on the scale that indicates the skill level required by the job, and mark through the appropriate number, from 1 (indicating that a very low level of the skill is required) to 7 (indicating that a very high level of the skill is required) on the LEVEL scale. For example, the level of "Reading Comprehension" needed for one job might be much higher than that needed for another job.

**THE NOT-RELEVANT (NR) RESPONSE.** If the skill is NOT RELEVANT at all to performance on the job, mark through the NR circle that appears at the bottom of the LEVEL scale. Carefully read all of the level descriptions before selecting the NR option. If you select NR, however, there is no need to complete the IMPORTANCE and JOB ENTRY REQUIREMENT ratings described below.

(2) **IMPORTANCE.** (Complete only if a 1 to 7 LEVEL rating was selected.) Ask yourself, "How important is this skill to performance on this job?" For example, "Information Gathering" might be very important for one job, but less important for another job. For the second job, however, "Listening/Questioning" might be very important.

Rate the IMPORTANCE of the skill for performance on the job by marking through the appropriate number, from 1 (indicating that the skill is of little or no importance) to 5 (indicating that the skill is very important) on the IMPORTANCE scale.

(3) **JOB ENTRY REQUIREMENT.** (Complete only if a 1 to 7 LEVEL rating was selected.) Bearing in mind the LEVEL of the skill that is needed to perform the job, ask yourself, "Is this level of the skill required for entry to this job?" For example, "Reading Comprehension" might be needed by an employee before starting one job. However, "Troubleshooting" might not be necessary before starting a different job. "Troubleshooting" might be learned during on-the-job training.
Rate the JOB ENTRY REQUIREMENT for the job by marking through the appropriate number, either 1 (indicating that the level of the skill is required for entry on the job) or 2 (indicating that the level of the skill can be learned on the job).

Notice that the LEVEL of a skill and the IMPORTANCE of the skill are different. For example, "Reading Comprehension" can be high in IMPORTANCE for two different jobs, but the LEVEL of "Reading Comprehension" that an employee in one job needs is not as high as the LEVEL of "Reading Comprehension" for an employee in another job.
Below is an example completed by an employee in a particular job. For the LEVEL rating, the employee believes that a low-to-medium level of "Reading Comprehension" is needed to perform this job, so the 3 is selected on the rating scale. For the IMPORTANCE rating, the employee believes that "Reading Comprehension" is "Very Important" for performing this job, so the 4 is selected on the rating scale. For the JOB ENTRY REQUIREMENT rating, this employee believes that a person must have reached the level of "Reading Comprehension" required for the job before being hired, so the 1 is selected. These judgments are, of course, just examples. The job you are describing may be very different.

# 1. Reading Comprehension

Understanding written sentences and paragraphs in work related documents.

**Level**

- **HIGH**
- **LOW**

**Importance**

- **Not Important**
- **Somewhat Important**
- **Important**
- **Very Important**
- **Extremely Important**

**Job Entry Requirement**

- **YES**, it is required for entry on the job.
- **NO**, it can be learned on the job.
Below is a second example completed by an employee in a different job. This employee does not believe that "Management of Personnel Resources" is at all relevant for this job. Therefore, the NR option is selected at the bottom of the LEVEL rating scale. Notice that, because the NR option was selected, the IMPORTANCE and JOB ENTRY REQUIREMENT ratings were not completed.

46. Management of Personnel Resources

Motivating, developing, and directing people as they work, identifying the best people for the job.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
- **LOW**

1. Planning, implementing and managing recruitment, training, and incentive programs for a high performance company.
2. Directing the activities of a road repair crew with minimal disruption of traffic flow.
3. Encouraging a co-worker who is having difficulty finishing a piece of work.
4. Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

1 2 3 4 5

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.

Turn the page to begin the Skills Questionnaire.
1. Reading Comprehension

Understanding written sentences and paragraphs in work related documents.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
- **LOW**
- **NR** Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. **YES**, it is required for entry on the job.
2. **NO**, it can be learned on the job.
2. Active Listening

Listening to what other people are saying and asking questions as appropriate.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7. Presiding as judge in a complex legal disagreement.
  - 6.
  - 5.
  - 4. Answering inquiries regarding credit references.
  - 3.
  - 2. Taking a customer's order.
  - 1.
  - NR. Not relevant at all for performance on this job.

**Importance**

How important is this skill to performance on this job?

- 1.
- 2.
- 3. Important
- 4. Very Important
- 5. Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

- 1. YES, it is required for entry on the job.
- 2. NO, it can be learned on the job.
3. Writing

Communicating effectively with others in writing as indicated by the needs of the audience.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
- **LOW**
- **NR** Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
4. Speaking

Talking to others to effectively convey information.

**Level**

What level of this skill is needed to perform this job?

- HIGH
- LOW

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
5. Mathematics

Using mathematics to solve problems.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7: Developing a mathematical model to simulate and resolve an engineering problem.
  - 6:
  - 5:
  - 4: Calculating the square footage of a new home under construction.
  - 3:
  - 2:
  - 1:
  - NR: Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- Not Important
  - 1
- Somewhat Important
  - 2
- Important
  - 3
- Very Important
  - 4
- Extremely Important
  - 5

**Job Entry Requirement**

Is this level of skill required for entry to this job?

- 1. **YES**, it is required for entry on the job.
- 2. **NO**, it can be learned on the job.
6. Science

Using scientific methods to solve problems.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - Conducting analyses of aerodynamic systems to determine the practicality of an aircraft design.
- **LOW**
  - Conducting product tests to ensure safety standards are met, following written instructions.
  - Conducting standard tests to determine soil quality.

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
7. Critical Thinking  Using logic and analysis to identify the strengths and weaknesses of different approaches.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7  Writing a legal brief challenging a federal law.
  - 6
  - 5
  - 4
  - 3
  - 2
  - 1

- **LOW**

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
8. Active Learning Working with new material or information to grasp its implications.

Level
What level of this skill is needed to perform this job?

HIGH

7. Identifying the implications of a new scientific theory for product design.

6.

5.

4. Determining the impact of new menu changes on a restaurant's purchasing requirements.

3.

2.

1.

LOW

NR. Not relevant at all for performance on this job.

Importance
How important is this skill to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5

Job Entry Requirement
Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
9. Learning Strategies

Using multiple approaches when learning or teaching new things.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7: Applying principles of educational psychology to developing new teaching methods.
- **LOW**
  - 1: Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- 1: Not Important
- 2: Somewhat Important
- 3: Important
- 4: Very Important
- 5: Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
10. Monitoring

Assessing how well one is doing when learning or doing something.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7
  - Reviewing corporate productivity and developing a plan to increase productivity.

- **LOW**
  - 1
  - Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- 1
  - Not Important
- 2
  - Somewhat Important
- 3
  - Important
- 4
  - Very Important
- 5
  - Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
11. Social Perceptiveness

Being aware of others' reactions and understanding why they react the way they do.

**Level**

What level of this skill is needed to perform this job?

- HIGH
- LOW
- NR (Not relevant at all for performance on this job)

**Counseling depressive patients during a crisis period.**

**Being aware of how a co-worker's promotion will affect a work group.**

**Noticing that customers are angry because they have been waiting too long.**

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
12. Coordination

Adjusting actions in relation to others’ actions.

Level

What level of this skill is needed to perform this job?

- HIGH
  - Working as director of a consulting project calling for interaction with multiple subcontractors.
- LOW
  - Working with others to put a new roof on a house.
  - Scheduling appointments for a medical clinic.
- NR
  - Not relevant at all for performance on this job.

Importance

How important is this skill to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5

Job Entry Requirement

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
13. Persuasion

Persuading others to approach things differently.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7
  - Changing the opinion of the jury in a complex legal case.

- **LOW**
  - 6
  - Convincing a supervisor to purchase a new copy machine.

- **1**
  - Soliciting donations for a charity.

- **NR**
  - Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- **Not Important**
  - 1

- **Somewhat Important**
  - 2

- **Important**
  - 3

- **Very Important**
  - 4

- **Extremely Important**
  - 5

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. **YES**, it is required for entry on the job.
2. **NO**, it can be learned on the job.
14. Negotiation

Bringing others together and trying to reconcile differences.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - Working as an ambassador in negotiating a new treaty.
- **LOW**
  - Contracting with a wholesaler to sell items at a given cost.
  - Presenting justification to a manager for altering work schedule.
- **NR** Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- Not Important (1)
- Somewhat Important (2)
- Important (3)
- Very Important (4)
- Extremely Important (5)

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
15. Instructing

Teaching others how to do something.

Level

What level of this skill is needed to perform this job?

HIGH

1. Demonstrating surgical procedures to interns in a teaching hospital.

2. Instructing a co-worker in how to operate a software program.

3. Instructing a new employee in the use of a time clock.

LOW

NR Not relevant at all for performance on this job

Importance

How important is this skill to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5

Job Entry Requirement

Is this level of skill required for entry to this job?

1) YES, it is required for entry on the job.
2) NO, it can be learned on the job.
16. Service Orientation

Actively looking for ways to help people.

**Level**
What level of this skill is needed to perform this job?

- HIGH
  - 7 Directing relief agency operations in a disaster area.
  - 6 Making flight reservations for customers, using airline reservation system.
  - 5
  - 4 Asking customers if they would like cups of coffee.
  - 3
  - 2
  - 1
  - NR Not relevant at all for performance on this job

**Importance**
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**Job Entry Requirement**
Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
17. Problem Identification

Identifying the nature of problems.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7
  - Analyzing corporate finances to develop a restructuring plan.

- **LOW**
  - 1
  - Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

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**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
18. Information Gathering

Knowing how to find information and identifying essential information.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7
  - Analyzing industry indices and competitors' annual reports to determine feasibility of expansion.
- **LOW**
  - 1
  - Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
19. Information Organization

Finding ways to structure or classify multiple pieces of information.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7  Developing a prototype for a new database system.
  - 6
  - 5
  - 4  Classifying library materials according to subject matter.
  - 3
  - 2  Laying out tools to complete a job.
  - 1
- **LOW**
- **NR** Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

- 1
- 2 3
- 4
- 5

**Job Entry Requirement**

Is this level of skill required for entry to this job?

- YES, it is required for entry on the job.
- NO, it can be learned on the job.
20. Synthesis/Reorganization

Reorganizing information to get a better approach to problems or tasks.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7: Determining the best order in which to present evidence in a criminal trial.
  - 6
  - 5
  - 4: Redesigning a floor layout to take advantage of new manufacturing techniques.
  - 3
  - 2
  - 1

- **LOW**

**Importance**

How important is this skill to performance on this job?

- 1: Not relevant at all for performance on this job
- 2: Not important
- 3: Somewhat important
- 4: Important
- 5: Very important
- 6: Extremely important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

- 1. YES, it is required for entry on the job.
- 2. NO, it can be learned on the job.
21. Idea Generation
Generating a number of different approaches to problems.

**Level**
What level of this skill is needed to perform this job?

- HIGH
- LOW
- NR Not relevant at all for performance on this job

- Developing alternative transportation plans for a growing urban area.
- Developing recruitment strategies.
- Finding alternative routes while making deliveries.

**Importance**
How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**
Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
22. Idea Evaluation

Evaluating the likely success of an idea in relation to the demands of the situation.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
- **LOW**

1. Analyzing probable outcomes of public health policies to combat a disease epidemic.
2. Evaluating and selecting employee suggestions for possible implementation.
3. Determining which procedure to apply to get a report typed more quickly.
4. NR: Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
23. Implementation
Planning

Developing approaches for implementing an idea.

**Level**
What level of this skill is needed to perform this job?

- HIGH

- LOW

1. Scheduling and coordinating a one-day meeting.
2. Scheduling deliveries based on distance between sites, staffing time, availability of vehicles, and cost.
3. Developing and implementing a plan to provide emergency relief for a major metropolitan area.

**Importance**
How important is this skill to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
--- | --- | --- | --- | ---
1 | 2 | 3 | 4 | 5

**Job Entry Requirement**
Is this level of skill required for entry to this job?

1) YES, it is required for entry on the job.
2) NO, it can be learned on the job.
24. Solution Appraisal

Observing and evaluating the outcomes of a problem solution to identify lessons learned or redirect efforts.

Level

What level of this skill is needed to perform this job?

HIGH

1. Reviewing, assessing, and modifying the implementation of a new business plan.

2. Measuring customer satisfaction after the introduction of new billing procedures.

LOW

3. Identifying and correcting an error made in preparing a report.

NR Not relevant at all for performance on this job

Importance

How important is this skill to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5

Job Entry Requirement

Is this level of skill required for entry to this job?

1) YES, it is required for entry on the job.
2) NO, it can be learned on the job.
25. Operations Analysis

Analyzing needs and product requirements to create a design.

**Level**
What level of this skill is needed to perform this job?

- **HIGH**
  - 7 - Identifying the control system needed for a new process production plant.
  - 6
  - 5
  - 4 - Suggesting changes in software to make a system more user-friendly.
  - 3
  - 2
  - 1
  - **NR** Not relevant at all for performance on this job

**Importance**
How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

1 2 3 4 5

**Job Entry Requirement**
Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
26. Technology Design

Generating or adapting equipment and technology to serve user needs.

**Level**
What level of this skill is needed to perform this job?

- **HIGH**
  - Creating new technology for producing industrial diamonds.

- **LOW**
  - Redesigning the handle on a hand tool for easier gripping.
  - Adjusting exercise equipment for use by a customer.

**Importance**
How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**
Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
27. Equipment Selection

Determining the kind of tools and equipment needed to do a job.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
- **LOW**

1. Identifying the equipment needed to produce a new product line.
2. Choosing a software application to use to complete a work assignment.
3. Selecting a screwdriver to use in adjusting a vehicle's carburetor.
4. Not relevant at all for performance on this job.

**Importance**

How important is this skill to performance on this job?

- 1. Not Important
- 2. Somewhat Important
- 3. Important
- 4. Very Important
- 5. Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
28. Installation

Installing equipment, machines, wiring, or programs to meet specifications.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7: Installing a "one of a kind" process production molding machine.
  - 6
  - 5
  - 4: Installing new switches for a telephone exchange.
  - 3
  - 2: Installing a new air filter in an air conditioner.
- **LOW**
  - 1
- **NR**: Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
<th>Very Important</th>
<th>Extremely Important</th>
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<td>1</td>
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</tbody>
</table>

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. **YES**, it is required for entry on the job.
2. **NO**, it can be learned on the job.
29. Programming

Writing computer programs for various purposes.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - Writing expert system programs to analyze ground radar geological data for probable existence of mineral deposits.
- **LOW**
  - Writing a statistical analysis program to analyze demographic data.
  - Writing a program in BASIC to sort objects in a database.

**Importance**

How important is this skill to performance on this job?

- **Not Important**
- **Somewhat Important**
- **Important**
- **Very Important**
- **Extremely Important**

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. **YES**, it is required for entry on the job.
2. **NO**, it can be learned on the job.
30. Testing

Conducting tests to determine whether equipment, software, or procedures are operating as expected.

**Level**

What level of this skill is needed to perform this job?

- HIGH
- LOW

**Importance**

How important is this skill to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
31. Operation Monitoring

Watching gauges, dials, or other indicators to make sure a machine is working properly.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - Monitoring and integrating control feedback in a petrochemical processing facility to maintain production flow.

- **LOW**
  - Monitoring machine functions on an automated production line.
  - Monitoring completion times while running a computer program.

**Importance**

How important is this skill to performance on this job?

- **Not Important**
  - Somewhat Important
  - Important
  - Very Important
  - Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
32. Operation and Control

Controlling operations of equipment or systems.

**Level**
What level of this skill is needed to perform this job?

- HIGH
  - Controlling aircraft approach and landing at a large airport during a busy period.

- LOW
  - Adjusting the speed of an assembly line equipment based on the type of product being assembled.
  - Adjusting the settings on a copy machine to make reduced size photocopies.

**Importance**
How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**
Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
33. Product Inspection

Inspecting and evaluating the quality of products.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7
  - 6
  - 5
  - 4
  - 3
  - 2
  - 1

- **LOW**
  - 0

**Establishing and monitoring quality control procedures for a large manufacturing operation.**

**Measuring new part requisitions for tolerance to specifications.**

**Inspecting a draft of a memorandum for clerical errors.**

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. **YES**, it is required for entry on the job.
2. **NO**, it can be learned on the job.
34. Equipment Maintenance

Performing routine maintenance and determining when and what kind of maintenance is needed.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
- **LOW**
- **NR** Not relevant at all for performance on this job

**Conducting maintenance checks on an experimental aircraft.**

**Clearing moving parts in production machinery.**

**Adding oil to an engine as indicated by a gauge or warning light.**

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

- **YES**, it is required for entry on the job.
- **NO**, it can be learned on the job.
35. Troubleshooting

Determining what is causing an operating error and deciding what to do about it.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7
  - Directing the debugging of control code for a new operating system.

- **LOW**
  - 1
  - Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- Not Important: 1
- Somewhat Important: 2
- Important: 3
- Very Important: 4
- Extremely Important: 5

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
36. Repairing

Repairing machines or systems using the needed tools.

**Level**
What level of this skill is needed to perform this job?

- **HIGH**
  - 7: Repairing structural damage to a building following an earthquake.
  - 6
  - 5
  - 4: Replacing a faulty hydraulic valve.
  - 3
  - 2
  - 1
  - **NR**: Not relevant at all for performance on this job

**Importance**
How important is this skill to performance on this job?

<table>
<thead>
<tr>
<th>Not Important</th>
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**Job Entry Requirement**
Is this level of skill required for entry to this job?

1. **YES**, it is required for entry on the job.
2. **NO**, it can be learned on the job.
37. Visioning

Developing an image of how a system should work under ideal conditions.

**Level**

What level of this skill is needed to perform this job?

- HIGH
- LOW
- NR (Not relevant at all for performance on this job)

**Importance**

How important is this skill to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
38. Systems Perceptions

Determining when important changes have occurred in a system or are likely to occur.

**Level**

What level of this skill is needed to perform this job?

<table>
<thead>
<tr>
<th>Level</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
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</table>

- Identifying how changes in tax laws are likely to affect preferred sites for manufacturing operations in different industries.
- Observing conditions that may impede the flow of work on an assembly line and notifying personnel that corrective action is necessary.
- Identifying how an argument among team members might affect the day's work.

**Importance**

How important is this skill to performance on this job?

<table>
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<th>Importance</th>
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</table>

**Job Entry Requirement**

Is this level of skill required for entry to this job?

- **1. YES**, it is required for entry on the job.
- **2. NO**, it can be learned on the job.
39. Identification of Downstream Consequences

Determining the long-term outcomes of a change in operations.

Level

What level of this skill is needed to perform this job?

HIGH

7

Determining changes that might occur in an industry if a new piece of legislation is passed.

6

Determining how the introduction of a new piece of equipment will affect production rates.

5

Determining how loss of a team member will affect the completion of a job.

4

2

1

Not relevant at all for performance on this job

Importance

How important is this skill to performance on this job?

Not Important

Somewhat Important

Important

Very Important

Extremely Important

1

2

3

4

5

Job Entry Requirement

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.

2. NO, it can be learned on the job.
40. Identification of Key Causes

Identifying the things that must be changed to achieve a goal.

Level
What level of this skill is needed to perform this job?

HIGH

LOW

NR Not relevant at all for performance on this job

Importance
How important is this skill to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5

Job Entry Requirement
Is this level of skill required for entry to this job?

1 YES, it is required for entry on the job. 2 NO, it can be learned on the job.

Identifying the changes in organizational policy needed to encourage research and development efforts.

Identifying the major reasons why a client might be unhappy with a product.

Determining which route to take to deliver a passenger to a destination quickly.
41. Judgment and Decision Making

Weighing the relative costs and benefits of a potential action.

**Level**

What level of this skill is needed to perform this job?

- HIGH
- LOW

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
42. Systems Evaluation

Looking at many indicators of system performance, taking into account their accuracy.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7 Evaluating the long-term performance problem of a company.
  - 6 Determining why a manager has underestimated production costs.
  - 5 Determining why a co-worker has been overly optimistic about how long it would take to complete a task.

- **LOW**
  - 1 NR Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

<table>
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</table>

**Job Entry Requirement**

Is this level of skill required for entry to this job?

- 1 YES, it is required for entry on the job.
- 2 NO, it can be learned on the job.
43. Time Management

Managing one's own time and the time of others.

**Level**
What level of this skill is needed to perform this job?

- **HIGH**
  - 7
  - Allocating the time of scientists to multiple research projects.

- **LOW**
  - 1
  - Not relevant at all for performance on this job

**Importance**
How important is this skill to performance on this job?

- 1 Not Important
- 2 Somewhat Important
- 3 Important
- 4 Very Important
- 5 Extremely Important

**Job Entry Requirement**
Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
44. Management of Financial Resources

Determining how money will be spent to get the work done, and accounting for these expenditures.

**Level**

What level of this skill is needed to perform this job?

- HIGH
- LOW

**Importance**

How important is this skill to performance on this job?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
<th>Very Important</th>
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</table>

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
45. Management of Material Resources

Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
  - 7. Determining the computer system needs of a large corporation and monitoring use of the equipment.
- **LOW**
  - 1. Not relevant at all for performance on this job
  - 2. Renting a meeting room for a management meeting.
  - 3. Evaluating an annual uniform service contract for delivery drivers.

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
46. Management of Personnel Resources

Motivating, developing, and directing people as they work, identifying the best people for the job.

**Level**

What level of this skill is needed to perform this job?

- **HIGH**
- **LOW**
- **NR** Not relevant at all for performance on this job

**Importance**

How important is this skill to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Entry Requirement**

Is this level of skill required for entry to this job?

1. YES, it is required for entry on the job.
2. NO, it can be learned on the job.
APPENDIX B

KNOWLEDGES QUESTIONNAIRE
Instructions for Making Knowledge Ratings

In this questionnaire you will be presented with a list of 33 knowledges. Knowledges are sets of facts and principles needed to address problems and issues in particular parts of a job.

For each knowledge, please make three ratings: LEVEL, IMPORTANCE, and JOB SPECIALTY REQUIREMENTS.

(1) LEVEL. Ask yourself, "What level of this knowledge is needed to perform this job?" To help you make this judgment, the LEVEL has three special features. First, each knowledge is named and then defined. Second, to the left of the scale are descriptions of high and low levels of the knowledge. Third, to the right of each scale are examples of specific tasks that require different levels of the knowledge. These are only examples, so they may or may not apply to the specific job you are describing. However, all of this information should help you make a judgement about the LEVEL of the knowledge required on the job you are describing. Please take the time to carefully read all of this information before making your ratings.

Use all of the information provided to select the number on the scale that indicates the knowledge level required by the job you are describing, and mark through the appropriate number, from 1 (indicating that a very low level of the knowledge is required) to 7 (indicating that a very high level of the knowledge is required) on the LEVEL scale. For example, the level of "Fine Arts" knowledge for one job might be higher than that for another job.

THE NOT-RELEVANT (NR) RESPONSE. If the knowledge is NOT RELEVANT at all to performance on the job, mark through the NR circle that appears at the bottom of the LEVEL scale. Carefully read all of the level descriptions before selecting the NR option. If you select NR, however, there is no need to complete the IMPORTANCE and JOB SPECIALTY REQUIREMENTS ratings described below.

(2) IMPORTANCE. (Complete only if a 1 to 7 LEVEL rating was selected.) Ask yourself, "How important is this knowledge to performance on this job?" For example, "Mathematics" knowledge might be very important for one job, but less important for another job. For the second job, however, "Medicine and Dentistry" knowledge might be very important.

Rate the IMPORTANCE of the knowledge for performance on the job by marking through the appropriate number, from 1 (indicating that the knowledge is of little or no importance) to 5 (indicating that the knowledge is very important) on the IMPORTANCE scale.

(3) JOB SPECIALTY REQUIREMENTS. (Complete only if a 1 to 7 LEVEL rating was selected.) Ask yourself, "Which of the following specialties are relevant to this job?"

Rate the JOB SPECIALTY REQUIREMENTS by marking through the appropriate letter, either R (indicating that the specialty is relevant) or NR (indicating that the specialty is not
relevant). If the job requires a specialty that is not listed, please write the specialty beside "Other(s)."

For example, an employee in a particular job might need "Sales and Marketing" knowledge. From the specialties listed, that employee would mark through R for "Retailing and Wholesaling" and R for "Vehicle Sales and Service." The employee would mark through NR next to all the other specialties listed.

Notice that the LEVEL of a knowledge and the IMPORTANCE of the knowledge are different. For example, "English Language" can be high in IMPORTANCE for two different jobs, but the LEVEL of "English Language" that an employee in one job needs may not be as high as the LEVEL of "English Language" for an employee in another job.
Below is an example completed by an employee in a particular job. For the LEVEL rating, this employee believes that a low-to-medium level of "Customer and Personal Service" knowledge is needed to perform this job, so the 3 is selected on the LEVEL rating scale. For the IMPORTANCE rating, the employee believes that "Customer and Personal Service" knowledge is "Very Important" for performing this job, so the 4 is selected on the IMPORTANCE rating scale. For the JOB SPECIALTY REQUIREMENTS rating, this employee selected the R next to "Travel Service" and "Hospitality Service" because knowledge of these specialties is important to the employee's job. The employee selected the NR next to all the other specialties. These judgments are, of course, just examples. The job you are describing may be very different.

5. **Customer and Personal Service**

Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques.

**Level**

What level of this knowledge is needed to perform this job?

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Responding to a citizen's request for assistance after a major natural disaster.</td>
</tr>
<tr>
<td>6</td>
<td>Catering a large wedding.</td>
</tr>
<tr>
<td>5</td>
<td>Working as a day care aide supervising ten children.</td>
</tr>
<tr>
<td>4</td>
<td>Running a hospital cleaning service.</td>
</tr>
<tr>
<td>3</td>
<td>Providing air flight arrival times over the phone.</td>
</tr>
<tr>
<td>2</td>
<td>Processing customer dry-cleaning drop-off.</td>
</tr>
<tr>
<td>1</td>
<td>Not relevant at all for performance on this job</td>
</tr>
</tbody>
</table>

**Importance**

How important is this knowledge to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

<table>
<thead>
<tr>
<th>Importance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>2</td>
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<td>4</td>
<td></td>
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<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark "R" for Relevant and "NR" for Not Relevant.)

- Barbering and Cosmetology R NR
- Bartending R NR
- Cashiering R NR
- Child Care and Home Management R NR
- Flight Attending R NR
- Food Preparation R NR
- Food Service R NR
- Hospitality Service R NR
- Housekeeping and Custodial R NR
- Laundry and Dry Cleaning R NR
- Meatcutting and Butchering R NR
- Travel Service R NR
- Other(s) R NR

(Please specify)
Below is a second example completed by an employee in a different job. This employee does not believe that "Biology" knowledge is at all relevant for this job. Therefore, the NR option is selected at the bottom of the LEVEL rating scale. Notice that, because the NR option was selected, the IMPORTANCE and JOB SPECIALTY REQUIREMENT ratings were not completed.

17. **Biology**

Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment.

**Level**

What level of this knowledge is needed to perform this job?

- 7: Isolating and identifying a microscopic virus.
- 6: Investigating the effects of pollution on marine plants and animals.
- 5: Dissecting a frog.
- 4: Feeding domestic animals.
- 3: Not relevant at all for performance on this job.

**Importance**

How important is this knowledge to performance on this job?

- 5: Extremely Important
- 4: Very Important
- 3: Important
- 2: Somewhat Important
- 1: Not Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark "R" for Relevant and "NR" for Not Relevant.)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Level</th>
<th>Specialty</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry</td>
<td>R</td>
<td>Marine and Aquatic Biology</td>
<td>R</td>
</tr>
<tr>
<td>Botany</td>
<td>R</td>
<td>Microbiology and Bacteriology</td>
<td>R</td>
</tr>
<tr>
<td>Cell and Molecular Biology</td>
<td>R</td>
<td>Nutritional Science</td>
<td>R</td>
</tr>
<tr>
<td>Ecology</td>
<td>R</td>
<td>Physiology</td>
<td>R</td>
</tr>
<tr>
<td>Genetics</td>
<td>R</td>
<td>Zoology</td>
<td>R</td>
</tr>
<tr>
<td>Other(s)</td>
<td></td>
<td>(Please specify)</td>
<td></td>
</tr>
</tbody>
</table>
1. Administration and Management

Knowledge of principles and processes involved in business and organizational planning, coordination, and execution. This includes strategic planning, resource allocation, manpower modeling, leadership techniques, and production methods.

**Level**

What level of this knowledge is needed to perform this job?

- Requires knowledge of high-level business and management principles and processes such as those required in large, multi-national organizations with diversified products or services.
- Requires knowledge of basic business and management principles and processes such as those required in small businesses with a single product or service.

**Importance**

How important is this knowledge to performance on this job?

- Managing a $10 million company.
- Administering a large retirement and nursing care facility.
- Monitoring progress of a project to ensure timely completion.
- Planning an effective staff meeting.
- Signing a pay voucher.

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>R</th>
<th>NR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Construction Management</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Engineering, Mathematical, and Sciences Management</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Food Service and Lodging Management</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Medical Service Management</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Personnel and Human Resource Management</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Public Administration</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Other(s)</td>
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</tbody>
</table>

(Please specify)
Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology.

### 2. Clerical

**Level**

What level of this knowledge is needed to perform this job?

- Requires knowledge of advanced clerical, stenographic, and word processing procedures and records management systems.
- Requires knowledge of simple clerical and filing procedures.

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not relevant at all for performance on this job</td>
</tr>
<tr>
<td>2</td>
<td>Requires knowledge of simple clerical and filing procedures</td>
</tr>
<tr>
<td>3</td>
<td>Requires knowledge of advanced clerical, stenographic, and word processing procedures and records management systems</td>
</tr>
</tbody>
</table>

**Importance**

How important is this knowledge to performance on this job?

<table>
<thead>
<tr>
<th>Importance</th>
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</tbody>
</table>

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.

- Banking Support
- Bookkeeping
- Computer Operations
- Data Entry
- Health Unit Coordinating
- Legal Secretarial
- Medical Secretarial
- Office Clerical
- Receptionist
- Stenography
- Stock and Warehousing
- Other(s) (Please specify)
3. Economics and Accounting

Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data.

**Level**

What level of this knowledge is needed to perform this job?

- **1** Requires knowledge of simple number and accounting procedures.
- **2** Requires knowledge of complex financial operations, regulations, agencies, and advanced cost accounting procedures.
- **3** Keeping a major corporation's financial records.
- **4** Approving a multi-million dollar loan to a real estate developer.
- **5** Developing financial investment programs for individual clients.
- **6** Keeping financial records for a family business.
- **7** Answering billing questions from credit card customers.

**Importance**

How important is this knowledge to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
--- | --- | --- | --- | ---
1 | 2 | 3 | 4 | 5

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark "R" for Relevant and "NR" for Not Relevant.)

- Accounting | R | NR
- Economics | R | NR
- Financial Management | R | NR
- Securities and Investments | R | NR
- Other(s) | (Please specify)
4. Sales and Marketing

Knowledge of principles and methods involved in showing, promoting, and selling products or services. This includes marketing strategies and tactics, product demonstration and sales techniques, and sales control systems.

Level

What level of this knowledge is needed to perform this job?

Requires knowledge of advanced marketing and sales principles and methods required to market and sell complex goods or services to new, large, or multiple clients with varying needs.

Requires knowledge of simple sales techniques required to sell simple items to existing customers.

Importance

How important is this knowledge to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5

Job Specialty Requirements

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

Advertising and Public Relations R NR Real Estate R NR
Fashion and Apparel R NR Retailing and Wholesaling R NR
Food Marketing R NR Vehicle Sales and Service R NR
Insurance R NR Other(s) (Please specify) R NR
Purchasing R NR
5. Customer and Personal Service

Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques.

**Level**

What level of this knowledge is needed to perform this job?

1. Requires knowledge of complex customer and personal service principles and processes for identifying and meeting complex demands of multiple clients with diverse needs.

2. Requires knowledge of basic customer and personal service processes for meeting demands of single clients with simple needs.

**Importance**

How important is this knowledge to performance on this job?

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<th>Important</th>
<th>Very Important</th>
<th>Extremely Important</th>
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</tbody>
</table>

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark "R" for Relevant and "NR" for Not Relevant.)

- Barbering and Cosmetology
  - Hospitality Service
- Bartending
  - Housekeeping and Custodial
- Cashiering
  - Laundry and Dry Cleaning
- Child Care and Home Management
  - Meatcutting and Butchering
- Flight Attending
  - Travel Service
- Food Preparation
  - Other(s) [Please specify]
- Food Service
  - R NR
6. Personnel and Human Resources

Knowledge of policies and practices involved in personnel/human resource functions. This includes recruitment, selection, training, and promotion regulations and procedures; compensation and benefits packages; labor relations and negotiation strategies; and personnel information systems.

**Level**

What level of this knowledge is needed to perform this job?

- Level 1: Requires knowledge of basic employment and personnel forms, practices, and procedures.
- Level 2: Requires knowledge of a broad range of employment and personnel practices, complex regulations, legal precedents, and labor negotiation principles.
- Level 3: Designing a new personnel selection and promotion system for the Army.
- Level 4: Conducting negotiations between labor and management to settle a dispute over wages.
- Level 5: Interviewing applicants for a secretarial position.
- Level 6: Filling out a medical claim form.
- Level 7: Not relevant at all for performance on this job

**Importance**

How important is this knowledge to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

Not at all Important: 1
Somewhat Important: 2
Important: 3
Very Important: 4
Extremely Important: 5

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Human Resource Management: R NR
- Interviewing and Hiring: R NR
- Labor Relations: R NR
- Management Analysis: R NR
- Personnel Research: R NR
- Training: R NR
- Other(s): (Please specify)
7. Production and Processing

Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods.

**Level**

What level of this knowledge is needed to perform this job?

Requires knowledge of advanced production, processing, and distribution techniques involved in large-scale manufacture and/or distribution of complex products.

Requires knowledge of simple production, processing, and distribution techniques involved in small-scale manufacture and/or distribution of simple products.

**Importance**

How important is this knowledge to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Clothing Production: R NR
- Food Processing and Production: R NR
- Home Furnishing Production: R NR
- Line Supervision: R NR
- Metal Production and Processing: R NR
- Printing and Publishing: R NR
- Quality Control and Inspection: R NR
- Other(s) (Please specify): 

863
8. **Food Production**

Knowledge of techniques and equipment for planting, growing, and harvesting of food for consumption including crop rotation methods, animal husbandry, and food storage/handling techniques.

**Level**

What level of this knowledge is needed to perform this job?

1. Requires knowledge of simple techniques involved in the small-scale production of single food products.
2. Requires knowledge of advanced techniques and equipment involved in the large-scale production of multiple food products.
3. Running a 100,000 acre farm.
4. Operating a commercial fishing boat.
5. Keeping an herb box in the kitchen.
6. Not relevant at all for performance on this job.

**Importance**

How important is this knowledge to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Agricultural and Business Management: R NR
- Agricultural Sciences: R NR
- Animal Husbandry and Production: R NR
- Animal Sciences: R NR
- Crop Production: R NR
- Fishing and Wildlife Management: R NR
- Food Sciences: R NR
- Other(s): (Please specify)
Computers and Electronics

Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming.

**Level**

What level of this knowledge is needed to perform this job?

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not relevant at all for performance on this job</td>
</tr>
<tr>
<td>2</td>
<td>Requires knowledge of basic electronic equipment and its use.</td>
</tr>
<tr>
<td>3</td>
<td>Using a word processor.</td>
</tr>
<tr>
<td>4</td>
<td>Operating a VCR to watch a pre-recorded training tape.</td>
</tr>
<tr>
<td>5</td>
<td>Fixing a two-way radio in order to transmit a message.</td>
</tr>
<tr>
<td>6</td>
<td>Creating a program to scan computer disks for viruses.</td>
</tr>
<tr>
<td>7</td>
<td>Requires knowledge of complex electronic principles and equipment.</td>
</tr>
</tbody>
</table>

**Importance**

How important is this knowledge to performance on this job?

<table>
<thead>
<tr>
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<td>4</td>
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</tr>
</tbody>
</table>

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>R</th>
<th>NR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Programming</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Computer Science</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Computer Technology</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Electrical and Electronics Technology</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Systems Analysis</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Other(s)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Please specify)
10. Engineering and Technology

Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications.

**Level**

What level of this knowledge is needed to perform this job?

- Requires knowledge of complicated engineering principles, devices, and structures.
- Requires knowledge of simple engineering devices.

**Importance**

How important is this knowledge to performance on this job?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Somewhat Important</th>
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</table>

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Aeronautical and Astronautical Engineering: R NR
- Chemical Engineering: R NR
- Civil Engineering: R NR
- Electrical Engineering: R NR
- Industrial Engineering: R NR

- Materials Engineering: R NR
- Mechanical Engineering: R NR
- Mining, Petroleum, and Nuclear Engineering: R NR
- Surveying: R NR

Other(s) (Please specify)
11. Design

Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models.

**Level**

What level of this knowledge is needed to perform this job?

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Developing detailed design plans for a new high rise office complex.</td>
</tr>
<tr>
<td>6</td>
<td>Understanding air conditioning and heating diagrams.</td>
</tr>
<tr>
<td>5</td>
<td>Planning for the remodeling of a kitchen.</td>
</tr>
<tr>
<td>4</td>
<td>Making furniture layouts for your home.</td>
</tr>
<tr>
<td>3</td>
<td>Drawing a straight line 4 3/16 inches long.</td>
</tr>
<tr>
<td>2</td>
<td>Requires knowledge of simple methods and tools to produce basic plans and drawings.</td>
</tr>
<tr>
<td>1</td>
<td>Requires knowledge of specialized methods, tools, and devices to create precise, highly complex and detailed plans, blueprints, or drawings.</td>
</tr>
<tr>
<td>NR</td>
<td>Not relevant at all for performance on this job.</td>
</tr>
</tbody>
</table>

**Importance**

How important is this knowledge to performance on this job?

<table>
<thead>
<tr>
<th>Importance</th>
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</tbody>
</table>

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark "R" for Relevant and "NR" for Not Relevant.)

- Architecture: R NR
- Drafting: R NR
- Industrial Design: R NR
- Interior Design: R NR
- Technical Theater Design: R NR
- Other(s): (Please specify)
12. **Building and Construction**

Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings.

### Level

What level of this knowledge is needed to perform this job?

1. Requires knowledge of basic construction techniques and materials required to build simple objects.
2. Fixing a plumbing leak in the ceiling.
3. Choosing the proper type of wood for adding a deck onto a house.
4. Sawing a board in half.
5. Estimating the cost of developing a housing project.
7. Not relevant at all for performance on this job

### Importance

How important is this knowledge to performance on this job?

<table>
<thead>
<tr>
<th>Not Important</th>
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</tbody>
</table>

### Job Specialty Requirements

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Bricklaying: R NR
- Carpentry: R NR
- Concrete: R NR
- Construction and Building Inspection: R NR
- Construction Equipment Operations: R NR
- Drywall and Plaster: R NR
- Electrical Power: R NR
- Painting and Paperhanging: R NR
- Plumbing: R NR
- Structural Metal: R NR
- Other(s): (Please specify)
13. Mechanical

Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance.

Level

What level of this knowledge is needed to perform this job?

Requires knowledge of use and maintenance of complex power tools and machinery.

Requires knowledge of use and maintenance of simple hand tools.

Not relevant at all for performance on this job

Importance

How important is this knowledge to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5

Job Specialty Requirements

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

Agricultural Mechanics R NR Engine Repair R NR
Aircraft Mechanics R NR Heavy Equipment Repair R NR
Appliance Repair R NR Instrument Repair R NR
Automobile Mechanics R NR Light Equipment Repair R NR
Building Maintenance R NR Other(s) (Please specify)
14. Mathematics

Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications.

**Level**

What level of this knowledge is needed to perform this job?

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not relevant at all for performance on this job</td>
</tr>
<tr>
<td>2</td>
<td>Requires knowledge of basic mathematical operations such as multiplication, addition, and subtraction.</td>
</tr>
<tr>
<td>3</td>
<td>Requires knowledge of advanced mathematical concepts and operations such as calculus, non-linear algebra, and statistics.</td>
</tr>
<tr>
<td>4</td>
<td>-- Deriving a complex mathematical equation.</td>
</tr>
<tr>
<td>5</td>
<td>-- Analyzing data to determine areas with the highest sales.</td>
</tr>
<tr>
<td>6</td>
<td>-- Adding two numbers.</td>
</tr>
<tr>
<td>7</td>
<td>-- Not relevant at all for performance on this job</td>
</tr>
</tbody>
</table>

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**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark "R" for Relevant and "NR" for Not Relevant.)

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<thead>
<tr>
<th>Specialty</th>
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<th>NR</th>
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<tbody>
<tr>
<td>Accounting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actuarial Science</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Applied Mathematics</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Operations Research</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Statistics</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Other(s)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Please specify)
15. **Physics**

Knowledge and prediction of physical principles, laws, and applications including air, water, material dynamics, light, atomic principles, heat, electric theory, earth formations, and meteorological and related natural phenomena.

**Level**

What level of this knowledge is needed to perform this job?

- **7** Requires knowledge of complex physical principles, laws, their applications, and interrelationships.
- **6** Designing a cleaner burning gasoline engine.
- **5** Calculating water pressure through a pipe.
- **4** Using a crowbar to pry open a box.
- **3** Requires knowledge of basic physical principles and their application.
- **2** Not relevant at all for performance on this job.
- **1** Not important.

**Importance**

How important is this knowledge to performance on this job?

Not Important  | Somewhat Important  | Important  | Very Important  | Extremely Important
--- | --- | --- | --- | ---
1 | 2 | 3 | 4 | 5

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Astronomy R NR
- Astrophysics R NR
- Atmospheric Sciences and Meteorology R NR
- Earth and Planetary Sciences R NR
- General Physics R NR
- Geology R NR
- Nuclear Physics R NR
- Oceanography R NR
- Optics and Acoustics R NR
- Other(s) (Please specify)
16. Chemistry

Knowledge of the composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.

**Level**

What level of this knowledge is needed to perform this job?

- Requires knowledge of complex chemicals, their properties, composition, structure, and possible interactions.
- Requires knowledge of common-place chemicals and their use.

**Importance**

How important is this knowledge to performance on this job?

- 1 Not Important
- 2 Somewhat Important
- 3 Important
- 4 Very Important
- 5 Extremely Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Analytical Chemistry: R NR
- Biochemistry: R NR
- Inorganic Chemistry: R NR
- Medicinal and Pharmaceutical Chemistry: R NR
- Organic Chemistry: R NR
- Physical and Theoretical Chemistry: R NR
- Polymer Chemistry: R NR
- Other(s): (Please specify)
Biology

Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment.

Level

What level of this knowledge is needed to perform this job?

1. Requires knowledge of basic biological, physiological, and ecological principles.

2. Requires knowledge of advanced biological, physiological, and ecological systems, their interactions, and management.

Isolating and identifying a microscopic virus.

Investigating the effects of pollution on marine plants and animals.

Dissecting a frog.

Feeding domestic animals.

NR Not relevant at all for performance on this job

Importance

How important is this knowledge to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5

Job Specialty Requirements

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

Biochemistry R NR
Botany R NR
Cell and Molecular Biology R NR
Ecology R NR
Genetics R NR

Marine and Aquatic Biology R NR
Microbiology and Bacteriology R NR
Nutritional Science R NR
Physiology R NR
Zoology R NR

Other(s) (Please specify)
18. Psychology

Knowledge of human behavior and performance, mental processes, psychological research methods, and the assessment and treatment of behavioral and affective disorders.

**Level**
What level of this knowledge is needed to perform this job?

- **7** Treating a person with a severe mental illness.
- **6** Developing a job performance appraisal system.
- **5** Understanding the impact of alcohol on human responses.
- **4** Soothing a sad friend.
- **3** Monitoring several children on a playground.
- **2** Requires knowledge of basic concepts of human behavior.
- **1** Requires knowledge of complex human behavior, advanced methods of psychological research, evaluation, and treatment.

**Importance**
How important is this knowledge to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

**Job Specialty Requirements**
Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Clinical Psychology: R NR
- Cognitive Psychology: R NR
- Community Psychology: R NR
- Counseling Psychology: R NR
- Developmental Psychology: R NR
- Experimental Psychology: R NR
- Industrial/Organizational Psychology: R NR
- Physiological/Biological Psychology: R NR
- Social Psychology: R NR
- Other(s): (Please specify)
19. **Sociology and Anthropology**

Knowledge of group behavior and dynamics, societal trends and influences, cultures, their history, migrations, ethnicity, and origins.

**Level**

What level of this knowledge is needed to perform this job?

- Requires knowledge of sophisticated cultural and societal trends and development across multiple civilizations and extended time periods.

- Requires knowledge of simple cultural and societal characteristics in single cultures over short time periods.

---

**Importance**

How important is this knowledge to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

---

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Anthropology: R NR
- Archeology: R NR
- Criminology: R NR
- Demography and Population: R NR
- Sociology: R NR
- Urban Affairs: R NR
- Other(s): (Please specify)
20. Geography

Knowledge of various methods for describing the location and distribution of land, sea, and air masses including their physical locations, relationships, and characteristics.

**Level**

What level of this knowledge is needed to perform this job?

1. Requires knowledge of the geographical location of a large number of places around the world.
2. Requires knowledge of a few local places, their names, and locations.

**Importance**

How important is this knowledge to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Cartography
- Geography
- Other(s) (Please specify)
21. Medicine and Dentistry

Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.

**Level**

What level of this knowledge is needed to perform this job?

1. Performing open-heart surgery.
2. Diagnosing appendicitis from a patient's symptoms.
3. Filling a tooth cavity.
4. Taking a person's blood pressure.
5. Using a small bandage.
6. Not relevant at all for performance on this job

**Importance**

How important is this knowledge to performance on this job?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
<th>Very Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark "R" for Relevant and "NR" for Not Relevant.)

- Chiropractic: R NR
- Community and Home Health: R NR
- Dentistry: R NR
- Medicine: R NR
- Nursing: R NR
- Pharmacology: R NR
- Psychiatry: R NR
- Speech Pathology and Audiology: R NR
- Surgery: R NR
- Veterinary Medicine: R NR
- Other(s): (Please specify)
22. Therapy and Counseling

Knowledge of information and techniques needed to rehabilitate physical and mental ailments and to provide career guidance including alternative treatments, rehabilitation equipment and its proper use, and methods to evaluate treatment effects.

**Level**

What level of this knowledge is needed to perform this job?

- Requires knowledge of counseling and therapy for treating complicated or difficult mental, emotional, or physical conditions or situations.

- Requires knowledge of basic counseling and therapy techniques for treating simple mental, emotional, and physical conditions or situations.

**Importance**

How important is this knowledge to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Relevant (R)</th>
<th>Not Relevant (NR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Counseling</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Psychiatric and Mental Health Counseling</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Recreational Therapy</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Speech Pathology and Audiology</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Social Work</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Vocational Counseling</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Other(s)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
23. Education and Training

Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles.

Level

What level of this knowledge is needed to perform this job?

1. Showing someone how to bowl.
2. Leading a quality improvement seminar.
3. Teaching a high school general sciences course.
4. Designing a training program for new employees.

Requires in-depth knowledge of numerous relevant facts and multiple instructional techniques to teach experts in a given field.

Requires knowledge of single instructional approaches to teach simple tasks to students.

Not relevant at all for performance on this job

Importance

How important is this knowledge to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5

Job Specialty Requirements

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Educational Administration R NR
- Instructional Design R NR
- Pre-School Education R NR
- Elementary Education R NR
- Secondary and Vocational Education R NR
- College and University Education R NR
- Special Education R NR
- Adult and Continuing Education R NR
- Professional Training R NR
- Other(s) (Please specify)
24. **English Language**

Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

**Level**

What level of this knowledge is needed to perform this job?

- **Teaching a college English class.**
  - Requires fluent knowledge of advanced English vocabulary, complex grammatical rules, and pronunciation.
- **Editing a feature article in a local newspaper.**
  - Requires elementary knowledge of English vocabulary, grammar, and pronunciation.
- **Reading a complicated historical novel.**
- **Writing a thank-you note.**
- **Not relevant at all for performance on this job**

**Importance**

How important is this knowledge to performance on this job?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
<th>Very Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Editing: R NR
- English Literature: R NR
- Creative Writing: R NR
- Journalistic Writing: R NR
- Linguistics: R NR
- Technical and Business Writing: R NR
- Other(s): (Please specify)
25. Foreign Language

Knowledge of the structure and content of a foreign (non-English) language including the meaning and spelling of words, rules of composition and grammar, and pronunciation.

**Level**

What level of this knowledge is needed to perform this job?

1. Requires elementary knowledge of vocabulary, grammar, and pronunciation in a foreign (non-English) language.

2. Requires fluent knowledge of advanced foreign language (non-English) vocabulary, complex grammatical rules, and pronunciation.

- Providing spoken translation of a political speech while listening to it at an international meeting.
- Writing an English language review of a book written in a foreign language.
- Using a foreign language dictionary to translate a business letter.
- Asking directions in a foreign city.
- Saying "please" and "thank you" in a foreign language.

NR Not relevant at all for performance on this job

**Importance**

How important is this knowledge to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark "R" for Relevant and "NR" for Not Relevant.)

Foreign Language Interpretation R NR
Foreign Language Literature R NR
Foreign Language Translation R NR
Linguistics R NR

Specify Language(s) required ________
________________________
________________________
Other(s) ________
(Please specify)
26. **Fine Arts**

Knowledge of theory and techniques required to produce, compose, and perform works of music, dance, visual arts, drama, and sculpture.

**Level**

What level of this knowledge is needed to perform this job?

- **7** — Composing a symphony.
- **6** — Designing an artistic display for a major trade show.
- **5** — Playing a minor part in a local theater play.
- **4** — Teaching students how to mix primary colors.
- **3** — Attending a popular music concert.
- **2** — Designing an artistic display for a major trade show.
- **1** — Attending a popular music concert.
- **NR** — Not relevant at all for performance on this job.

**Importance**

How important is this knowledge to performance on this job?

- **1** — Not Important
- **2** — Somewhat Important
- **3** — Important
- **4** — Very Important
- **5** — Extremely Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- **Arts and Crafts** R NR
- **Dance** R NR
- **Dramatic and Theatrical Arts** R NR
- **Film-Video Making and Cinematography** R NR
- **Music** R NR
- **Photography** R NR
- **Other(s)**

(Please specify)
27. **History and Archeology**

Knowledge of past historical events and their causes, indicators, and impact on particular civilizations and cultures.

**Level**

What level of this knowledge is needed to perform this job?

- Requires knowledge of complex historical events and archeological records, their creation, interpretation, and impact on civilizations and cultures.
- Requires knowledge of commonly-known historical events and archeological findings.

**Importance**

How important is this knowledge to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- African History: R NR
- American History: R NR
- Archeology: R NR
- Asian History: R NR
- European History: R NR
- General History: R NR
- History of Science and Technology: R NR
- Other(s) (Please specify)
Knowledge of different philosophical systems and religions, including their basic principles, values, ethics, ways of thinking, customs, and practices, and their impact on human culture.

**Level**

What level of this knowledge is needed to perform this job?

1. Not relevant at all for performance on this job
2. Watching a TV program on family values.
3. Understanding another culture's religious practices.
4. Comparing the teachings of major philosophers.
5. Requires knowledge of popular philosophical ideas and thought.
6. Requires knowledge of complex philosophical positions and their impact on culture and thought.
7. Very important for performance on this job

**Importance**

How important is this knowledge to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

<table>
<thead>
<tr>
<th>Ministry</th>
<th>R</th>
<th>NR</th>
<th>Philosophy</th>
<th>R</th>
<th>NR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missions and Missionary Studies</td>
<td>R</td>
<td>NR</td>
<td>Religious Education</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Pastoral Counseling</td>
<td>R</td>
<td>NR</td>
<td>Theology</td>
<td>R</td>
<td>NR</td>
</tr>
<tr>
<td>Other(s)</td>
<td>(Please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

884
29. Public Safety and Security

Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, and property.

**Level**

What level of this knowledge is needed to perform this job?

1. **Using a seatbelt.**
2. Loading and shooting a weapon.
3. Inspecting a building site for safety violations.
4. Securing a crime scene.
5. Commanding a military operation.
6. Requires knowledge of basic safety rules and procedures, security operations, and use of simple weapons.
7. Requires knowledge of advanced safety rules and procedures, security needs and operations, and use of complicated weapons systems.

**Importance**

How important is this knowledge to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Corrections
- Criminal Investigation
- Fire Fighting
- Fire Inspection and Investigation
- Military Technologies
- Police Patrol
- Security Services
- Other(s) (Please specify)
30. Law, Government and Jurisprudence

Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.

**Level**

What level of this knowledge is needed to perform this job?

- **1** - Not relevant at all for performance on this job
- **2** - Requires knowledge of basic rights, laws, and political processes.
- **3** - Lobbying for political support of a new bill.
- **4** - Arguing a criminal case in court.
- **5** - Being a judge in a federal court.
- **6** - Preparing documents and title papers for the purchase of a house.
- **7** - Registering to vote in a national election.

**Importance**

How important is this knowledge to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Jurisprudence: R NR
- Legal Representation: R NR
- Paralegal and Legal Support Services: R NR
- Political Science and Government: R NR
- Other(s): (Please specify)

30 386
31. Telecommunications

Knowledge of transmission, broadcasting, switching, control, and operation of telecommunication systems.

**Level**

What level of this knowledge is needed to perform this job?

- **1** Not relevant at all for performance on this job
- **2** Requires knowledge of simple telecommunications equipment and their use.
- **3** Requires knowledge of complex high-tech, digital transmission and switching telecommunication systems.

*Developing a new, world-wide telecommunication network.*

*Finding the cause of static on a line.*

*Operating a television camera.*

*Installing a satellite TV dish.*

*Douling a phone.*

**Importance**

How important is this knowledge to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Central Office and Switches: R NR
- Electrical and Electronics Engineering: R NR
- Radio and Television Broadcasting Technology: R NR
- System Installation and Repair: R NR
- Other(s): (Please specify)

31 387
32. Communications and Media

Knowledge of media production, communication, and dissemination techniques and methods including alternative ways to inform and entertain via written, oral, and visual media.

**Level**

What level of this knowledge is needed to perform this job?

1. **Requires knowledge of how to use simple communications methods and media to inform or entertain a limited audience.**

2. **Writing a thank you note.**

3. **Being a radio disk jockey.**

4. **Writing a novel.**

5. **Producing a combined TV, radio, and newspaper campaign to inform the public about world hunger.**

6. Requires knowledge of complex multiple communications methods and media to inform and entertain different and varied audiences.

7. **Not relevant at all for performance on this job**

**Importance**

How important is this knowledge to performance on this job?

- 1: Not Important
- 2: Somewhat Important
- 3: Important
- 4: Very Important
- 5: Extremely Important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- Archival Science: R NR
- Creative Writing: R NR
- Journalism: R NR
- Library Science: R NR
- Printing and Publishing: NR
- Radio and Television Broadcasting: R NR
- Technical and Business Writing: R NR
- Other(s): (Please specify)
33. Transportation

Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations.

**Level**

What level of this knowledge is needed to perform this job?

- **1** Not relevant at all for performance on this job
- **2** Requires knowledge of basic modes of transportation for moving people or goods within a local area
- **3** Selecting the best way to transport senior citizens to shopping areas.
- **4** Steering a large freighter through a busy harbor.
- **5** Arranging to transport a large crate from the US to Asia.
- **6** Controlling air traffic at a major airport.
- **7** Taking a train to work.

**Importance**

How important is this knowledge to performance on this job?

- **1** Not important
- **2** Somewhat important
- **3** Important
- **4** Very important
- **5** Extremely important

**Job Specialty Requirements**

Which of the following specialties are relevant to this job? (Mark “R” for Relevant and “NR” for Not Relevant.)

- **Airplane piloting** R NR
- **Air Traffic Control** R NR
- **Railroad Operations** R NR
- **Truck and Bus Transportation** R NR
- **Water Transportation** R NR
- **Other(s)** (Please specify)
APPENDIX C

TRAINING, EDUCATION, LICENSURE, AND EXPERIENCE QUESTIONNAIRE
Training, Education, Licensure and Experience Questionnaire
Instructions for Making Training, Education, Licensure, and Experience Ratings

In this questionnaire you will be asked about the training, education, licensure, and experience requirements of the job you are describing.

Read each question carefully. Read the rating scale or response options that follow the question. Mark through the number for the response that best describes the requirements of this job.

Turn the page to begin the Training, Education, Licensure, and Experience Questionnaire.
LEVEL OF EDUCATION REQUIRED TO PERFORM THIS JOB

1. Please place an "X" next to the level of education required to perform this job. Note that this does not mean the education that you personally have obtained.
   ___ a. Less than a High School Diploma
   ___ b. High School Diploma (or High School Equivalence Certificate)
   ___ c. Post-Secondary Certificate – awarded for training completed after high school (e.g., in Personal Services, Engineering-Related Technologies, Vocational Home Economics, Construction Trades, Mechanics and Repairers, Precision Production Trades)
   ___ d. Some College Courses
   ___ e. Associate's Degree (or other 2-year degree)
   ___ f. Bachelor's Degree
   ___ g. Post-Baccalaureate Certificate – awarded for completion of an organized program of study requiring 30 credit hours beyond the Bachelor's degree; designed for persons who have completed a Baccalaureate degree, but do not meet the requirements of academic degrees carrying the title of Master.
   ___ h. Master's Degree
   ___ i. Post-Master's Certificate – awarded for completion of an organized program of study of 60 credit hours beyond the Master's degree, but does not meet the requirements of academic degrees at the Doctoral level.
   ___ j. First Professional Degree – awarded for completion of a program that:
   • requires at least 2 years of college work before entrance into the program,
   • includes a total of at least 6 academic years of college work to complete, and
   • provides all remaining academic requirements to begin practice in a profession
   ___ k. Doctoral Degree
   ___ l. Post-Doctoral Certificate
## INSTRUCTIONAL PROGRAM REQUIRED

2. Please indicate the instructional program that is required for this job by placing an "X" next to the appropriate area.

| 01. | Agricultural Business and Production |
| 02. | Agricultural Sciences |
| 03. | Architecture and Related Programs |
| 04. | Area, Ethnic, and Cultural Studies |
| 05. | Biological Sciences/Life Sciences |
| 06. | Business Management and Administrative Services |
| 07. | Communications |
| 08. | Communications Technologies (preparation to provide technical service in areas including educational/instructional media, photography, and radio/TV broadcasting) |
| 09. | Computer and Information Sciences |
| 10. | Conservation and Renewable Natural Resources |
| 11. | Construction Trades |
| 12. | Education |
| 13. | Engineering |
| 14. | Engineering-Related Technologies |
| 15. | English Language and Literature/Letters |
| 16. | Foreign Languages and Literatures |
| 17. | Health Professions and Related Sciences |
| 18. | Home Economics, General |
| 19. | Law and Legal Studies |
| 20. | Liberal Arts and Sciences, General Studies and Humanities |
| 21. | Library Science |
| 22. | Marketing Operations/Marketing and Distribution |
| 23. | Mathematics |
| 24. | Mechanics and Repairers |
| 25. | Military Technologies |
| 26. | Multi/interdisciplinary Studies |
| 27. | Parks, Recreation, Leisure, and Fitness Studies |
| 28. | Personal and Miscellaneous Services (preparation to provide services including gaming and sports officiating, funeral services/mortuary science, cosmetic services, and culinary arts) |
| 29. | Philosophy and Religion |
| 30. | Physical Sciences |
| 31. | Precision Production Trades |
| 32. | Protective Services |
| 33. | Psychology |
| 34. | Public Administration and Services |
| 35. | Reserve Officers' Training Corps (ROTC) |
| 36. | Science Technologies (preparation to provide technical service in the following technologies: biological, nuclear, industrial, and physical science) |
| 37. | Social Sciences and History |
| 38. | Theological Studies and Religious Vocations |
| 39. | Transportation and Materials Moving |
| 40. | Visual and Performing Arts |
| 41. | Vocational Home Economics (preparation to provide services related to child care, clothing apparel/textiles, institutional food, home furnishings, and custodial/housekeeping) |
| 99. | No specific course major is required or preferred. |
LEVEL OF EDUCATION REQUIRED IN SPECIFIC SUBJECT AREAS

3. Below is a list of 15 educational subject areas.

Instructions:
- Read each subject area title, the definition, and the example courses.
- For each subject area, determine the highest level of educational coursework that is required for entry into this job.
- Place an "X" over the most appropriate value using the following scale:
  0 = not required
  1 = high school
  2 = post-secondary technical training
  3 = college
  4 = graduate school or other post undergraduate training

<table>
<thead>
<tr>
<th>#</th>
<th>Subject Area</th>
<th>Definition: Courses focus on ...</th>
<th>Example Courses</th>
<th>Highest level of educational coursework required for entry into this job</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technical Vocational</td>
<td>non-business technical skills</td>
<td>Agriculture; Industrial Arts; Auto-Shop; Electronics</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>2</td>
<td>Business Vocational</td>
<td>basic business skills</td>
<td>Word Processing; Filing; Bookkeeping/Business Accounting</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>3</td>
<td>English/language Arts</td>
<td>reading, interpretation, and writing</td>
<td>Reading; Literature; Composition; Journalism; Creative Writing</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>4</td>
<td>Oral Communication</td>
<td>oral communication and speech</td>
<td>Oral Communication; Speech; Interpersonal Communication</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>5</td>
<td>Languages</td>
<td>reading, writing, and/or speaking languages other than English</td>
<td>French; Chinese; German; Japanese; Latin; Russian; Spanish</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>6</td>
<td>Basic Math</td>
<td>basic and applied math</td>
<td>General Math; Business Math</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>7</td>
<td>Advanced Math</td>
<td>advanced topics in math</td>
<td>Algebra; Geometry; Calculus; Statistics</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>8</td>
<td>Physical Science</td>
<td>the study of matter and/or energy</td>
<td>Physics; Chemistry; Astronomy</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>9</td>
<td>Computer Science</td>
<td>computers and their uses</td>
<td>Programming; Information Systems Management; Software Applications</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>10</td>
<td>Biological Science</td>
<td>the study of life and living beings</td>
<td>Life Science; Biology; Anatomy; Physiology</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>11</td>
<td>Applied Science</td>
<td>the application of Science</td>
<td>Engineering; Health; Medicine</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>12</td>
<td>Social Science</td>
<td>the behavioral sciences</td>
<td>Social Studies; Economics; History; Psychology; Sociology</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>13</td>
<td>Arts</td>
<td>visual and performing arts</td>
<td>Arts &amp; Crafts; Music; Painting; Sculpture; Theater; Voice</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>14</td>
<td>Humanities</td>
<td>cultural and philosophical aspects of humans</td>
<td>Minority Studies; Philosophy; Religion</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>15</td>
<td>Physical Education</td>
<td>physical fitness and sports</td>
<td>Aerobics; Jogging; Weight Lifting; Specific Sports</td>
<td>0 1 2 3 4</td>
</tr>
</tbody>
</table>
LICENSURE, CERTIFICATION, AND REGISTRATION

Licenses, certificates, and registrations are awarded to show that a job holder has gained certain skills. Some organizations that use licenses, registration, and certification include federal, state, and local governments, unions, guilds, and professional associations (examples include: Board of Certified Safety Professionals [BCSP] certification; Certified Public Accountant [CPA] certification; Registered Nurse [RN] licensure; American Production and Inventory Control Society [APICS] certification; and Academy of Certified Social Workers [ACSW] certification).

Instructions:
• Place an "X" next to the best answer.
• When asked to do so, write your answers in the spaces provided.

1. Is a commercial vehicle operator's license required to perform this job?
   ____ a. yes
   ____ b. no

2. Is a license, certificate, or registration (other than a driver's or vehicle operator's license) required to perform this job?
   ____ a. yes
   ____ b. no (skip questions 3, 4, and 5)

3. Name all licenses, certificates, or registrations that are required to perform this job:
   _________________________________
   _________________________________
   _________________________________
   _________________________________
4. Which of the following are required to receive these licenses, certificates, or registrations?

- Place an "X" for Yes (Y) or No (N) for each one

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Y</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Secondary Degree (e.g., Associate's degree, Bachelor's degree)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Degree (e.g., Master's degree, Doctoral degree)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-the-Job Training (including apprenticeships, internships, and other supervised experience)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination (including written, oral, and performance assessments)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One or more character references</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. To retain a license, certification, or registration, is it necessary to take additional coursework?

- a. yes  
- b. no

6. To perform this job, does the law (federal, state, or local law) require you to possess one or more licenses, certificates, or registrations?

- a. yes  
- b. no

7. To perform this job, are you required by your employer to possess a license, certificate, or registration?

- a. yes  
- b. no

8. Does a job-related union, or professional association require you to possess a license, certificate, or registration?

- a. yes  
- b. no
EXPERIENCE

Instructions:

- Determine the level of experience that is required for this job. Use the following scale:

  0 = not applicable or none  
  1 = up to and including 1 month  
  2 = over 1 month, up to and including 3 months  
  3 = over 3 months, up to and including 6 months  
  4 = over 6 months, up to and including 1 year  
  5 = over 1 year, up to and including 2 years  
  6 = over 2 years, up to and including 4 years  
  7 = over 4 years, up to and including 6 years  
  8 = over 6 years, up to and including 8 years  
  9 = over 8 years, up to and including 10 years  
  10 = over 10 years

- Place an "X" over the most appropriate value.

If someone were being hired to perform this job, how much of the following would be required?

<table>
<thead>
<tr>
<th>Required Amount of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. RELATED WORK EXPERIENCE</td>
</tr>
<tr>
<td>(other jobs that prepared you for this job)</td>
</tr>
<tr>
<td>2. ON-SITE OR IN-PLANT TRAINING</td>
</tr>
<tr>
<td>(organized classroom study provided by the employer)</td>
</tr>
<tr>
<td>3. ON-THE-JOB TRAINING (OJT)</td>
</tr>
<tr>
<td>(serving as a learner or trainee on the job under the instruction of a more experienced worker)</td>
</tr>
<tr>
<td>4. APPRENTICESHIP (having served in a registered US Department of Labor apprenticeship program and received a certificate of completion)</td>
</tr>
</tbody>
</table>
APPENDIX D

GENERALIZED WORK ACTIVITIES QUESTIONNAIRE
Generalized Work Activities

Questionnaire
Instructions for Making Generalized Work Activity Ratings

In this questionnaire you will be presented with a list of 42 Generalized Work Activities. A Generalized Work Activity is a grouping of similar actions that, when put together, form a work function that is performed in many different jobs.

For each activity, please make the following three ratings: LEVEL, IMPORTANCE and FREQUENCY.

(1) LEVEL. Ask yourself, "What level of this activity is needed to perform this job?" To help you make this judgment, the LEVEL scale includes descriptions of activities requiring high, medium, and low levels of the activity. These are only examples, so they may or may not apply to the specific job you are describing.

Use the example descriptions to select the number on the scale that indicates the activity level required by the job, and mark through the appropriate number, from 1 (indicating that a very low level of the activity is required) to 7 (indicating that a very high level of the activity is required) on the LEVEL scale. For example, the level of "Getting Information Needed To Do the Job" needed for one job might be much higher than that needed for another job.

THE NOT-RELEVANT (NR) RESPONSE. If the activity is NOT RELEVANT at all to performance on the job, mark through the NR circle that appears at the bottom of the LEVEL scale. Carefully read all of the level descriptions before selecting the NR option. If you select NR, however, there is no need to complete the IMPORTANCE and FREQUENCY ratings described below.

(2) IMPORTANCE. (Complete only if a 1 to 7 LEVEL rating was selected.) Ask yourself, "How important is this activity to performance on this job?" For example, "Developing Objectives and Strategies" might be very important for one job, but less important for another job. For the second job, however, "Inspecting Equipment and Devices" might be very important.

Rate the IMPORTANCE of the activity for performance on the job by marking through the appropriate number, from 1 (indicating that the activity is of little or no importance) to 5 (indicating that the activity is very important) on the IMPORTANCE scale.

(3) FREQUENCY. (Complete only if a 1 to 7 LEVEL rating was selected.) Ask yourself, "How often is this activity performed on this job?" For example, "Performing General Physical Activities" might be an activity performed very frequently by an employee in a particular job, but less frequently by an employee in another job.

Rate the FREQUENCY with which an activity is performed by marking through the appropriate number, from 1 (indicating that the activity is performed once per year or less often) to 7 (indicating that the activity is performed hourly or more often) on the FREQUENCY scale.
Notice that the LEVEL of an activity and the IMPORTANCE of the activity are different. For example, "Getting Information" can be high in IMPORTANCE for two different jobs, but the LEVEL of "Getting Information" that an employee in one job needs is not as high as the LEVEL of "Getting Information" for an employee in another job. In addition, "Getting Information" may be an activity that is performed with similar FREQUENCY by both employees.
Below is an example completed by an employee in a particular job. For the LEVEL rating, this employee believes that a low-to-medium level of "Getting Information" is needed to perform this job, so the 3 is selected on the rating scale. For the IMPORTANCE rating, the employee believes that "Getting Information" is "Very Important" for performing this job, so the 4 is selected on the rating scale. For the FREQUENCY rating, this employee performs activities that involve "Getting Information" daily, so the 5 is selected on the FREQUENCY rating scale. These judgments are, of course, just examples. The job you are describing may be very different.

1. Getting Information
   Needed To Do
The Job

Observing, receiving, and otherwise obtaining information from all relevant sources.

<table>
<thead>
<tr>
<th>Level</th>
<th>What level of this activity is needed to perform this job?</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Studying international tax laws.</td>
</tr>
<tr>
<td>6</td>
<td>Reviewing the results of a large financial audit.</td>
</tr>
<tr>
<td>5</td>
<td>Grading the performance of college students.</td>
</tr>
<tr>
<td>4</td>
<td>Following a wiring diagram.</td>
</tr>
<tr>
<td>3</td>
<td>Reviewing a budget.</td>
</tr>
<tr>
<td>2</td>
<td>Interviewing witnesses at a crime scene.</td>
</tr>
<tr>
<td>1</td>
<td>Feeling the smoothness of a sanded surface.</td>
</tr>
<tr>
<td></td>
<td>Following a standard blueprint.</td>
</tr>
<tr>
<td>x</td>
<td>Reading instructions to install clothes washers and dryers.</td>
</tr>
<tr>
<td>0</td>
<td>Not relevant at all for performance on this job</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Importance</th>
<th>How important is this activity to performance on this job?</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Extremely Important</td>
</tr>
<tr>
<td>4</td>
<td>Very Important</td>
</tr>
<tr>
<td>3</td>
<td>Important</td>
</tr>
<tr>
<td>2</td>
<td>Somewhat Important</td>
</tr>
<tr>
<td>1</td>
<td>Not Important</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency</th>
<th>How often is this activity performed on this job?</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Hourly or more often</td>
</tr>
<tr>
<td>6</td>
<td>Several times per day</td>
</tr>
<tr>
<td>5</td>
<td>Daily</td>
</tr>
<tr>
<td>4</td>
<td>More than once per week</td>
</tr>
<tr>
<td>3</td>
<td>More than once per month</td>
</tr>
<tr>
<td>2</td>
<td>More than once per year</td>
</tr>
<tr>
<td>1</td>
<td>Once per year or less</td>
</tr>
</tbody>
</table>

903
Below is a second example completed by an employee in a different job. This employee does not believe that "Coordinating the Work and Activities of Others" is at all relevant for this job. Therefore, the NR option is selected at the bottom of the LEVEL rating scale. Notice that, because the NR option was selected, the IMPORTANCE and FREQUENCY ratings were not completed.

### 34. Coordinating the Work and Activities of Others

Coordinating members of a work group to accomplish tasks.

<table>
<thead>
<tr>
<th>Level</th>
<th>What level of this activity is needed to perform this job?</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Acting as general contractor for the building of a large industrial complex.</td>
</tr>
<tr>
<td>6</td>
<td>Organizing the clean-up crew after a major sports event or political convention.</td>
</tr>
<tr>
<td>5</td>
<td>Not relevant at all for performance on this job</td>
</tr>
<tr>
<td>4</td>
<td>Exchanging information during shift change.</td>
</tr>
<tr>
<td>3</td>
<td>Needing to do little coordinating of others.</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Importance</th>
<th>How important is this activity to performance on this job?</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Extremely Important</td>
</tr>
<tr>
<td>4</td>
<td>Very Important</td>
</tr>
<tr>
<td>3</td>
<td>Important</td>
</tr>
<tr>
<td>2</td>
<td>Somewhat Important</td>
</tr>
<tr>
<td>1</td>
<td>Not Important</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency</th>
<th>How often is this activity performed on this job?</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Hourly or more often</td>
</tr>
<tr>
<td>6</td>
<td>Several times per day</td>
</tr>
<tr>
<td>5</td>
<td>Daily</td>
</tr>
<tr>
<td>4</td>
<td>More than once per week</td>
</tr>
<tr>
<td>3</td>
<td>More than once per month</td>
</tr>
<tr>
<td>2</td>
<td>More than once per year</td>
</tr>
<tr>
<td>1</td>
<td>Once per year or less</td>
</tr>
</tbody>
</table>

Turn the page to begin the Generalized Work Activities Questionnaire.
1. **Getting Information Needed To Do The Job**

   Observing, receiving, and otherwise obtaining information from all relevant sources.

### Level

What level of this activity is needed to perform this job?

<table>
<thead>
<tr>
<th>Level</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Studying international tax laws.</td>
</tr>
<tr>
<td>6</td>
<td>Reviewing the results of a large financial audit.</td>
</tr>
<tr>
<td>5</td>
<td>Grading the performance of college students.</td>
</tr>
<tr>
<td>4</td>
<td>Following a wiring diagram.</td>
</tr>
<tr>
<td>3</td>
<td>Reviewing a budget.</td>
</tr>
<tr>
<td>2</td>
<td>Interviewing witnesses at a crime scene.</td>
</tr>
<tr>
<td>1</td>
<td>Feeling the smoothness of a sanded surface.</td>
</tr>
<tr>
<td>NR</td>
<td>Following a standard blueprint.</td>
</tr>
<tr>
<td></td>
<td>Reading instructions to install clothes washers and dryers.</td>
</tr>
</tbody>
</table>

### Importance

How important is this activity to performance on this job?

<table>
<thead>
<tr>
<th>Importance</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Important</td>
<td>1</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>2</td>
</tr>
<tr>
<td>Important</td>
<td>3</td>
</tr>
<tr>
<td>Very Important</td>
<td>4</td>
</tr>
<tr>
<td>Extremely Important</td>
<td>5</td>
</tr>
</tbody>
</table>

### Frequency

How often is this activity performed on this job?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once per year or less</td>
<td>1</td>
</tr>
<tr>
<td>More than once per year</td>
<td>2</td>
</tr>
<tr>
<td>More than once per month</td>
<td>3</td>
</tr>
<tr>
<td>More than once per week</td>
<td>4</td>
</tr>
<tr>
<td>Daily</td>
<td>5</td>
</tr>
<tr>
<td>Several times per day</td>
<td>6</td>
</tr>
<tr>
<td>Hourly or more often</td>
<td>7</td>
</tr>
</tbody>
</table>
2. Identifying Objects, Actions, and Events

Identifying information received by making estimates or categorizations, recognizing differences or similarities, or sensing changes in circumstances or events.

**Level**

What level of this activity is needed to perform this job?

- 7: Evaluating investments for a mutual fund.
- 6: Determining the reaction of a virus to a new drug.
- 5: Making currency exchanges.
- 4: Judging the acceptability of food products.
- 3: Testing an automobile transmission.
- 2: Soliciting information over the telephone.
- 1: Making easy identifications based on information that is not complex.
- NR: Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
<th>Very Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Frequency**

How often is this activity performed on this job?

<table>
<thead>
<tr>
<th>Once per year or less</th>
<th>More than once per year</th>
<th>More than once per month</th>
<th>More than once per week</th>
<th>Daily</th>
<th>Several times per day</th>
<th>Hourly or more often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
3. **Monitoring Processes, Materials, or Surroundings**

Monitoring and reviewing information from materials, events, or the environment, often to detect problems or to find out when things are finished.

### Level

What level of this activity is needed to perform this job?

<table>
<thead>
<tr>
<th>Level</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Watching aircraft instruments.</td>
</tr>
<tr>
<td>6</td>
<td>Checking the status of a patient in critical medical care.</td>
</tr>
<tr>
<td>5</td>
<td>Watching chemical reactions in laboratory test tubes.</td>
</tr>
<tr>
<td>4</td>
<td>Testing electrical circuits.</td>
</tr>
<tr>
<td>3</td>
<td>Checking to see if baking bread is done.</td>
</tr>
<tr>
<td>2</td>
<td>Watching progress in digging a ditch.</td>
</tr>
<tr>
<td>1</td>
<td>Monitoring very complex processes, events, or circumstances.</td>
</tr>
<tr>
<td>NR</td>
<td>Monitoring processes, events, or circumstances that are not complex.</td>
</tr>
</tbody>
</table>

### Importance

How important is this activity to performance on this job?

<table>
<thead>
<tr>
<th>Importance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Very Important</td>
<td>Extremely Important</td>
<td></td>
</tr>
</tbody>
</table>

### Frequency

How often is this activity performed on this job?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once per year or less</td>
<td>More than once per year</td>
<td>More than once per month</td>
<td>More than once per week</td>
<td>Daily</td>
<td>Several times per day</td>
<td>Hourly or more often</td>
<td></td>
</tr>
</tbody>
</table>
4. Inspecting Equipment, Structures, or Materials

Inspecting or diagnosing equipment, structures, or materials to identify the causes of errors or other problems or defects.

**Level**
What level of this activity is needed to perform this job?

1. Making inspections of very simple components, machines, or structures, where indications of problems or defects are easily found.

2. Inspecting a nuclear reactor.
3. Testing a space shuttle prior to takeoff.
4. Testing computer circuits.
5. Inspecting equipment in a chemical processing plant.
6. Inspecting the production of paper cups.
7. Checking that doors to a building are locked.

NR Not relevant at all for performance on this job

**Importance**
How important is this activity to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

**Frequency**
How often is this activity performed on this job?

1. Once per year or less
2. More than once per year
3. More than once per month
4. More than once per week
5. Daily
6. Several times per day
7. Hourly or more often
5. Estimating the Characteristics of Materials, Products, Events, or Information

Estimating sizes, distances, and quantities, or determining time, costs, resources, or materials needed to perform a work activity.

**Level**

What level of this activity is needed to perform this job?

- **7** Estimating the amount of natural resources that lie beneath the world's oceans.
- **6** Estimating the time required to evacuate a sizable city in the event of a major disaster.
- **5** Estimating the size of household furnishings to be crated.
- **4** Determining the arrival time of cargo ships at a seaport.
- **3** Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important

**Frequency**

How often is this activity performed on this job?

- **1** Once per year or less
- **2** More than once per year
- **3** More than once per month
- **4** More than once per week
- **5** Daily
- **6** Several times per day
- **7** Hourly or more often
6. Judging the Qualities of Objects, Services, or Persons

Making judgments about or assessing the value, importance, or quality of things or people.

**Level**

What level of this activity is needed to perform this job?

- **1** Not relevant at all for performance on this job
- **2** Making easy judgments about the quality or importance of things or people when there are a lot of guidelines.
- **3** Determining the value of property lost in a fire.
- **4** Judging the quality of writing paper.
- **5** Determining whether to remove a tree that has been damaged.
- **6** Determining the importance of a new mental health delivery program to the residents of a major city.
- **7** Trying to establish the value of a recently discovered ancient art work.

**Importance**

How important is this activity to performance on this job?

<table>
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7. Evaluating Information for Compliance to Standards

Evaluating information against a set of standards and verifying that it is correct.

**Level**

What level of this activity is needed to perform this job?

- 7 → *Making a ruling in a court on a very complicated motion.*
- 6 → Evaluating a fairly complicated insurance claim for compliance with the insurance policy terms
- 5
- 4
- 3
- 2 → Proofreading typing.
- 1 → Reviewing forms for completeness.
- NR → Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

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8. Processing Information

Compiling, coding, categorizing, calculating, tabulating, auditing, verifying, or processing information or data.

Level
What level of this activity is needed to perform this job?

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<th>Level</th>
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<td>5</td>
<td>Very Important</td>
<td>More than once per year</td>
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<td>6</td>
<td>Extremely Important</td>
<td>More than once per year</td>
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<tr>
<td>7</td>
<td>Making a cost analysis for a nuclear power plant</td>
<td>Once per year or less</td>
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<td>Compiling data for a complex scientific report</td>
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<td>Calculating the adjustments for insurance claims</td>
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<td>Auditing quality control records for a drug manufacturer</td>
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<td></td>
<td>Coding dental hygiene records</td>
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<td>Tabulating costs of parcel deliveries</td>
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</table>

NR: Not relevant at all for performance on this job.
9. Analyzing Data or Information

Identifying underlying principles, reasons, or facts by breaking down information or data into separate parts.

**Level**

What level of this activity is needed to perform this job?

1. Analyzing very different and complicated data or information that can be used for making critical decisions.
2. Analyzing data or information that is easy to understand.

**Importance**

How important is this activity to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

**Frequency**

How often is this activity performed on this job?

1. Once per year or less
2. More than once per year
3. More than once per month
4. More than once per week
5. Daily
6. Several times per day
7. Hourly or more often
Combining, evaluating, and reasoning with information and data to make decisions and solve problems. These processes involve making decisions about the relative importance of information and choosing the best solution.

**Level**

What level of this activity is needed to perform this job?

- 7: Making the final decisions about a company's five-year strategic plan.
- 6: Determining the best way to perform brain surgery.
- 5: Deciding how to settle a moderate sized insurance claim.
- 4: Selecting the location for a major department store.
- 3: Routing truck deliveries.
- 2: Determining the meal selection for a cafeteria.
- 1: Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Frequency**

How often is this activity performed on this job?

- Once per year or less
- More than once per year
- More than once per month
- More than once per week
- Daily
- Several times per day
- Hourly or more often
11. Thinking Creatively

Originating, inventing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions.

**Level**
What level of this activity is needed to perform this job?

1. Designing an office building complex.
2. Creating new computer software.
3. Adapting popular music for a high-school marching band.
4. Developing a traffic flow plan around a very busy shopping center.
5. Changing the spacing on a printed report.
6. Selecting colors to paint a small office area.
7. Not relevant at all for performance on this job.

**Importance**
How important is this activity to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

**Frequency**
How often is this activity performed on this job?

Once per year or less More than once per year More than once per month More than once per week Daily Several times per day Hourly or more often

©
12. Updating and Using Job-Relevant Knowledge

Keeping up-to-date technically and knowing one's own jobs' and related jobs' functions.

**Level**
What level of this activity is needed to perform this job?

- Learning, retaining, and staying current with complex, often highly technical information.

- Learning, retaining, and staying current with relatively easy-to-master information.

- Learning information related to a complex and rapidly changing technology.

- Keeping up to date on changes in maintenance procedures for repairing sports cars.

- Staying current on price changes in a small retail store.

- Not relevant at all for performance on this job

**Importance**
How important is this activity to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Frequency**
How often is this activity performed on this job?

- Once per year or less
- More than once per year
- More than once per month
- More than once per week
- Daily
- Several times per day
- Hourly or more often
13. Developing Objectives and Strategies

Establishing long-range objectives and specifying the strategies and actions to achieve these objectives.

**Level**

What level of this activity is needed to perform this job?

- Doing complex, future oriented strategic planning.
- Developing a 10 year business plan for an organization or a unit.
- Developing the activities and time line to complete the merger of two organizations over a three year period.
- Planning the holiday schedule for an airline workforce.
- Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Frequency**

How often is this activity performed on this job?

- Once per year or less
- More than once per year
- More than once per month
- More than once per week
- Daily
- Several times per day
- Hourly or more often
14. Scheduling Work and Activities

Scheduling events, programs, activities, as well as the work of others.

**Level**

What level of this activity is needed to perform this job?

1. Engaging in complex and difficult scheduling activities.
2. Engaging in simple or straightforward scheduling activities.

- Scheduling a complex conference program with multiple, parallel sessions.
- Preparing the work schedule for salesclerks in a large retail store.
- Making appointments for patients, using a predetermined schedule.
- Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
--- | --- | --- | --- | ---
1 | 2 | 3 | 4 | 5

**Frequency**

How often is this activity performed on this job?

Once per year or less | More than once per year | More than once per month | More than once per week | Daily | Several times per day | Hourly or more often
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14 918
15. Organizing Planning, and Prioritizing Work

Developing plans to accomplish work, and prioritizing and organizing one's own work.

**Level**

What level of this activity is needed to perform this job?

- 7
  - Prioritizing and planning multiple tasks several months ahead.
- 6
  - Planning and organizing one's own activities that often change from week to week.
- 5
  - Organizing a work schedule that is repetitive and easy to plan.
- 4
  - Not relevant at all for performance on this job.
- 3
  - Not relevant at all for performance on this job.
- 2
  - Not relevant at all for performance on this job.
- 1
  - Not relevant at all for performance on this job.

**Importance**

How important is this activity to performance on this job?

- 1
  - Not Important
- 2
  - Somewhat Important
- 3
  - Important
- 4
  - Very Important
- 5
  - Extremely Important

**Frequency**

How often is this activity performed on this job?

- 1
  - Once per year or less
- 2
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- 3
  - More than once per month
- 4
  - More than once per week
- 5
  - Daily
- 6
  - Several times per day
- 7
  - Hourly or more often
16. Performing General Physical Activities

Performing physical activities that require moving one's whole body, such as in climbing, lifting, balancing, walking, stooping, where the activities often also require considerable use of the arms and legs, such as in the physical handling of materials.

**Level**
What level of this activity is needed to perform this job?

- 7
  - Climbing up and down poles to install electric wires.
  - Walking a mail delivery route.
- 6
  - Painting the outside of a house.
  - Caring for patients in a hospital.
- 5
  - Walking to and from work stations in a small office.
  - Taking inventory of small parts.
- 4
- 3
- 2
- 1
- NR Not relevant at all for performance on this job

**Importance**
How important is this activity to performance on this job?

- Not Important
  - 1
- Somewhat Important
  - 2
- Important
  - 3
- Very Important
  - 4
- Extremely Important
  - 5

**Frequency**
How often is this activity performed on this job?

- Once per year or less
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- Daily
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  - 6
- Hourly or more often
  - 7
### Handling and Moving Objects

Using one's own hands and arms in handling, installing, forming, positioning, and moving materials, or in manipulating things, including the use of keyboards.

#### Level

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<th>Level</th>
<th>Activity</th>
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<tbody>
<tr>
<td>1</td>
<td>Not relevant at all for performance on this job</td>
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<tr>
<td>2</td>
<td>Making little use of one's hands and arms.</td>
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<td>3</td>
<td>Positioning materials in a machine.</td>
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<td>Loading boxes on an assembly line.</td>
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<td>5</td>
<td>Continually sorting materials into bins.</td>
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<td>6</td>
<td>Changing settings on office reproduction machines.</td>
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<td>7</td>
<td>Making minor adjustments to electronic testing equipment.</td>
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#### Importance

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18. Controlling Machines and Processes

Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).

**Level**

What level of this activity is needed to perform this job?

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<tbody>
<tr>
<td>Not relevant at all</td>
<td>Operating a cash register</td>
<td>Operating a drilling rig</td>
<td>Controlling the mixture of chemicals in test tubes</td>
<td>Running a large boom crane</td>
<td>Operating a precision milling machine</td>
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**Importance**

How important is this activity to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5

**Frequency**

How often is this activity performed on this job?

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---|---|---|---|---|---|---
1 | 2 | 3 | 4 | 5 | 6 | 7
19. Interacting with Computers

Controlling computer functions by using programs, setting up functions, writing software, or otherwise communicating with computer systems.

**Level**

What level of this activity is needed to perform this job?

- **7**: Setting up a new computer system for a large, multi-national company.
- **6**: Programming a high speed computer to evaluate scientific information.
- **5**: Writing software to keep track of parts in inventory.
- **4**: Setting up the payroll on computer for a large employer.
- **3**: Key entering employee personnel information.
- **2**: Editing correspondence on word processing equipment.
- **1**: Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

- **1**: Not Important
- **2**: Somewhat Important
- **3**: Important
- **4**: Very Important
- **5**: Extremely Important

**Frequency**

How often is this activity performed on this job?

- **1**: Once per year or less
- **2**: More than once per year
- **3**: More than once per month
- **4**: More than once per week
- **5**: Daily
- **6**: Several times per day
- **7**: Hourly or more often
20. Operating Vehicles, Mechanized Devices, or Equipment

Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.

**Level**
What level of this activity is needed to perform this job?

Operating equipment or vehicles that are very difficult to run.

- **7** Hovering a helicopter in a strong wind.
- **6** Running a power shovel in very hard or very soft ground.
- **5** Operating a firefighting pumper truck.
- **4** Driving an eighteen wheel moving van.
- **3** Driving a car.
- **2** Operating a grass mowing machine.
- **1** Operating equipment or vehicles that are easy to run.
- **NR** Not relevant at all for performance on this job

**Importance**
How important is this activity to performance on this job?

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21. Drafting, Laying-Out, and Specifying Technical Devices, Parts, or Equipment

Providing documentation, detailed instructions, drawings, or specifications to inform others about how devices, parts, equipment, or structures are to be fabricated, constructed, assembled, modified, maintained, or used.

**Level**

What level of this activity is needed to perform this job?

- Drafting and specifying the components or technical relationships for complicated devices, parts, or equipment.
- Drafting or specifying the components or technical relationships for devices, parts, or equipment that are easily understood.

**Importance**

How important is this activity to performance on this job?

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22. Implementing Ideas, Programs, Systems, or Products

Conducting or carrying out work procedures and activities in accord with one's own ideas or information provided through directions/instructions for purposes of installing, modifying, preparing, delivering, constructing, integrating, finishing, or completing programs, systems, structures, or products.

Level
What level of this activity is needed to perform this job?

1. Performing activities that have clear cut directions and are easy to carry out.
2. Performing highly complex and very difficult work activities with very limited guidelines to follow.
3. Building an electrical distribution system for a new industrial and commercial park.
4. Completing the installation of a new radar guidance system for commercial aircraft.
5. Building a health care system within a third world country.
6. Performing surgery in a rarely explored area of the brain.
7. Setting up a retail store display.
8. Installing new highway signs.
9. Not relevant at all for performance on this job.

Importance
How important is this activity to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important
1 2 3 4 5

Frequency
How often is this activity performed on this job?

Once per year or less More than once per year More than once per month More than once per week Daily Several times per day Hourly or more often
1 2 3 4 5 6 7
Fixing, servicing, aligning, setting up, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles.

### Level
What level of this activity is needed to perform this job?

- **Level 7**: Rebuilding a high-performance engine.
- **Level 6**: Overhauling a power plant turbine.
- **Level 5**: Removing and replacing broken parts in an automobile transmission.
- **Level 4**: Adjusting a grandfather clock.
- **Level 3**: Making routine preventive maintenance to a door lock.
- **Level 2**: Making simple, external adjustments to a door hinge with ordinary hand tools.
- **Level 1**: Not relevant at all for performance on this job.

### Importance
How important is this activity to performance on this job?

- **Not Important**: 1
- **Somewhat Important**: 2
- **Important**: 3
- **Very Important**: 4
- **Extremely Important**: 5

### Frequency
How often is this activity performed on this job?

- **Once per year or less**: 1
- **More than once per year**: 2
- **More than once per month**: 3
- **More than once per week**: 4
- **Daily**: 5
- **Several times per day**: 6
- **Hourly or more often**: 7
24. Repairing and Maintaining Electronic Equipment

Fixing, servicing, adjusting, regulating, calibrating, fine-tuning, or testing machines, devices, and equipment that operate primarily on the basis of electrical or electronic (not mechanical) principles.

**Level**
What level of this activity is needed to perform this job?

- Not relevant at all for performance on this job (NR)
- Performing straightforward repair, maintenance, or adjustment of electronic devices or equipment using established, easy to understand procedures.
- Making repairs or replacements of electrical components on circuit boards.
- Using highly complex electronic test equipment, (e.g., meters, oscilloscopes) to calibrate and fine-tune electronic equipment.
- Making repairs that consist primarily of swapping circuit boards among pieces of electronic equipment.
- Using electronic test equipment, (e.g., meters) to calibrate and fine-tune circuits and components.
- Performing simple external adjustments to a television using knobs or dials, without the use of electronic test equipment.

**Importance**
How important is this activity to performance on this job?

<table>
<thead>
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<th>Not Important</th>
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</tbody>
</table>

**Frequency**
How often is this activity performed on this job?

<table>
<thead>
<tr>
<th>Once per year or less</th>
<th>More than once per year</th>
<th>More than once per month</th>
<th>More than once per week</th>
<th>Daily</th>
<th>Several times per day</th>
<th>Hourly or more often</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Documenting/Recording Information

25. Documenting/Recording Information

Entering, transcribing, recording, storing, or maintaining information in either written form or by electronic/magnetic recording.

Level
What level of this activity is needed to perform this job?

1. Documenting or recording straightforward information using predetermined forms and procedures.

2. Recording the weights of trucks using the highways.

3. Documenting the contents of rail cargo.

4. Recording the day shift operating results for a nuclear power generating plant.

5. Documenting the results of a major crime scene investigation.

6. Maintaining information about the use of orbiting satellites for private industry communications.

7. Keeping records about the progress of a rare disease in a third world country.

NR Not relevant at all for performance on this job.

Importance
How important is this activity to performance on this job?

1. Not Important

2. Somewhat Important

3. Important

4. Very Important

5. Extremely Important

Frequency
How often is this activity performed on this job?

1. Once per year or less

2. More than once per year

3. More than once per month

4. More than once per week

5. Daily

6. Several times per day

7. Hourly or more often
26. Interpreting the Meaning of Information for Others

Translating or explaining what information means and how it can be understood or used to support responses or feedback to others.

**Level**
What level of this activity is needed to perform this job?

1. Making easy interpretations of information with a high degree of guidance to follow.
2. Interpreting the results of a blood pressure reading.
3. Explaining how to use a bus schedule.
4. Translating a presentation made at an international scientific conference from French to English.
5. Interpreting how foreign tax laws apply to U.S. exports.
6. Interpreting the results of experiments in quantum physics so they can be understood by most people.
7. Translating the inscriptions of a just discovered tribe of people living in isolation.

**Importance**
How important is this activity to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important
1 2 3 4 5

**Frequency**
How often is this activity performed on this job?

Once per year or less More than once per year More than once per month More than once per week Daily Several times per day Hourly or more often
1 2 3 4 5 6 7
27. Communicating with Supervisors, Peers, or Subordinates

Providing information to supervisors, fellow workers, and subordinates. This information can be exchanged face-to-face, in writing, or via telephone/electronic transfer.

<table>
<thead>
<tr>
<th>Level</th>
<th>Importance</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not relevant at all for performance on this job</td>
<td>Once per year or less</td>
</tr>
<tr>
<td>2</td>
<td>Communicating minimally with others.</td>
<td>More than once per year</td>
</tr>
<tr>
<td>3</td>
<td>Writing brief notes to others.</td>
<td>More than once per month</td>
</tr>
<tr>
<td>4</td>
<td>Reporting the results of a sales meeting to a supervisor.</td>
<td>More than once per week</td>
</tr>
<tr>
<td>5</td>
<td>Writing memos to other team members.</td>
<td>Daily</td>
</tr>
<tr>
<td>6</td>
<td>Preparing important reports for management.</td>
<td>Several times per day</td>
</tr>
<tr>
<td>7</td>
<td>Creating videotaped presentations of a company's internal policy.</td>
<td>Hourly or more often</td>
</tr>
</tbody>
</table>

Not relevant at all for performance on this job

Communicating minimally with others.

Writing brief notes to others.

Reporting the results of a sales meeting to a supervisor.

Writing memos to other team members.

Preparing important reports for management.

Creating videotaped presentations of a company's internal policy.
28. Communicating with Persons Outside the Organizations

Communicating with persons outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged face-to-face, in writing, or via telephone/electronic transfer.

**Level**

What level of this activity is needed to perform this job?

- Presenting complex oral and written communications to persons outside the organization.
  - 7
  - Preparing or delivering press releases.
  - Presenting highly technical information to customers.
- Presenting routine and simple oral and written communications to persons outside the organization.
  - 6
  - Making standard presentations about available services.
  - Writing ads for job openings in the organization.
- Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

- Not Important
  - 1
- Somewhat Important
  - 2
- Important
  - 3
- Very Important
  - 4
- Extremely Important
  - 5

**Frequency**

How often is this activity performed on this job?

- Once per year or less
  - 1
- More than once per year
  - 2
- More than once per month
  - 3
- More than once per week
  - 4
- Daily
  - 5
- Several times per day
  - 6
- Hourly or more often
  - 7
29. Establishing and Maintaining Interpersonal Relationships

Developing constructive and cooperative working relationships with others.

### Level

What level of this activity is needed to perform this job?

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Working with and gaining cooperation from a group of multinational/multicultural executives, initially hostile to your organization.</td>
</tr>
<tr>
<td>6</td>
<td>Getting along well and maintaining good working relationships with almost all co-workers and clients.</td>
</tr>
<tr>
<td>5</td>
<td>Exchanging greetings with a co-worker.</td>
</tr>
<tr>
<td>4</td>
<td>Developing very good interpersonal relationships with highly diverse individuals or stakeholders in difficult situations.</td>
</tr>
<tr>
<td>3</td>
<td>Developing very few working relationships with others.</td>
</tr>
<tr>
<td>2</td>
<td>Not relevant at all for performance on this job</td>
</tr>
</tbody>
</table>

### Importance

How important is this activity to performance on this job?

<table>
<thead>
<tr>
<th>Importance</th>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
<th>Very Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

### Frequency

How often is this activity performed on this job?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Once per year or less</th>
<th>More than once per year</th>
<th>More than once per month</th>
<th>More than once per week</th>
<th>Daily</th>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
30. Assisting and Caring for Others

Providing assistance or personal care to others.

**Level**
What level of this activity is needed to perform this job?

1. Needing to provide minimal help or assistance to others.
2. Assisting a stranded traveler in finding lodging.
3. Helping a coworker complete an assignment.
5. Not relevant at all for performance on this job.

**Importance**
How important is this activity to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

**Frequency**
How often is this activity performed on this job?

1. Once per year or less
2. More than once per year
3. More than once per month
4. More than once per week
5. Daily
6. Several times per day
7. Hourly or more often
31. Selling or Influencing Others

Convincing others to buy merchandise/goods, or otherwise changing their minds or actions.

**Level**

What level of this activity is needed to perform this job?

- 7 - Delivering major sales campaign in a new market.
- 6 - Delivering standard arguments or sales pitches to convince others to buy popular products.
- 5 - Convincing a co-worker to assist with an assignment.
- 4 -
- 3 -
- 2 -
- 1 -
- NR - Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Frequency**

How often is this activity performed on this job?

- Once per year or less
- More than once per year
- More than once per month
- More than once per week
- Daily
- Several times per day
- Hourly or more often
32. Resolving Conflicts and Negotiating with Others

Handling complaints, arbitrating disputes, and resolving grievances, or otherwise negotiating with others.

**Level**
What level of this activity is needed to perform this job?

- **7** Negotiating a major labor-management contract.
- **6** Getting two subordinates to agree on their vacation schedules.
- **5** Apologizing to a customer who has complained about being kept waiting too long.
- **4** Handling negotiations that involve very simple matters that are easily resolved, or needing to do little complaint-handling or negotiating.
- **3** Handling complaints and negotiations in very challenging situations, involving complex matters and significant conflict and pressure.
- **2** Not relevant at all for performance on this job

**Importance**
How important is this activity to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important

**Frequency**
How often is this activity performed on this job?

- **1** Once per year or less
- **2** More than once per year
- **3** More than once per month
- **4** More than once per week
- **5** Daily
- **6** Several times per day
- **7** Hourly or more often
33. Performing For or Working Directly With the Public

Performing for people or dealing directly with the public, including serving persons in restaurants and stores, and receiving clients or guests.

**Level**

What level of this activity is needed to perform this job?

- **1** Not relevant at all for performance on this job
- **2** Having little interaction with the public, or needing to have only brief interactions.
- **3** Handling interactions with the public, where the audience is hard to please or other conflict is involved.
- **4** Selling shoes in a popular shoe store.
- **5** Calming a very disorderly crowd.
- **6** Doing a monologue on national TV.
- **7** Tending a highway toll booth.
- **8** Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5

**Frequency**

How often is this activity performed on this job?

Once per year or less | More than once per year | More than once per month | More than once per week | Daily | Several times per day | Hourly or more often
---|---|---|---|---|---|---
1 | 2 | 3 | 4 | 5 | 6 | 7
34. Coordinating the Work and Activities of Others

Coordinating members of a work group to accomplish tasks.

**Level**

What level of this activity is needed to perform this job?

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Acting as general contractor for the building of a large industrial complex.</td>
</tr>
<tr>
<td>6</td>
<td>Organizing the clean-up crew after a major sports event or political convention.</td>
</tr>
<tr>
<td>5</td>
<td>Exchanging information during shift change.</td>
</tr>
<tr>
<td>4</td>
<td>Needing to do little coordinating of others.</td>
</tr>
<tr>
<td>3</td>
<td>Coordinating the work of many employees, where a complex sequencing of others' tasks is required.</td>
</tr>
<tr>
<td>2</td>
<td>Not relevant at all for performance on this job</td>
</tr>
<tr>
<td>1</td>
<td>Not relevant at all for performance on this job</td>
</tr>
</tbody>
</table>

**Importance**

How important is this activity to performance on this job?

<table>
<thead>
<tr>
<th>Importance</th>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
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</table>

**Frequency**

How often is this activity performed on this job?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Once per year or less</th>
<th>More than once per year</th>
<th>More than once per month</th>
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<td>7</td>
<td></td>
</tr>
</tbody>
</table>
35. Developing and Building Teams

Encouraging and building mutual trust, respect, and cooperation among team members.

### Level

What level of this activity is needed to perform this job?

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Leading a large team to design and build a new aircraft.</td>
</tr>
<tr>
<td>6</td>
<td>Leading an assembly team in an automobile production plant.</td>
</tr>
<tr>
<td>5</td>
<td>Encouraging two co-workers to stick with a tough assignment.</td>
</tr>
<tr>
<td>4</td>
<td>Not relevant at all for performance on this job.</td>
</tr>
<tr>
<td>3</td>
<td>Leading an assembly team in an automobile production plant.</td>
</tr>
<tr>
<td>2</td>
<td>Encouraging two co-workers to stick with a tough assignment.</td>
</tr>
<tr>
<td>1</td>
<td>Not relevant at all for performance on this job.</td>
</tr>
<tr>
<td>NR</td>
<td>Not relevant at all for performance on this job.</td>
</tr>
</tbody>
</table>

### Importance

How important is this activity to performance on this job?

- Not Important: 1
- Somewhat Important: 2
- Important: 3
- Very Important: 4
- Extremely Important: 5

### Frequency

How often is this activity performed on this job?

- Once per year or less: 1
- More than once per year: 2
- More than once per month: 3
- More than once per week: 4
- Daily: 5
- Several times per day: 6
- Hourly or more often: 7
36. Teaching Others

Identifying educational needs, developing formal training programs or classes, and teaching or instructing others.

**Level**
What level of this activity is needed to perform this job?

- **1** Doing little training or educating of others.
- **2** Giving co-workers brief instructions on a simple procedural change.
- **3** Teaching a social sciences course to high school students.
- **4** Developing and conducting training programs for a medical school.
- **5** Not relevant at all for performance on this job.

**Importance**
How important is this activity to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important

**Frequency**
How often is this activity performed on this job?

- **1** Once per year or less
- **2** More than once per year
- **3** More than once per month
- **4** More than once per week
- **5** Daily
- **6** Several times per day
- **7** Hourly or more often
37. Guiding, Directing, and Motivating Subordinates

Providing guidance and direction to subordinates, including setting performance standards and monitoring subordinates.

**Level**

What level of this activity is needed to perform this job?

- **7** Manager a severely downsized unit.
- **6** Supervising a small number of subordinates in a well-paid industry.
- **5** Working occasionally as a back-up supervisor.
- **4** Directing and motivating several organization members, and building and maintaining morale in difficult or unpleasant work settings.
- **3** Doing little directing or motivating of subordinates.
- **2** Not relevant at all for performance on this job

**Importance**

How important is this activity to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important

**Frequency**

How often is this activity performed on this job?

- **1** Once per year or less
- **2** More than once per year
- **3** More than once per month
- **4** More than once per week
- **5** Daily
- **6** Several times per day
- **7** Hourly or more often
38. Coaching and Developing Others

Identifying developmental needs of others and coaching or otherwise helping others to improve their knowledge or skills.

**Level**

What level of this activity is needed to perform this job?

1. Not relevant at all for performance on this job

2. Showing a co-worker how to operate a piece of equipment.

3. Providing on-the-job training for clerical workers.

4. Coaching a college athletic team.

5. Serving as an executive mentor.

**Importance**

How important is this activity to performance on this job?

1. Not Important

2. Somewhat Important

3. Important

4. Very Important

5. Extremely Important

**Frequency**

How often is this activity performed on this job?

1. Once per year or less

2. More than once per year

3. More than once per month

4. More than once per week

5. Daily

6. Several times per day

7. Hourly or more often
39. Providing Consultation and Advice to Others

Providing consultation and expert advice to management or other groups on technical, systems-related, or process-related topics.

Level

What level of this activity is needed to perform this job?

1. Providing little advice or consultation to others.
2. Recommendation a new software package to increase operational efficiency.
3. Working in a position that requires little advising of others.
4. Providing ideas for changing an organization to increase profitability.
5. Providing expert guidance on complex matters regarding the design, development, or implementation of major programs.
6. Providing little advice or consultation to others.
7. Not relevant at all for performance on this job

Importance

How important is this activity to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

Frequency

How often is this activity performed on this job?

1. Once per year or less
2. More than once per year
3. More than once per month
4. More than once per week
5. Daily
6. Several times per day
7. Hourly or more often
40. Performing Administrative Activities

Approving requests, handling paperwork, and performing day-to-day administrative tasks.

**Level**
What level of this activity is needed to perform this job?

- 7: Serving as the benefits director for a large and growing computer sales organization.
- 6: Completing tax forms required of self-employed business persons.
- 5: Completing routine paperwork on standard forms.
- 4: Not relevant at all for performance on this job.
- 3: Serving as the benefits director for a large and growing computer sales organization.
- 2: Completing tax forms required of self-employed business persons.
- 1: Completing routine paperwork on standard forms.

**Importance**
How important is this activity to performance on this job?

- 5: Extremely Important
- 4: Very Important
- 3: Important
- 2: Somewhat Important
- 1: Not Important

**Frequency**
How often is this activity performed on this job?

- 7: Hourly or more often
- 6: Several times per day
- 5: Daily
- 4: More than once per week
- 3: More than once per month
- 2: More than once per year
- 1: Once per year or less
41. Staffing Organizational Units

Recruiting, interviewing, selecting, hiring, and promoting persons for an organization.

Level

What level of this activity is needed to perform this job?

1. Not relevant at all for performance on this job
2. Working in a position that has minimal staffing requirements.
3. Interviewing candidates for a sales position and making a hiring recommendation.
4. Directing a large recruitment and employment testing program for an international manufacturing organization.
5. Overseeing the staff of a large and diverse workforce, with complex staffing needs.
6. Doing very straightforward staffing activities.
7. Not relevant at all for performance on this job

Importance

How important is this activity to performance on this job?

Not Important

Somewhat Important

Important

Very Important

Extremely Important

1

2

3

4

5

Frequency

How often is this activity performed on this job?

Once per year or less

More than once per year

More than once per month

More than once per week

Daily

Several times per day

Hourly or more often

1

2

3

4

5

6

7
42. Monitoring and Controlling Resources

Monitoring and controlling resources and overseeing the spending of money.

**Level**

What level of this activity is needed to perform this job?

- Monitoring and controlling a large number of resources, including managing a large budget.
- Serving as a financial executive in charge of a large company's budget.
- Working as a chef responsible for ordering food for the menu.
- Working as a housekeeper responsible for keeping track of the linens.
- Needing to do little monitoring or controlling of resources or money.

**Importance**

How important is this activity to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

**Frequency**

How often is this activity performed on this job?

- Once per year or less
- More than once per year
- More than once per month
- More than once per week
- Daily
- Several times per day
- Hourly or more often
APPENDIX E

WORK CONTEXT QUESTIONNAIRE
Work Context

Questionnaire
Instructions for Making Work Context Ratings

In this questionnaire you will be asked about your working conditions and the context in which you work. These questions are about your work setting and its possible hazards, the pace of your work, and your dealings with other people.

Read each question carefully. Read the rating scale or response options that follow the question. Mark through the number or letter for the response that best describes your job. In doing so, consider your job over a reasonable time period as it would be related to your work, such as a work day or week. You may wish to consider your work over a longer period (such as a month or more) if your job changes a great deal from week to week or is seasonal in nature.

Turn the page to begin the Work Context Questionnaire.
1. Formality of Communication

How formal is most of the job-related information that the worker gives and receives on this job?

<table>
<thead>
<tr>
<th>Very Informal</th>
<th>Moderately Formal</th>
<th>Very Formal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casual conversation, or communication on a personal basis</td>
<td>Personal letters, informal reports, or brief memos</td>
<td>In writing as formal reports or official statements, or orally in formal presentations</td>
</tr>
</tbody>
</table>

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
2. Communication Methods

How frequently does this job require the use of the following communication methods?

a. Face-to-Face (individuals)

<table>
<thead>
<tr>
<th></th>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

b. Face-to-Face (group/team meetings)

<table>
<thead>
<tr>
<th></th>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

c. Public Speaking

<table>
<thead>
<tr>
<th></th>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
2. Communication Methods (continued)

How frequently does this job require the use of the following communication methods?

d. Video Conference

<table>
<thead>
<tr>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

e. Voice Mail

<table>
<thead>
<tr>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

f. Telephone

<table>
<thead>
<tr>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
2. Communication Methods (continued)

How frequently does this job require the use of the following communication methods?

g. Interactive (same-time) computer communication

<table>
<thead>
<tr>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

h. Electronic Mail

<table>
<thead>
<tr>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

i. Handwritten Notes or Messages

<table>
<thead>
<tr>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
2. Communication Methods (continued)

How frequently does this job require the use of the following communication methods?

j. Letters and Memos

<table>
<thead>
<tr>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
<td>⑥</td>
<td>⑦</td>
</tr>
</tbody>
</table>

k. Written Reports

<table>
<thead>
<tr>
<th>Never or less than once a month</th>
<th>Once or more per month, but less than weekly</th>
<th>Once or more per week, but less than daily</th>
<th>Daily (once or twice a day)</th>
<th>Several times per day</th>
<th>Hourly</th>
<th>More than hourly</th>
<th>Continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
<td>⑥</td>
<td>⑦</td>
</tr>
</tbody>
</table>
Work Context: Interpersonal: Communication

3. Objectivity vs. Subjectivity of Information Communicated

How objective or subjective is the information communicated in this job?

<table>
<thead>
<tr>
<th>Very Objective</th>
<th>Moderate Objectivity</th>
<th>Very Subjective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very concrete and deals with observable data, behaviors, or events</td>
<td>Includes both concrete and subjective or judgmental information</td>
<td>Deals mostly with feelings, thoughts, or ideas</td>
</tr>
</tbody>
</table>

4. Job-Required Social Interaction

How much does this job require the worker to be in contact (face-to-face, by telephone, or otherwise) with others in order to perform it?

<table>
<thead>
<tr>
<th>Very Little Contact</th>
<th>Moderate Contact</th>
<th>Very Extensive Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost no contact with others is required</td>
<td>Some contact with others is required; about half of work time spent in contact with others</td>
<td>Constant contact with others is required</td>
</tr>
</tbody>
</table>

5. Privacy of Communications

To what extent can an individual's work materials and communications (face-to-face, phone, fax, E-mail, etc.) be monitored by others?

<table>
<thead>
<tr>
<th>Little Privacy</th>
<th>Moderate Privacy</th>
<th>Substantial Privacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most communications and materials are monitored by others</td>
<td>Communications and materials for this job are not monitored, but others can easily access communications (community printer, fax and/or materials)</td>
<td>No one has access to communications or materials for this job without the worker's consent</td>
</tr>
</tbody>
</table>
6. Job Interactions

How important are interactions requiring the worker to:

a. Supervise, coach, train, or develop other employees?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

b. Persuade someone to a course of action (informally) or influence others to buy something (to sell)?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

c. Provide a service to others (e.g., customers)?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

d. Take a position opposed to coworkers or others?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
6. Job Interactions

How important are interactions requiring the worker to:

e. Work with or contribute to a work group or team to perform this job?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

f. Deal with external customers (e.g., retail sales) or the public in general (e.g., police work)?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

g. Coordinate or lead others in accomplishing work activities (not supervision)?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Work Context: Interpersonal: Responsibility for Others

7. Responsibility for Others' Health and Safety

How responsible is the worker for others' health and safety on this job?

<table>
<thead>
<tr>
<th>Very</th>
<th>Limited</th>
<th>None</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>No responsibility</td>
<td>Has little responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for the health and</td>
<td>for others' health and safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>safety of others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others' health and</td>
<td>Must be careful to avoid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>safety</td>
<td>injury to others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Substantial</td>
<td>Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others' health and</td>
<td>depends almost entirely on</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>safety</td>
<td>actions of worker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Responsibility for Work Outcomes and Results

How responsible is the worker for work outcomes and results of other workers.

<table>
<thead>
<tr>
<th>Very</th>
<th>Limited</th>
<th>None</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>No responsibility</td>
<td>Minimum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for work results of</td>
<td>responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>others</td>
<td>for the work results of others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Considerable</td>
<td>responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>responsibility for the</td>
<td>work results of others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>work results of others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Substantial</td>
<td>Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete</td>
<td>responsibility</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>responsibility for the</td>
<td>work results of others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. How frequently do the job requirements place the worker in conflict situations?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Almost Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

10. How frequently does the worker have to deal with unpleasant, angry, or discourteous individuals as part of the job requirements?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Almost Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

11. How frequently does this job require the worker to deal with physical aggression of violent individuals?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Almost Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
12. Work Setting

How frequently does this job require the worker to work:

a. Indoors, environmentally controlled?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per year, but less than monthly</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

b. Indoors, not environmentally controlled (e.g., warehouse without air conditioning)?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per year, but less than monthly</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
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<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

c. Outdoors, exposed to all weather conditions?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per year, but less than monthly</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
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<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
12. Work Setting (continued)

How frequently does this job require the worker to work:

d. Outdoors, under cover (e.g., open shed)?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>More than once per year, but less than monthly</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never (or does not apply)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Once per year or less</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than once per hour, daily</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>More than once per day, or more</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e. In an open vehicle or operating open equipment (e.g., tractor)?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>More than once per year, but less than monthly</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never (or does not apply)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Once per year or less</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than once per hour, daily</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>More than once per day, or more</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

f. In an enclosed vehicle or operating enclosed equipment (e.g., automobile)?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>More than once per year, but less than monthly</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never (or does not apply)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Once per year or less</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than once per hour, daily</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>More than once per day, or more</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Work Context: Physical Work Conditions: Work Setting

#### 13. Privacy of Work Area

How private is the work area for this job?

<table>
<thead>
<tr>
<th>Little Privacy</th>
<th>Moderate Privacy</th>
<th>Substantial Privacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work is with others in a non-private area, such as a typing pool, food preparation, or production area</td>
<td>Work is conducted in a semi-private area, such as a cubicle</td>
<td>Work is performed in a private work space or office</td>
</tr>
</tbody>
</table>

1 | 2 | 3 | 4 | 5 | 6 | 7

#### 14. Physical Proximity

To what extent does this job require the worker to perform job tasks in close physical proximity to other people?

<table>
<thead>
<tr>
<th>Not Close</th>
<th>Moderately Close</th>
<th>Very Close</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work does not require close physical contact with others (e.g., forest ranger)</td>
<td>Work requires infrequent physical contact and allows some distance (e.g., sharing office space)</td>
<td>Work design requires working very close to or in contact with others (e.g., commercial pilots in a cockpit)</td>
</tr>
</tbody>
</table>

1 | 2 | 3 | 4 | 5 | 6 | 7
Work Context: Physical Work Conditions: Environmental Conditions

15. Environmental Conditions

How often during a usual work period is the worker exposed to the following conditions:

a. Sounds and noise levels that are distracting and uncomfortable?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

b. Very hot (above 90° F) or very cold (under 32° F) temperatures?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

c. Extremely bright or inadequate lighting conditions?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
15. Environmental Conditions (continued)

How often during a usual work period is the worker exposed to the following conditions:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. Contaminants (pollutants, gases, dust, odors, etc.)?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>e. Cramped work space that requires getting into awkward positions?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>f. Whole body vibration (e.g., operating a jackhammer or earth-moving equipment)?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
16. Exposure to Radiation

a. Frequency

How often does this job require the worker to be exposed to radiation?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than monthly</th>
<th>More than one per week, but less than weekly</th>
<th>More than one per day</th>
<th>Daily (once or more times per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

b. Likelihood of Injury

What is the likelihood that the worker would be injured as a result of being exposed to radiation while performing this job?

<table>
<thead>
<tr>
<th>No possibility</th>
<th>Almost no possibility</th>
<th>Very limited possibility</th>
<th>Limited possibility</th>
<th>Some possibility</th>
<th>Fairly high possibility</th>
<th>High possibility</th>
<th>Very high possibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

c. Degree of Injury

If injury, due to exposure to radiation, were to occur while performing this job, how serious would be the likely outcome?

<table>
<thead>
<tr>
<th>No treatment required</th>
<th>Injury requiring first aid</th>
<th>Injury resulting in loss of up to one day</th>
<th>Injury resulting in more than one day</th>
<th>Injury resulting in permanent partial impairment</th>
<th>Injury resulting in permanent total impairment/death</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
17. Exposure to Diseases/Infections (e.g., patient care, some laboratory work, sanitation control, etc.)

a. Frequency

How often does this job require the worker to be exposed to diseases/infections?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

b. Likelihood of Injury

What is the likelihood that the worker would be injured as a result of being exposed to diseases/infections while performing this job?

<table>
<thead>
<tr>
<th>No possibility</th>
<th>Almost no possibility</th>
<th>Very limited possibility</th>
<th>Limited possibility</th>
<th>Some possibility</th>
<th>Fairly high possibility</th>
<th>High possibility</th>
<th>Very high possibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

c. Degree of Injury

If injury, due to exposure to diseases/infection, were to occur while performing this job, how serious would be the likely outcome?

<table>
<thead>
<tr>
<th>Injury resulting in No treatment required</th>
<th>Injury resulting in Injury resulting in</th>
<th>Injury resulting in Injury resulting in</th>
</tr>
</thead>
<tbody>
<tr>
<td>No treatment required</td>
<td>Injury requiring first aid</td>
<td>Injuy resulting in loss of up to one work day</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
18. Exposure to High Places (e.g., heights above 8 feet on ladders, poles, scaffolding, catwalks, etc.)

a. **Frequency**

How often does this job require the worker to be exposed to high places?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>More than once per hour</th>
<th>More than once per day</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never (or does not apply)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

b. **Likelihood of Injury**

What is the likelihood that the worker would be injured as a result of being exposed to high places while performing this job?

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>No possibility</th>
<th>Almost no possibility</th>
<th>Very limited possibility</th>
<th>Limited possibility</th>
<th>Some possibility</th>
<th>Fairly high possibility</th>
<th>High possibility</th>
<th>Very high possibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

c. **Degree of Injury**

If injury, due to exposure to high places, were to occur while performing this job, how serious would be the likely outcome?

<table>
<thead>
<tr>
<th>Injury resulting in</th>
<th>No treatment required</th>
<th>Injury requiring first aid</th>
<th>Injury resulting in</th>
<th>Injury resulting in</th>
<th>Injury resulting in</th>
<th>Injury resulting in</th>
</tr>
</thead>
<tbody>
<tr>
<td>loss of up to one work day</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
19. Exposure to Hazardous Conditions (e.g., high voltage electricity, combustibles, explosives, chemicals; do not include hazardous equipment or situations - see questions 20 and 21).

a. Frequency

How often does this job require the worker to be exposed to hazardous conditions?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year, but less than monthly</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

b. Likelihood of Injury

What is the likelihood that the worker would be injured as a result of being exposed to hazardous conditions while performing this job?

<table>
<thead>
<tr>
<th>Very limited possibility</th>
<th>Almost no possibility</th>
<th>No possibility</th>
<th>Fairly high possibility</th>
<th>Very high possibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

C. Degree of Injury

If injury, due to exposure to hazardous conditions, were to occur while performing this job, how serious would be the likely outcome?

<table>
<thead>
<tr>
<th>Injury resulting in no treatment required</th>
<th>Injury requiring first aid</th>
<th>Injury resulting in loss of up to one work day</th>
<th>Injury resulting in loss of more than one work day</th>
<th>Injury resulting in permanent partial impairment</th>
<th>Injury resulting in permanent total impairment/death</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>


20. Exposure to Hazardous Equipment, (e.g., saws, machinery/mechanical parts; include exposure to vehicular traffic, but not driving a vehicle).

a. Frequency

How often does this job require the worker to be exposed to hazardous equipment?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Likelihood of Injury

What is the likelihood that the worker would be injured as a result of being exposed to hazardous equipment while performing this job?

<table>
<thead>
<tr>
<th>No possibility</th>
<th>Almost no possibility</th>
<th>Very limited possibility</th>
<th>Limited possibility</th>
<th>Some possibility</th>
<th>Fairly high possibility</th>
<th>High possibility</th>
<th>Very high possibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c. Degree of Injury

If injury, due to exposure to hazardous equipment, were to occur while performing this job, how serious would be the likely outcome?

<table>
<thead>
<tr>
<th>No treatment required</th>
<th>Injury requiring first aid</th>
<th>Injury resulting in loss of up to one work day</th>
<th>Injury resulting in loss of more than one work day</th>
<th>Injury resulting in permanent partial impairment</th>
<th>Injury resulting in permanent total impairment/death</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

20 969
21. Exposure to Hazardous Situations involving likely cuts, bites, stings, or minor burns

a. **Frequency**

How often does this job require the worker to be exposed to hazardous situations?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

b. **Likelihood of Injury**

What is the likelihood that the worker would be injured as a result of being exposed to hazardous situations while performing this job?

<table>
<thead>
<tr>
<th>No possibility</th>
<th>Almost no possibility</th>
<th>Very limited possibility</th>
<th>Limited possibility</th>
<th>Some possibility</th>
<th>Fairly high possibility</th>
<th>High possibility</th>
<th>Very high possibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

c. **Degree of Injury**

If injury, due to exposure to hazardous situations, were to occur while performing this job, how serious would be the likely outcome?

<table>
<thead>
<tr>
<th>No treatment required</th>
<th>Injury requiring first aid</th>
<th>Injury resulting in loss of up to one work day</th>
<th>Injury resulting in loss of more than one work day</th>
<th>Injury resulting in permanent partial impairment</th>
<th>Injury resulting in permanent total impairment/death</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>


Work Context: Physical Work Conditions: Body Positioning

22. Body Positioning

How much time in a usual work period does the worker spend:

a. Sitting?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Under 1/10 of the time</th>
<th>Between 1/10 and 1/3 of the time</th>
<th>Between 1/3 and 2/3 of the time</th>
<th>Over 2/3 of the time</th>
<th>Almost continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

b. Standing?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Under 1/10 of the time</th>
<th>Between 1/10 and 1/3 of the time</th>
<th>Between 1/3 and 2/3 of the time</th>
<th>Over 2/3 of the time</th>
<th>Almost continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

c. Climbing ladders, scaffolds, poles, etc.?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Under 1/10 of the time</th>
<th>Between 1/10 and 1/3 of the time</th>
<th>Between 1/3 and 2/3 of the time</th>
<th>Over 2/3 of the time</th>
<th>Almost continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

d. Walking or running?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Under 1/10 of the time</th>
<th>Between 1/10 and 1/3 of the time</th>
<th>Between 1/3 and 2/3 of the time</th>
<th>Over 2/3 of the time</th>
<th>Almost continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
22. Body Positioning (continued)

How much time in a usual work period does the worker spend:

e. Kneeling, crouching, stooping, or crawling?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Under 1/10 of the time</th>
<th>Between 1/10 and 1/3 of the time</th>
<th>Between 1/3 and 2/3 of the time</th>
<th>Over 2/3 of the time</th>
<th>Almost continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

f. Keeping or regaining balance?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Under 1/10 of the time</th>
<th>Between 1/10 and 1/3 of the time</th>
<th>Between 1/3 and 2/3 of the time</th>
<th>Over 2/3 of the time</th>
<th>Almost continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

g. Using hands to handle, control, or feel objects, tools or controls?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Under 1/10 of the time</th>
<th>Between 1/10 and 1/3 of the time</th>
<th>Between 1/3 and 2/3 of the time</th>
<th>Over 2/3 of the time</th>
<th>Almost continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

h. Bending or twisting the body?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Under 1/10 of the time</th>
<th>Between 1/10 and 1/3 of the time</th>
<th>Between 1/3 and 2/3 of the time</th>
<th>Over 2/3 of the time</th>
<th>Almost continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
22. Body Positioning (continued)

How much time in a usual work period does the worker spend:

i. Making repetitive motions?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Under 1/10 of the time</th>
<th>Between 1/10 and 1/3 of the time</th>
<th>Between 1/3 and 2/3 of the time</th>
<th>Over 2/3 of the time</th>
<th>Almost continually</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

24.973
23. Work Attire

How often does the worker wear:

a. Business clothes, such as neckties and dresses that are often worn in offices?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per year, but less than monthly</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

b. A special uniform, such as that of a commercial pilot, nurse, police officer, or military personnel?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per year, but less than monthly</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

c. Work clothing such as that worn by production or maintenance workers?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per year, but less than monthly</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
23. Work Attire (continued)

How often does the worker wear:

d. Common protective or safety attire, such as safety shoes, glasses, gloves, hearing protection, hard-hat, or personal flotation device?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

e. Specialized protective or safety attire, such as a breathing apparatus, safety harness, full protection suit, or radiation protection?

<table>
<thead>
<tr>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
24. Consequences of Error

How serious would the result usually be if the worker made a mistake that was not readily correctable?

<table>
<thead>
<tr>
<th></th>
<th>Mildly Serious</th>
<th>Moderately Serious</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimal loss of time or effort or minor inconvenience to customers</td>
<td>Some loss of time, money, or damage to equipment</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
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<td>4</td>
<td></td>
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<td>5</td>
<td></td>
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<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extremely Serious
Substantial costs, loss of reputation, damage to physical plant, or serious injury or death to self, other workers, or the public

25. Impact of Decisions

a. Level

What results do the worker's decisions usually have on other people, the financial resources, and/or the image or reputation of the organization?

<table>
<thead>
<tr>
<th></th>
<th>Very Minor Results</th>
<th>Moderate Results</th>
<th>Extreme Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Decisions do not affect others or the reputation of the organization</td>
<td>Decisions may affect some others</td>
<td>Decisions affect several departments and may result in large financial losses or gains</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Frequency

How frequently is the worker required to make decisions that affect other people, the financial resources, and/or the image and reputation of the organization?

<table>
<thead>
<tr>
<th></th>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than monthly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
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<tr>
<td>2</td>
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<td>6</td>
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<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
26. Responsibility/Accountability

To what extent is this job assigned accountability for final work outcomes or results?

<table>
<thead>
<tr>
<th>Very Limited</th>
<th>Intermediate</th>
<th>Very Substantial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible for immediate outcomes of specific tasks</td>
<td>Moderate responsibility for effects of job performance on other individuals or related work groups</td>
<td>High responsibility for effects of job performance on the organization as a whole or beyond</td>
</tr>
</tbody>
</table>

1 2 3 4 5 6 7

27. Decision Latitude

Indicate the amount of freedom the worker has to make decisions without supervision.

<table>
<thead>
<tr>
<th>Very Little Freedom</th>
<th>Some Freedom</th>
<th>Extensive Freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>All decisions must be approved by supervisor</td>
<td>May make some decisions using general guidelines; other decisions are subject to supervisor approval</td>
<td>May make any and all decisions without approval</td>
</tr>
</tbody>
</table>

1 2 3 4 5 6 7
28. Frustrating Circumstances

To what extent do frustrating circumstances ("road blocks" to work that are beyond the worker's control) hinder the accomplishment of this job?

<table>
<thead>
<tr>
<th>Low Extent</th>
<th>Moderate Extent</th>
<th>High Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Few work activities are hindered</td>
<td>Some work activities are delayed or interrupted</td>
<td>Important work activities cannot be completed</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29. Degree of Automation

Indicate the level of automation of this job.

<table>
<thead>
<tr>
<th>Low Automation</th>
<th>Moderate Automation</th>
<th>High Automation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal automation; tasks are performed manually or without automated machinery</td>
<td>Some automation</td>
<td>Complete automation; tasks involve mainly monitoring and verifying machines or equipment</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30. Task Clarity

To what extent is the worker clear about what is to be done on this job and how work performance is to be evaluated?

<table>
<thead>
<tr>
<th>Low Clarity</th>
<th>Moderate Clarity</th>
<th>High Clarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme uncertainty; tasks and expectations are very unclear</td>
<td>Some guidance is given, but some uncertainty about what is to be done exists</td>
<td>All tasks and expectations are clear</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
31. How important is being very exact or highly accurate in performing this job?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

32. How important is it to be sure that all the details of this job are performed and everything is done completely?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

33. How important is being constantly aware of either frequently changing events (e.g., security guard watching for shoplifters) or infrequent events (e.g., radar operator watching for tornadoes) to performing this job?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

34. How important is repeating the same physical activities (e.g., key entry) or mental activities (e.g., checking entries in a ledger) over and over, without stopping, to performing this job?

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
35. Structured vs. Unstructured Work

To what extent is this job structured for the worker, rather than allowing the worker to determine tasks, priorities, and goals?

<table>
<thead>
<tr>
<th>Very Structured</th>
<th>Moderately Structured</th>
<th>Very Unstructured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very fixed job activities with little chance to vary tasks, priorities, or goals</td>
<td>Some leeway in work routine, but certain limits apply</td>
<td>Extremely high flexibility in selecting methods, setting goals, and establishing priorities</td>
</tr>
</tbody>
</table>

1  2  3  4  5  6  7
36. Level of Competition

To what extent does this job require the worker to compete or to be aware of competitive pressures?

<table>
<thead>
<tr>
<th>Low Competition</th>
<th>Moderate Competition</th>
<th>High Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requires the worker to be generally aware of competitive pressures on the organization</td>
<td>Requires the worker to contribute to group effort to improve performance or efficiency to levels exceeding those attained by other groups within the organization</td>
<td>Requires the worker to compete directly with coworkers or counterparts in other organizations for sales, customers, efficiency, productivity, new product development, or financial resources</td>
</tr>
</tbody>
</table>

1  2  3  4  5  6  7
37. Time Pressure

How often does this job require the worker to meet strict deadlines?

<table>
<thead>
<tr>
<th>Time Frequency</th>
<th>Never (or does not apply)</th>
<th>Once per year or less</th>
<th>More than once per month, but less than weekly</th>
<th>More than once per week, but less than daily</th>
<th>Daily (once or twice per day)</th>
<th>Several times per day</th>
<th>Hourly or more often (including continually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

38. How important is working under frequent distractions or interruptions to performing this job?

<table>
<thead>
<tr>
<th>Importance Level</th>
<th>Does not apply</th>
<th>Not important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

39. How important is it to this job that the pace is determined by the speed of equipment or machinery? (This does not refer to keeping busy at all times on this job.)

<table>
<thead>
<tr>
<th>Importance Level</th>
<th>Does not apply</th>
<th>Minimally important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
40. Please check the usual work schedule for this job. (Check only one.)
   _ a. Regular Work (established routine, with set schedule)
   _ b. Irregular Work (subject to weather conditions, production demands, contract duration)
   _ c. Seasonal Basis (only work during certain times of the year)

41. Please check the usual work shift for this job. (Check only one.)
   _ a. Day Shift
   _ b. Other Than Day Shift (i.e., evening shift or night shift)
   _ c. Split or Variable Shift (work busy times or shift changes due to staffing demands)
   _ d. Rotating Shift (rotate days, evenings, nights)

42. Please check the usual work shift duration. (Check only one.)
   _ a. Paid for less than 8 hours
   _ b. Paid for 8 hours
   _ c. Paid for more than 8 hours

43. Please check the usual overtime work. (Check all that apply.)
   _ a. None
   _ b. Overtime at request of employer
   _ c. Available for call-in to work
   _ d. Weekend work (not part of regular shift)

44. Please check the number of hours typically worked in one week. (Check only one.)
   _ a. Less than 40 hours
   _ b. 40 hours
   _ c. More than 40 hours
45. Please check the usual work cycle for this job. (Check only one.)

   __ a. 1 week
   __ b. 2 weeks
   __ c. 1 month (28 or more days)

46. Please check the number of days usually worked in the cycle. (Check only one.)

   __ a. Less than 3
   __ b. 3
   __ c. 4
   __ d. 5
   __ e. 6
   __ f. 7
   __ g. 8-10
   __ h. 11-14
   __ i. 15-20
   __ j. More than 20
APPENDIX F

ORGANIZATIONAL CONTEXT QUESTIONNAIRE
Organizational Context

Questionnaire
Instructions for Making Organizational Context Ratings

In this questionnaire you will be asked about the organization in which you work.

Read each question carefully. Read the rating scale or response options that follow the question. Mark through the appropriate number for the response that best describes your organization.

Turn the page to begin the Organizational Context Questionnaire.
1. You have a great deal of control over what happens in your unit or department.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

2. You have a great deal of influence over decisions that are made in your unit or department.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

3. How much autonomy and freedom are there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing your job?

<table>
<thead>
<tr>
<th>Very Little Autonomy</th>
<th>Moderate Autonomy</th>
<th>Very Much Autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

4. To what extent does your job involve doing a "whole" and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or automatic machines? [If your job involves many different tasks or pieces of work, try to think about your typical tasks or the tasks you spend the most time on.]

<table>
<thead>
<tr>
<th>My job is only part of the work</th>
<th>My job is a moderate sized &quot;chunk&quot; of the overall piece of work</th>
<th>My job involves doing a whole piece of work from start to finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

983
5. How much **variety** is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?

<table>
<thead>
<tr>
<th>Very Little Variety</th>
<th>Moderate Variety</th>
<th>Very Much Variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

6. In general, how **significant or important** is your job? That is, are the results of your work likely to significantly affect the lives or well-being of other people?

<table>
<thead>
<tr>
<th>Not very Significant</th>
<th>Moderately Significant</th>
<th>Highly Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

7. To what extent does **doing the job itself** provide you with information about your work performance? That is, does the actual **work itself** provide clues about how well you are doing—aside from any "feedback" co-workers or supervisors may provide?

<table>
<thead>
<tr>
<th>Very Little</th>
<th>A Moderate Amount</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

8. Your job requires you to use a number of complex or high-level skills.

<table>
<thead>
<tr>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
9. Your job is arranged so that you can do an entire piece of work from beginning to end.

<table>
<thead>
<tr>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

10. Just doing the job provides many chances for you to figure out how well you are doing.

<table>
<thead>
<tr>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

11. Your job requires you to perform a variety of tasks.

<table>
<thead>
<tr>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

12. Your job is one where a lot of people can be affected by how well the work gets done.

<table>
<thead>
<tr>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
13. Your job gives you a chance to use your personal initiative and judgment in carrying out the work.

<table>
<thead>
<tr>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

14. Your job provides you a chance to completely finish the piece of work you began.

<table>
<thead>
<tr>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

15. After you finish a job, you know whether you performed well.

<table>
<thead>
<tr>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

16. Your job gives you considerable opportunity for independence and freedom in how you do your job.

<table>
<thead>
<tr>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

17. Your job itself is very significant and important in the broader scheme of things.

<table>
<thead>
<tr>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Organizational Context

18. To what extent does your supervisor act in a friendly and supportive manner? For example, does he/she show concern for members of your work group and respect for your ideas?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>To a limited extent</th>
<th>To some extent</th>
<th>To a moderate extent</th>
<th>To a very great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

19. To what extent does your supervisor take an active role in directing your work group's activities by setting goals, planning and scheduling work, assigning tasks, and making sure that each person knows what he/she should be doing?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>To a limited extent</th>
<th>To some extent</th>
<th>To a moderate extent</th>
<th>To a very great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

20. To what extent does your supervisor provide members of your work group with a clear vision of where the group is going and keep everyone fully committed to the work at hand?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>To a limited extent</th>
<th>To some extent</th>
<th>To a moderate extent</th>
<th>To a very great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

21. To what extent does your supervisor quickly and effectively solve problems, even difficult problems, that come up in your work group?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>To a limited extent</th>
<th>To some extent</th>
<th>To a moderate extent</th>
<th>To a very great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
22. This item asks you about the values of the organization where you work. Please rate how important each of the following concepts is as a guiding principle for your organization as a whole.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Somewhat Important</th>
<th>Not Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Taking chances; going out on a limb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Fairness; justice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Precision; paying attention to even the smallest details</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Stability; keeping things on an even keel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Getting things done; taking decisive or quick action</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Caring about employees; showing concern for their well-being</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Innovation; finding new and better ways of doing things; openness to new ideas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Aggressiveness; forcefully going after what you want</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Valuing customers; emphasizing customer service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Providing high quality products or services; meeting high standards of excellence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. Openness; honesty; keeping employees well informed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L. Flexibility, adapting to change</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
23. How many different supervisors have you had in the past year? (circle one answer)
   a. Only 1
   b. 2
   c. 3
   d. 4 or more
   e. Not applicable

24. Approximately how many different work teams have you belonged to during the past year? (circle one answer)
   a. None
   b. 1
   c. 2-3
   d. 4-6
   e. 7-10
   f. 11 or more

25. In the past year, how many times has your primary work group gone through some kind of reorganization? (circle one answer)
   a. Never
   b. Once
   c. Twice
   d. 3-5 times
   e. 6 times or more

26. In the past year, how many times have the nature of your job duties changed dramatically? (circle one answer)
   a. Never
   b. Once
   c. Twice
   d. 3-5 times
   e. 6 times or more

27. You often receive conflicting requests from two or more people at work.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

7 994
28. You work with two or more groups who want you to focus on different things.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29. You and your supervisor agree about what your job should be.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30. Your supervisor often asks you to do two or more things that conflict (for example, save a large amount of money while at the same time dramatically increasing quality).

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

31. You receive assignments at work without adequate resources and materials to complete them properly.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

32. You are given enough time to do what is expected of you at work.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8 995
33. It often seems like you have too much work for one person to do.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

34. You have negotiated changes in the nature of your role at work with your supervisor.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

35. You have significant input into the way you do your job.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

36. Realistically, the probability that you will achieve your most important individual work goal this year is:

<table>
<thead>
<tr>
<th>You are not required to set individual goals</th>
<th>Less than 20%</th>
<th>21% to 40%</th>
<th>41% to 60%</th>
<th>61% to 80%</th>
<th>81% to 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

9 996
### Organizational Context

37. How many of your individual work goals are quantitative (e.g., selling $100,000 worth of merchandise as opposed to selling as much merchandise as possible).

<table>
<thead>
<tr>
<th>You are not required to set individual goals</th>
<th>None</th>
<th>Few</th>
<th>Some</th>
<th>Most</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

38. How many of your individual work goals are specific – that is, you will know exactly when you have achieved them.

<table>
<thead>
<tr>
<th>You are not required to set individual goals</th>
<th>None</th>
<th>Few</th>
<th>Some</th>
<th>Most</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

39. How often do you get information regarding how close you are to achieving your most important individual work goal (for example, an interim financial report or data on number of units sold)?

<table>
<thead>
<tr>
<th>Never</th>
<th>Once a year</th>
<th>Twice a year</th>
<th>Three times a year</th>
<th>Four times a year or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

40. To what extent do you receive informal, job-relevant feedback from your supervisor?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>To a limited extent</th>
<th>To some extent</th>
<th>To a moderate extent</th>
<th>To a great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
41. During the past year, how often have you met one-on-one with your immediate supervisor to discuss issues such as your performance, goals, training and development? (circle one answer)
   a. Never
   b. Once
   c. Twice
   d. 3-5 times
   e. 6 or more times

42. To what extent do you perform each of the following activities? Use the scale below to rate each activity. (fill in the blanks)

<table>
<thead>
<tr>
<th>Not at all</th>
<th>To a limited extent</th>
<th>To some extent</th>
<th>To a moderate extent</th>
<th>To a great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

   _____ Monitor data on quality, costs, waste, and productivity.
   _____ Determine work flow or the order in which tasks are performed.
   _____ Invest in new equipment and technology.
   _____ Develop new products, services, and procedures.

43. Approximately what percentage of your time do you spend working in an intact team? By intact team we mean a group of 3 or more employees who are jointly responsible for whole work processes and work toward shared goals (e.g., production team, development team, project team). (circle one answer)
   a. None
   b. Less than 25%
   c. 25%-50%
   d. 51%-75%
   e. More than 75%
44. Which of the following is part of your compensation package (i.e., pay)? (check all that apply)

- Profit Sharing
- Gain Sharing
- Knowledge/Skill-based pay
- Pay based on your individual performance
- Pay based on the performance of your team
- Pay based on customer satisfaction
- Pay based on job tenure/seniority
- Pay based on job attributes (e.g., hazards involved, Hay points assigned)
- None of the above

45. Which of the following is part of your benefits? (check all that apply)

- Stock ownership in the organization
- Retirement plan [e.g., 401(k), pension plan, etc.]
- Major medical insurance
- Life insurance
- Disability insurance
- Flexible working hours
- Daycare
- Paid leave (i.e., holidays, vacation time, maternity leave, etc.)
- None of the above
46. In which of the following content areas have you received formal training in the last two years? (check all that apply)

- Diversity
- Team Skills
- Quality Control Skills (e.g., quality/statistical analysis)
- Basic Business or Economics (e.g., accounting, finance)
- Problem Solving Skills
- Leadership Skills
- Customer Service
- None of the above

47. In the last two years, how often have you attended company-sponsored job-related technical training (i.e., technical skills training)? (circle one answer)

a. Never
b. Only once
c. Twice
d. More than twice

48. Which of the following training methods have been used in company training courses you have attended in the last two years? (check all that apply)

- On-the-Job Training
- Case Study Exercises
- Conference Method (i.e., group discussions)
- Lectures with Questions
- Business Games
- Machine Simulators (e.g., flight simulators)
- Films/Videos
- Workbooks
- Role Plays
- Computer-Assisted Instruction
- Audiocassettes
- Interactive Videos
- None of the above
49. Which of the following assessment methods are used to select people for your current job? (check all that apply)

- Ability Tests
- Personality Inventories
- Biodata Questionnaires
- Weighted Application Blanks
- Technical Job Knowledge Tests
- Background Checks
- Interviews
- Simulations (e.g., in-baskets, role plays)
- Ratings by others (e.g., supervisors, peers)
- References
- Educational Records
- Employment Records
- Resumes
- None of the above
- Do not know or unsure
50. Which of the sources listed below are used to recruit people for your current job? (check all that apply)

- Employee referrals
- Direct applications (i.e., unsolicited resumes)
- Employment agencies/Recruiting firms
- College placement offices
- Internships
- Recruiting booths at community functions
- Newspaper advertisements
- Professional journal advertisements
- Other advertisements
- Rehiring
- High school referrals
- In-house notices
- Radio
- Television
- In-house referrals
- Other (please specify ________________________)
- Do not know or unsure

51. Which statement best describes the job rotation practices in your job and your work group? (circle one answer)

a. There is no job rotation — you are trained to do one job and do not usually rotate to other jobs.

b. You rotate within your work group, but not usually outside your group.

c. You rotate jobs within your work group and across work groups in your department, but not across departments.

d. You rotate across work groups and across departments.
APPENDIX G

ABILITIES QUESTIONNAIRE
Abilities Questionnaire

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Instructions for Making Ability Ratings

In this questionnaire you will be presented with a list of 52 abilities. An ability is an enduring attribute that influences performance on a variety of tasks. Examples include Cognitive Abilities such as Written and Oral Expression; Psychomotor Abilities such as Arm-Hand Steadiness and Speed of Limb Movement; Physical Abilities such as Stamina and Trunk Strength; and Sensory Abilities such as Night Vision and Hearing Sensitivity.

For each ability, please make two ratings: LEVEL and IMPORTANCE.

(1) LEVEL. Ask yourself, "What level of this ability is needed to perform this job?" To help you make this judgment, the LEVEL scale has three special features. First, each ability is named and then defined. Second, to the left of the scale are descriptions of high and low levels of the ability. Third, to the right of the scale are examples of specific tasks that require different levels of the ability. These are only examples, so they may or may not apply to the specific job you are describing. However, all of this information should help you make a judgement about the LEVEL of the ability required on the job you are describing. Please take the time to carefully read all of this information before making your ratings.

Use all of the information provided to select the number on the scale that indicates the ability level required by the job you are describing, and mark through the appropriate number, from 1 (indicating that a very low level of the ability is required) to 7 (indicating that a very high level of the ability is required) on the LEVEL scale. For example, the level of "Oral Expression" needed for one job might be much higher than that needed for another job.

THE NOT-RELEVANT (NR) RESPONSE. If the ability is NOT RELEVANT at all to performance on the job, mark through the NR circle that appears at the bottom of the LEVEL scale. Carefully read all of the level descriptions before selecting the NR option. If you select NR, however, there is no need to complete the IMPORTANCE rating described below.

(2) IMPORTANCE. (Complete only if a 1 to 7 LEVEL rating was selected.) Ask yourself, "How important is this ability to performance on this job?" For example, "Written Expression" might be very important for one job, but less important for another job. For the second job, however, "Oral Expression" might be very important.

Rate the IMPORTANCE of the ability for performance on the job by marking through the appropriate number, from 1 (indicating that the ability is of little or no importance) to 5 (indicating that the ability is very important) on the IMPORTANCE scale.

Notice that the LEVEL of an ability and the IMPORTANCE of the ability are different. For example, "Oral Expression" can be high in IMPORTANCE for two different jobs, but the LEVEL of "Oral Expression" that an employee in one job needs is not as high as the LEVEL of "Oral Expression" for an employee in another job.
Below is an example completed by an employee in a particular job. For the LEVEL rating, this employee believes that a low-to-medium level of "Written Expression" is needed to perform this job, so the 3 is selected on the LEVEL rating scale. For the IMPORTANCE rating, the employee believes that "Written Expression" is "Very Important" for performing this job, so the 4 is selected on the IMPORTANCE rating scale. These judgments are, of course, just examples. The job you are describing may be very different.

4. Written Expression

The ability to communicate information and ideas in writing so others will understand.

**Level**

What level of this ability is needed to perform this job?

- **7** Requires clear and well organized use of words and sentences to communicate complicated ideas to others in writing.
- **6** Writing an advanced economics textbook.
- **5** Requires use of words and sentences to communicate simple ideas to others in writing.
- **4** Writing a job recommendation for a subordinate.
- **3** Writing a note to remind someone to take something out of the freezer to thaw.
- **2** Not relevant at all for performance on this job.

**Importance**

How important is this ability to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important

The job you are describing may be very different.
Below is a second example completed by an employee in a different job. This employee does not believe that "Originality" is at all relevant for this job. Therefore, the NR option is selected at the bottom of the LEVEL rating scale. Notice that, because the NR option was selected, the IMPORTANCE rating was not completed.

6. Originality

The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.

Level

What level of this ability is needed to perform this job?

- Requires the production of extremely clever or creative ideas about an unusual topic or situation.
- Requires the production of one or two ideas showing little creativity about a common topic.
- Not relevant at all for performance on this job

Importance

How important is this ability to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5

Turn the page to begin the Abilities Questionnaire.
1. Oral Comprehension

The ability to listen to and understand information and ideas presented through spoken words and sentences.

**Level**

What level of this ability is needed to perform this job?

- **7** Requires understanding complex or detailed spoken sentences that contain unusual words and phrases.

- **6** Understanding a lecture on advanced physics.

- **5** Understanding a coach's oral instructions for a sport.

- **4** Understanding a television commercial.

- **3** Requires understanding short or simple spoken sentences that contain common words and phrases.

- **2** Not relevant at all for performance on this job.

**Importance**

How important is this ability to performance on this job?

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</table>
2. Written Comprehension

The ability to read and understand information and ideas presented in writing.

**Level**

What level of this ability is needed to perform this job?

1. Requires understanding short or simple written sentences that contain common words and phrases.
2. Requires understanding short or simple written sentences that contain common words and phrases.
3. Requires understanding short or simple written sentences that contain common words and phrases.
4. Requires understanding short or simple written sentences that contain common words and phrases.
5. Requires understanding short or simple written sentences that contain common words and phrases.
6. Requires understanding complex or detailed written sentences that contain unusual words and phrases.
7. Requires understanding complex or detailed written sentences that contain unusual words and phrases.

**Importance**

How important is this ability to performance on this job?

Not ImportantSomewhat ImportantImportantVery ImportantExtremely Important

1
2
3
4
5

Understanding an instruction book on repairing a missile guidance system.

Understanding an apartment lease.

Understanding signs on the highway.

Not relevant at all for performance on this job.
3. Oral Expression

The ability to communicate information and ideas in speaking so others will understand.

**Level**

What level of this ability is needed to perform this job?

1. Requires speaking in a clear and well organized way to communicate complicated ideas to others.

2. Requires speaking to communicate simple ideas to others.

**Importance**

How important is this ability to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
--- | --- | --- | --- | ---
1 | 2 | 3 | 4 | 5
4. Written Expression

The ability to communicate information and ideas in writing so others will understand.

**Level**

What level of this ability is needed to perform this job?

- **1** Not relevant at all for performance on this job
- **2** Requires use of words and sentences to communicate simple ideas to others in writing.
- **3** Requires use of words and sentences to communicate complicated ideas to others in writing.
- **4** Writing a job recommendation for a subordinate.
- **5** Writing a note to remind someone to take something out of the freezer to thaw.
- **6** Writing an advanced economics textbook.
- **7** Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important
5. Fluency of Ideas

The ability to come up with a number of ideas about a given topic. It concerns the number of ideas produced and not the quality, correctness, or creativity of the ideas.

**Level**

What level of this ability is needed to perform this job?

- **7** Requires the production of many ideas about a very specialized topic.

- **6** Requires the production of one or two ideas about a common topic.

- **5** Naming all the possible strategies for a particular military battle.

- **4** Thinking of as many ideas as possible for the name of a new research firm.

- **3** Naming four different uses for a screwdriver.

- **2** Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5
6. Originality

The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.

**Level**

What level of this ability is needed to perform this job?

- **7** Requires the production of extremely clever or creative ideas about an unusual topic or situation.
- **6** Requires the production of one or two ideas showing little creativity about a common topic.
- **5** Requires the production of two or three ideas showing little creativity about a common topic.
- **4** Requires the production of one or two ideas showing little creativity about a common topic.
- **3** Requires the production of one idea showing little creativity about a common topic.
- **2** Requires the production of a single idea showing little creativity about a common topic.
- **1** Requires the production of a single idea showing little creativity about a common topic.
- **NR** Not relevant at all for performance on this job.

**Importance**

How important is this ability to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important
7. Problem Sensitivity

The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

**Level**

What level of this ability is needed to perform this job?

Requires recognizing very unusual or complex problems and identifying all elements of the problem.

Requires recognizing common or simple problems.

- **7**
  - Recognizing an illness at an early stage of a disease when there are only a few symptoms.

- **6**
  - Recognizing from the mood of prisoners that a prison riot is likely to occur.

- **5**
  - Recognizing that an unplugged lamp won't work.

- **4**
  - Recognizing an illness at an early stage of a disease when there are only a few symptoms.

- **3**
  - Recognizing from the mood of prisoners that a prison riot is likely to occur.

- **2**
  - Recognizing that an unplugged lamp won't work.

- **1**
  - Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- **Not Important**
  - 1
- **Somewhat Important**
  - 2
- **Important**
  - 3
- **Very Important**
  - 4
- **Extremely Important**
  - 5
8. **Deductive Reasoning**

The ability to apply general rules to specific problems to come up with logical answers. It involves deciding if an answer makes sense.

**Level**

What level of this ability is needed to perform this job?

- **7** — Designing an aircraft wing using the principles of aerodynamics.
- **6** — Deciding what factors to consider in selecting stocks.
- **5** — Knowing that, due to the law of gravity, a stalled car can coast down the hill.
- **4**
- **3**
- **2**
- **1**
- **NR** — Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- **1** — Not Important
- **2** — Somewhat Important
- **3** — Important
- **4** — Very Important
- **5** — Extremely Important
9. Inductive Reasoning

The ability to combine separate pieces of information, or specific answers to problems, to form general rules or conclusions. It includes coming up with a logical explanation for why a series of seemingly unrelated events occur together.

**Level**

What level of this ability is needed to perform this job?

- **1** Not relevant at all for performance on this job
- **2** Requires developing a simple basic rule to explain how two similar things are related.
- **3** Requires developing a rule or theory to explain how very different things or groups of things are related.
- **4** Determining the prime suspect based on evidence gathered at a crime scene.
- **5** Determining clothing to wear based on the weather report.
- **6** Diagnosing a disease using the results of many different lab tests.

**Importance**

How important is this ability to performance on this job?

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The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations.

**Level**

What level of this ability is needed to perform this job?

- **7** ← Assembling a nuclear warhead.
- **6** ← Mixing chemicals according to a specific sequence so they do not become toxic.
- **5** ← Following the correct steps to change a tire.
- **4** ← Putting things in numerical order.
- **3** ← Requires putting in order a small amount of information according to a simple rule.
- **2** ← Requires putting in order a large amount of information using two or more complex rules.
- **1** ← Not relevant at all for performance on this job.

**Importance**

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11. Category Flexibility

The ability to produce many rules so that each rule tells how to group (or combine) a set of things in a different way.

**Level**

What level of this ability is needed to perform this job?

- **7**
  - Requires the production of a large number of rules to make many different groupings of unrelated things.
  - *Classifying man-made fibers in terms of their strength, cost, flexibility, melting points, etc.*

- **6**
  - Requires the production of only one rule, and thus only one grouping of a set of very similar things.
  - *Classifying flowers according to size, color, smell, and uses.*

- **5**
  - *Sorting nails in a toolbox on the basis of length.*

- **4**
- **3**
- **2**
- **1**
- **NR** Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important
12. Mathematical Reasoning

The ability to understand and organize a problem and then to select a mathematical method or formula to solve the problem.

**Level**

What level of this ability is needed to perform this job?

- **7**
  - Determining the mathematics required to simulate a space craft landing on the moon.

- **6**
  - Deciding how to calculate profits to determine the amounts of yearly bonuses.

- **5**
  - Determining how much 10 oranges will cost when they are priced at 2 for 29 cents.

- **4**
  - Not relevant at all for performance on this job

**Importance**

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13. Number Facility

The ability to add, subtract, multiply, or divide quickly and correctly.

**Level**

What level of this ability is needed to perform this job?

1. Requires fast and accurate calculations using many different operations, with complex numbers.
2. Requires simple calculations when more than enough time is available.
3. Manually calculating the flight path of an aircraft, taking into account speed, fuel, wind, and altitude.
4. Computing the interest payment that should be generated from an investment.
5. Balancing a checkbook.
6. Adding 2 and 7.
7. Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

Not relevant at all for performance on this job
14. Memorization

The ability to remember information such as words, numbers, pictures, and procedures.

**Level**
What level of this ability is needed to perform this job?

- **7**
  - Reciting the Gettysburg Address after studying it for 15 minutes.
- **6**
  - Reciting the first names of the five people you just met.
- **5**
- **4**
  - Remembering the number on your bus to be sure you get back on the right one.
- **3**
- **2**
- **1**
  - Not relevant at all for performance on this job

**Importance**
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15. **Speed of Closure**

The ability to quickly make sense of information that seems to be without meaning or organization. It involves quickly combining and organizing different pieces of information into a meaningful pattern.

**Level**

What level of this ability is needed to perform this job?

- **7** Requires quick combination of many different pieces of information to identify a very complex and unusual pattern.
- **6** Interpreting the patterns on a weather radarscope to decide if the weather is changing.
- **5** Making sense out of strange handwriting.
- **4** Recognizing a song after hearing only the first few notes.
- **3** Requires the combination of two or three pieces of information into a simple pattern, when time is not very important.
- **2**
- **1** Not relevant at all for performance on this job (NR)

**Importance**

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**16. Flexibility of Closure**

The ability to identify or detect a known pattern (a figure, object, word, or sound) that is hidden in other distracting material.

**Level**

What level of this ability is needed to perform this job?

- **1** Not relevant at all for performance on this job
- **2** Requires detecting an easy-to-find pattern in simple background material.
- **3** Requires detecting an unusual, complex pattern in highly complex, confusing, and distracting background material.
- **4** Identifying camouflaged tanks while flying in a high speed airplane.
- **5** Looking for a golf ball in the rough.
- **6** Tuning in a radio weather station in a noisy truck.
- **7** Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important
**Perceptual Speed**

The ability to quickly and accurately compare letters, numbers, objects, pictures, or patterns. The things to be compared may be presented at the same time or one after the other. This ability also includes comparing a presented object with a remembered object.

**Level**

What level of this ability is needed to perform this job?

- Requires very quick and accurate comparisons of highly detailed pictures and patterns.
  - 7

- Requires accuracy and some quickness in comparing letters, numbers, or objects that are obviously the same or different from each other.
  - 6

- Not relevant at all for performance on this job
  - NR

**Importance**

How important is this ability to performance on this job?

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- Inspecting electrical parts for defects as they flow by on a fast-moving assembly line.
- Reading five temperature gauges in 10 seconds to make sure each temperature is within safe limits.
- Sorting mail according to zip codes with no time pressure.
18. Spatial Orientation

The ability to know one’s location in relation to the environment, or to know where other objects are in relation to one’s self.

Level

What level of this ability is needed to perform this job?

Requires staying oriented in a changing environment.

Requires some orientation in an unchanging environment.

Navigating an ocean voyage using only the positions of the sun and stars.

Finding your way through a familiar room when the lights are out without bumping into anything.

Using the floor plan to locate a store in a shopping mall.

NR Not relevant at all for performance on this job

Importance

How important is this ability to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5
19. Visualization

The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged.

**Level**

What level of this ability is needed to perform this job?

![Level Diagram]

- Requires imagining how something unusual will look after many complex changes in its position or in the arrangement of its parts.
- Requires imagining how something familiar will look after one simple change in its position or in the arrangement of its parts.
- Anticipating opponent's as well as your own future moves in a chess game.
- Following a diagram to assemble a metal storage cabinet.
- Imagining how to put paper in the typewriter so the letterhead comes out at the top.
- Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

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20. Selective Attention

The ability to concentrate and not be distracted while performing a task over a period of time.

**Level**

What level of this ability is needed to perform this job?

- **7**
  - Requires intense concentration on a complex task in the presence of a great deal of background distraction.
  - *Studying a technical manual in a noisy boiler room.*

- **6**
  - Requires enough attention to do a simple, routine task in the presence of a little background distraction.
  - *Monitoring security TV screens for intruders throughout the night shift.*

- **5**
  - *Answering a business call with coworkers talking nearby.*

**Important**

How important is this ability to performance on this job?

- **1**
  - Not relevant at all for performance on this job

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21. Time Sharing

The ability to efficiently shift back and forth between two or more activities or sources of information (such as speech, sounds, touch, or other sources).

Level

What level of this ability is needed to perform this job?

- **Requires using more than two sources to get complex information at a rapid rate.**
  - Level 7
  - Monitoring radar and radio transmissions to keep track of aircraft during periods of heavy traffic.

- **Requires using two sources to get simple information at a slow pace.**
  - Level 6
  - Watching the actions of several team members while coaching a player on the sidelines.

- Level 5
  - Watching street signs while driving at 30 miles per hour.

- Level 4
  - Listening to music while filing papers.

- Level 3
  - Not relevant at all for performance on this job

Importance

How important is this ability to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

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22. Arm-Hand Steadiness

The ability to keep the hand and arm steady while making an arm movement or while holding the arm and hand in one position.

**Level**

What level of this ability is needed to perform this job?

- Requires extreme steadiness to move the arm and hand or to hold them in position.
- Requires only a little steadiness to move the arm and hand or to hold them in one position.

**Importance**

How important is this ability to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

- Cutting facets in diamonds.
- Threading a needle.
- Lighting a candle.

NR: Not relevant at all for performance on this job.
23. Manual Dexterity

The ability to quickly make coordinated movements of one hand, a hand together with the arm, or two hands to grasp, manipulate, or assemble objects.

**Level**

What level of this ability is needed to perform this job?

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<th>Level</th>
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<td>Requires very fast coordinated use of one hand, a hand and arms, or two hands to grasp, place, move, or assemble objects.</td>
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<tr>
<td>6</td>
<td>Performs open-heart surgery using surgical instruments.</td>
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<td>5</td>
<td>Packaging oranges in crates as quickly as possible.</td>
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<td>4</td>
<td>Screwing a light bulb into a lamp socket.</td>
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<td>3</td>
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**Importance**

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24. Finger Dexterity

The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.

**Level**

What level of this ability is needed to perform this job?

- 7
  - Putting together the inner workings of a small wrist watch.
- 6
  - Attaching small knobs to stereo equipment on an assembly line.
- 5
- 4
  - Putting coins in a parking meter.
- 3
- 2
- 1
- NR
  - Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

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25. Control Precision

The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions.

**Level**

What level of this ability is needed to perform this job?

- **Requires extreme precision to quickly and repeatedly adjust very sensitive controls.** (7)
- **Drilling a tooth.**

- **Requires some precision to adjust a control once or twice under little time pressure.** (6)
- **Adjusting farm tractor controls.**

- **Adjusting a room light with a dimmer switch.** (5)

- **Not relevant at all for performance on this job** (NR)

**Importance**

How important is this ability to performance on this job?

- **Not Important** (1)
- **Somewhat Important** (2)
- **Important** (3)
- **Very Important** (4)
- **Extremely Important** (5)
26. Multilimb Coordination

The ability to coordinate movements of two or more limbs together (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the body is in motion.

**Level**

What level of this ability is needed to perform this job?

- ** NR** Not relevant at all for performance on this job
- ** 1** Requires a low degree of coordination to perform simple movements using two limbs at a time.
- ** 2** Requires a high degree of coordination to perform very complex movements involving the use of all four limbs together.

- ** 7** Playing the drum set in a jazz band.
- ** 6** Operating a forklift truck in a warehouse.
- ** 5** Rowing a boat.

**Importance**

How important is this ability to performance on this job?

- ** 1** Not Important
- ** 2** Somewhat Important
- ** 3** Important
- ** 4** Very Important
- ** 5** Extremely Important
27. Response Orientation

The ability to choose quickly and correctly between two or more movements in response to two or more different signals (lights, sounds, pictures, etc.). It includes the speed with which the correct response is started with the hand, foot, or other body parts.

**Level**

What level of this ability is needed to perform this job?

- **1** Not relevant at all for performance on this job
- **2** Requires some speed in selection of the correct movement when there are two signals or two response possibilities.
- **3** Requires the extremely rapid selection of the correct movement when there are many signals and many response possibilities.
- **4** Hitting either the automobile brake or gas pedal in a skid situation.
- **5** In a spacecraft which is out of control, reacting quickly to each malfunction with the correct control movements.
- **6** When the doorbell and telephone ring at the same time, quickly selecting which to answer first.
- **7** Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- **1** Not important
- **2** Somewhat important
- **3** Important
- **4** Very important
- **5** Extremely important
28. Rate Control

The ability to time the adjustments of a movement or equipment control in anticipation of changes in the speed and/or direction of a continuously moving object or scene.

**Level**

What level of this ability is needed to perform this job?

- Requires precisely timed control adjustments to random changes of a high-speed object moving in several directions.
- Operating aircraft controls used to land a jet on an aircraft carrier in rough weather.
- Shooting a duck in flight.
- Keeping up with a car you are following when the speed of that car changes.
- Riding a bicycle alongside a jogger.
- Requires timed control adjustments to a slow-moving, almost predictable object moving in a single direction.

**Importance**

How important is this ability to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

Not relevant at all for performance on this job
29. Reaction Time

The ability to quickly respond (with the hand, finger, or foot) to one signal (sound, light, picture, etc.) when it appears.

**Level**

What level of this ability is needed to perform this job?

1. **Requires extreme quickness in starting the movement when a signal appears.**

2. **Requires some quickness in starting the movement when a signal appears.**

3. **Not relevant at all for performance on this job**

**Importance**

How important is this ability to performance on this job?

1. Not Important

2. Somewhat Important

3. Important

4. Very Important

5. Extremely Important

- Hitting the brake when a pedestrian steps in front of the car.
- Throwing a switch when a red warning light goes on.
- Starting to slow down the car when a traffic light turns yellow.
30. Wrist-Finger Speed

The ability to make fast, simple, repeated movements of the fingers, hands, and wrists.

**Level**

What level of this ability is needed to perform this job?

- Requires movements of the fingers, hands, and wrists at an extremely fast pace.
  - Requires movement of the fingers, hands, and wrists at a slow pace.
  - Typing a document at the speed of 90 words per minute.
  - Carving roast beef in a cafeteria.
  - Using a manual pencil sharpener.
  - Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

1  2  3  4  5
31. Speed of Limb Movement

The ability to quickly move the arms or legs.

**Level**
What level of this ability is needed to perform this job?

- **7** Throwing punches in a boxing match.
- **6** Swatting a fly with a fly swatter.
- **5** Sawing through a thin piece of wood.
- **4**
- **3**
- **2**
- **1** Not relevant at all for performance on this job

**Importance**
How important is this ability to performance on this job?

<table>
<thead>
<tr>
<th>Not Important</th>
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32. Static Strength

The ability to exert maximum muscle force to lift, push, pull, or carry objects.

**Level**

What level of this ability is needed to perform this job?

- **7**: Lifting 75-pound bags of cement onto a truck.
- **6**: Pulling a 40-pound sack of fertilizer across the lawn.
- **5**: Pushing an empty shopping cart.
- **1**: Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

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33. explosive strength

The ability to use short bursts of muscle force to propel oneself (as in jumping or sprinting), or to throw an object.

Level

What level of this ability is needed to perform this job?

Requires bursts of all the muscle force possible to propel one’s own body weight or objects.

Requires bursts of a little muscle force to move one’s own body weight or objects.

Importance

How important is this ability to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5
34. Dynamic Strength

The ability to exert muscle force repeatedly or continuously over time. This involves muscular endurance and resistance to muscle fatigue.

**Level**

What level of this ability is needed to perform this job?

- **7**: Performing a gymnastics routine using the rings.
- **6**: Climbing a 48-foot long extension ladder.
- **5**: Using pruning shears to trim a bush.
- **2**: Requires use of a little muscle force to hold up or move the body weight or objects for a short time.
- **1**: Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- **1**: Not Important
- **2**: Somewhat Important
- **3**: Important
- **4**: Very Important
- **5**: Extremely Important
35. Trunk Strength

The ability to use one's abdominal and lower back muscles to support part of the body repeatedly or continuously over time without "giving out" or fatiguing.

**Level**

What level of this ability is needed to perform this job?

- **7** Requires use of all the abdominal and lower back muscle force possible to hold up or move part of the body for a long period of time.

- **6** Requires use of a little abdominal and lower back muscle force to hold up or move part of the body for a short time.

- **5** Doing 100 sit-ups.

- **4** Shoveling snow for a half-hour to clear a walkway.

- **3** Sitting up in an office chair.

- **2** Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important
36. Stamina

The ability to exert one's self physically over long periods of time without getting winded or out of breath.

Level

What level of this ability is needed to perform this job?

1

NR

Not relevant at all for performance on this job

Requires physical activity of the whole body over a short time, with little strain on the heart and lungs.

Requires physical activity of the whole body over a long time, with great strain on the heart and lungs.

7

Running a 10 mile race.

Climbing 6 flights of stairs.

Walking a quarter of a mile to deliver a letter.

Importance

How important is this ability to performance on this job?

Not Important

Somewhat Important

Important

Very Important

Extremely Important

1

2

3

4

5
37. Extent Flexibility

The ability to bend, stretch, twist, or reach out with the body, arms, and/or legs.

Level
What level of this ability is needed to perform this job?

1. Requires a high degree of bending, stretching, twisting, or reaching out into unusual positions.

- Working under a car dashboard to repair the heater.

2. Requires a low degree of bending, stretching, twisting, or reaching out.

- Reaching for a box on a high warehouse shelf.

- Reaching for a microphone in a patrol car.

NR (Not Relevant) Not relevant at all for performance on this job.

Importance
How important is this ability to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5
38. Dynamic Flexibility

The ability to quickly and repeatedly bend, stretch, twist, or reach out with the body, arms, and/or legs.

**Level**
What level of this ability is needed to perform this job?

1. Not relevant at all for performance on this job
2. Requires a few repeated bending, twisting, or stretching movements in which speed is not important.
3. Requires many fast and repeated body bending, twisting, or stretching movements.

![Level Scale]

**Importance**
How important is this ability to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

![Importance Scale]
39. Gross Body Coordination

The ability to coordinate the *movement of the arms, legs, and torso together* in activities where the whole body is in motion.

**Level**

What level of this ability is needed to perform this job?

1. Requires a small degree of overall body coordination to do simple common movements.
2. Requires a high degree of overall body coordination to do difficult sets of movements.
3. Performing a ballet dance.
4. Swimming the length of the pool.
5. Getting in and out of a truck.
6. Not relevant at all for performance on this job.

**Importance**

How important is this ability to performance on this job?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important
40. Gross Body Equilibrium

The ability to keep or regain one's body balance or stay upright when in an unstable position.

**Level**

What level of this ability is needed to perform this job?

- **7**
  - Requires keeping or getting back body balance when many forces are working against keeping body balance.
  - *Walking on narrow beams in high-rise construction.*

- **6**
  - Requires keeping or getting back balance when a fairly weak force is working against keeping body balance.
  - *Walking on ice across a pond.*

- **5**
  - *Standing on a ladder.*

- **2**

- **1**
  - Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

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41. Near Vision

The ability to see details of objects at a close range (within a few feet of the observer).

### Level

**What level of this ability is needed to perform this job?**

- **7**
  - Detecting minor defects in a diamond.

- **6**
  - Reading the fine print of a legal document.

- **5**
  - Reading dials on the car dashboard.

- **4**

- **3**

- **2**

- **1**
  - Requires fine visual distinctions at a close range.

- **NR**
  - Not relevant at all for performance on this job

### Importance

**How important is this ability to performance on this job?**

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42. Far Vision

The ability to see details at a distance.

**Level**

What level of this ability is needed to perform this job?

- Requires fine visual distinctions at a distant range.
- Requires gross visual distinctions at a distant range.
- Detecting differences in ocean vessels on the horizon.
- Focusing a slide projector.
- Reading a roadside billboard.

**Importance**

How important is this ability to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5

Not relevant at all for performance on this job (NR)
43. Visual Color Discrimination

The ability to match or detect differences between colors, including shades of color and brightness.

**Level**

What level of this ability is needed to perform this job?

- **1** NR Not relevant at all for performance on this job
- **2** Separating laundry into colors and whites.
- **3** Tracing an electrical circuit which is marked by various colored wires.
- **4** Painting a color portrait from a living subject.
- **5** Requires distinctions between a few colors that are very different in terms of color, shade, and brightness.
- **6** Requires distinctions between a variety of colors that are closely related in terms of color, shade, and brightness.
- **7** Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5
44. Night Vision

The ability to see under low light conditions.

**Level**

What level of this ability is needed to perform this job?

- **1**
  - Requires some visual detection under nearly normal light conditions.

- **2**
  - Requires visual detection and identification of detail under extremely low light conditions.

- **3**
  - **Finding your way through the woods on a moonless night.**

- **4**
  - **Taking notes during a slide presentation.**

- **5**
  - **Reading street signs when driving at dusk (just after the sun sets).**

- **6**
  - Not relevant at all for performance on this job

- **7**
  - Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important
45. Peripheral Vision

The ability to see objects or movement of objects to one's side when the eyes are focused forward.

**Level**

What level of this ability is needed to perform this job?

- Requires the detection of small objects or small movements at the edges of the field of vision.
  - 7
- Requires the general detection of relatively large objects or movements to the side.
  - 6
  - 5
  - 4
  - 3
  - 2
  - 1

NR: Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
--- | --- | --- | --- | ---
1 | 2 | 3 | 4 | 5
46. Depth Perception

The ability to judge which of several objects is closer or farther away from the observer, or to judge the distance between an object and the observer.

**Level**

What level of this ability is needed to perform this job?

1. Requires the detection of small differences in distance.
   - Throwing a long pass to a teammate who is surrounded by opponents.
   - Operating a crane to move materials from a truck bed to the ground.
   - Merging a car into traffic on a city street.

2. Requires the general discrimination of relative positions of objects.

3. Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important
47. **Glare Sensitivity**

The ability to see objects in the presence of glare or bright lighting.

**Level**

What level of this ability is needed to perform this job?

- **7** Requires visual detection of fine detail in very high glare conditions.
- **6** Snow skiing in bright sunlight.
- **5** Seeing boats on the horizon when sailing.
- **4** Driving on a familiar roadway on a cloudy day.
- **3** Requires some visual detection in conditions of minimal glare.
- **2**
- **1**
- **NR** Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important
48. Hearing Sensitivity

The ability to detect or tell the difference between sounds that vary over broad ranges of pitch and loudness.

Level

What level of this ability is needed to perform this job?

1. **7**
   - **Tuning an orchestra.**

2. **6**
   - **Diagnosing what is wrong with a car engine from its sound.**

3. **5**
   - **Noticing when the hourly watch alarm goes off.**

4. **4**
   - **Not relevant at all for performance on this job.**

Requires making distinctions between sounds of very similar pitch or loudness and detecting sounds of low intensity.

Requires making distinctions between sounds that are very different in pitch or loudness and detecting sounds of moderate intensity.

Importance

How important is this ability to performance on this job?

- **1** Not Important
- **2** Somewhat Important
- **3** Important
- **4** Very Important
- **5** Extremely Important
49. Auditory Attention

The ability to focus on a single source of auditory (hearing) information in the presence of other distracting sounds.

Level

What level of this ability is needed to perform this job?

Requires highly focused attention to a complex target sound in the presence of many other distracting sounds.

7 - Listening to instructions from a coworker in a noisy saw mill.

6 - Listening for your flight announcement at an airport.

5 - Listening to a lecture while people are whispering nearby.

4 - Requires focusing on a simple target sound in an otherwise quiet situation.

3 - Requires focusing on a simple target sound in an otherwise quiet situation.

2 - Not relevant at all for performance on this job

1 - Not relevant at all for performance on this job

Importance

How important is this ability to performance on this job?

Not Important | Somewhat Important | Important | Very Important | Extremely Important
---|---|---|---|---
1 | 2 | 3 | 4 | 5
50. Sound Localization

The ability to tell the direction from which a sound originated.

Level

What level of this ability is needed to perform this job?

- Requires determining the precise location of several sounds that may be faint or producing echoes.
- Requires determining the general direction from which a sound originated.

Importance

How important is this ability to performance on this job?

- Determining the direction of an emergency vehicle from the sound of its siren.
- Finding a ringing telephone in an unfamiliar apartment.
- Listening to a stereo to determine which speaker is working.
- Not relevant at all for performance on this job.

1  2  3  4  5
Not Important  Somewhat Important  Important  Very Important  Extremely Important

10570
51. Speech Recognition

The ability to identify and understand the speech of another person.

Level
What level of this ability is needed to perform this job?

Requires hearing and understanding complex speech that is unclear or distorted.

Requires hearing and understanding simple speech under normal conditions.

- Understanding a speech presented by someone with a strong foreign accent.
- Identifying a former customer's voice over the telephone.
- Recognizing the voice of a coworker.
- Not relevant at all for performance on this job

Importance
How important is this ability to performance on this job?

Not Important  |  Somewhat Important  |  Important  |  Very Important  |  Extremely Important
1  |  2  |  3  |  4  |  5

1058
52. Speech Clarity

The ability to speak clearly so that it is understandable to a listener.

**Level**

What level of this ability is needed to perform this job?

- Requires speaking many complex words in a clear fashion.
  - 7
  - Giving a lecture to a large audience.
- Requires speaking a few simple words in a clear fashion.
  - 6
  - Making announcements over the loud speaker at a sports event.
  - 5
  - Calling the numbers in a bingo game.
  - 4
  - 3
  - 2
  - 1
  - NR
  - Not relevant at all for performance on this job

**Importance**

How important is this ability to performance on this job?

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APPENDIX H

OCCUPATIONAL VALUES QUESTIONNAIRE
Occupational Values

Questionnaire
Instructions for Making Occupational Value Ratings

In this questionnaire you will be presented with a list of 21 statements that describe jobs. Each statement begins "workers on this job;" by "workers on this job," we mean you or anyone else who might have your job in the future.

Read each statement and decide whether it describes your job. Make this judgment by marking through the appropriate number on the AGREEMENT scale. It is a 1 to 5-point scale where 1 indicates that you strongly disagree with the statement and 5 indicates that you strongly agree with the statement.

Below is an example completed by an employee in a particular job. The employee agrees with the statement, "Workers on this job make use of their individual abilities;" neither agrees nor disagrees with the statement, "Workers on this job get a feeling of accomplishment;" and strongly agrees with the statement, "Workers on this job are busy all the time." These judgments are, of course, just examples. The job you are describing may be very different.

EXAMPLE

For each statement, mark an X over the appropriate value.

<table>
<thead>
<tr>
<th>Statement</th>
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<tbody>
<tr>
<td>1. Workers on this job make use of their individual abilities.</td>
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<td></td>
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<td>2. Workers on this job get a feeling of accomplishment.</td>
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<tr>
<td>3. Workers on this job are busy all the time.</td>
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</table>

Turn the page to begin the Occupational Values Questionnaire.
For each statement, mark an X over the appropriate value.

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<tr>
<td>1. Workers on this job make use of their individual abilities.</td>
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<td>2. Workers on this job get a feeling of accomplishment.</td>
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<td>3. Workers on this job are busy all the time.</td>
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<td>4. Workers on this job have opportunities for advancement.</td>
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<td>5. Workers on this job give directions and instructions to others.</td>
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<td>6. Workers on this job are treated fairly by the company.</td>
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<td>7. Workers on this job are paid well in comparison with other workers.</td>
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<td>8. Workers on this job have co-workers who are easy to get along with.</td>
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<td>9. Workers on this job try out their own ideas.</td>
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<td>10. Workers on this job do their work alone.</td>
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<td>11. Workers on this job are never pressured to do things that go against their sense of right and wrong.</td>
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<td>12. Workers on this job receive recognition for the work they do.</td>
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<td>13. Workers on this job make decisions on their own.</td>
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<td>14. Workers on this job have steady employment.</td>
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<td>15. Workers on this job have work where they do things for other people.</td>
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<td>16. Workers on this job are looked up to by others in their company and their community.</td>
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<td>17. Workers on this job have supervisors who back up their workers with management.</td>
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<tr>
<td>18. Workers on this job have supervisors who train their workers well.</td>
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<tr>
<td>19. Workers on this job have something different to do every day.</td>
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<td>20. Workers on this job have good working conditions.</td>
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<td>21. Workers on this job plan their work with little supervision.</td>
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APPENDIX I

WORK STYLES QUESTIONNAIRE
Work Styles

Questionnaire
Instructions for Making Work Style Ratings

In this questionnaire you will be presented with a list of 17 work style characteristics.

For each characteristic, please make two ratings: LEVEL and IMPORTANCE.

(1) LEVEL. Ask yourself, "What level of this characteristic is needed to perform this job?"

To help you make this judgment, the LEVEL scale includes descriptions of activities
requiring high, medium, and low levels of the characteristic. These are only examples, so
they may or may not apply to the specific job you are describing.

Use the example descriptions to select the number on the scale that indicates the work style
characteristic level required by the job, and mark through the appropriate number, from 1
(indicating that a very low level of the characteristic is required) to 7 (indicating that a very
high level of the characteristic is required) on the LEVEL scale. For example, the level of
"Persistence" needed for one job might be much higher than that needed for another job.

THE NOT-RELEVANT (NR) RESPONSE. If the characteristic is NOT RELEVANT at all
to performance on the job, mark through the NR circle that appears at the bottom of the
LEVEL scale. Carefully read all of the level descriptions before selecting the NR option. If
you select NR, however, there is no need to complete the IMPORTANCE rating described
below.

(2) IMPORTANCE. (Complete only if a 1 to 7 LEVEL rating was selected.) Ask yourself,
"How important is this characteristic to performance on this job?" For example, "Attention to
Detail" might be very important for one job, but less important for another job. For the
second job, however, "Innovation" might be very important.

Rate the IMPORTANCE of the work style characteristic for performance on the job by
marking through the appropriate number, from 1 (indicating that the characteristic is of little
or no importance) to 5 (indicating that the characteristic is very important) on the
IMPORTANCE scale.

Notice that the LEVEL of a work style characteristic and the IMPORTANCE of the
characteristic are different. For example, "Persistence" can be high in IMPORTANCE for
two different jobs, but the LEVEL of "Persistence" that an employee in one job needs may
not be as high as the LEVEL of "Persistence" for an employee in another job.
Below is an example completed by an employee in a particular job. For the LEVEL rating, this employee believes that a low-to-medium level of "Dependability" is needed to perform this job, so the 3 is selected on the rating scale. For the IMPORTANCE rating, the employee believes that "Dependability" is "Very Important" for performing this job, so the 4 is selected on the rating scale. These judgments are, of course, just examples. The job you are describing may be very different.

12. Dependability

Job requires being reliable, responsible, and dependable, and fulfilling obligations.

---

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
- **LOW**

---

**Importance**

How important is this characteristic to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

---
Below is a second example completed by an employee in a different job. This employee does not believe that "Innovation" is at all relevant for this job. Therefore, the NR option is selected at the bottom of the LEVEL rating scale. Notice that, because the NR option was selected, the IMPORTANCE rating was not completed.

16. Innovation

Job requires creativity and alternative thinking to come up with new ideas for and answers to work-related problems.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
- **LOW**

- **1** Not relevant at all for performance on this job

**Importance**

How important is this characteristic to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

Turn the page to begin the Work Styles Questionnaire.
1. Achievement/Effort

Job requires establishing and maintaining personally challenging achievement goals, and exerting effort toward task mastery.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
  - Requires continual extensive effort toward achievement of work goals.
- **LOW**
  - Requires sustained effort toward achievement of work goals.
  - Requires moderate levels of effort toward achievement of work goals.
  - **NR** Not relevant at all for performance on this job

**Importance**

How important is this characteristic to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

1 2 3 4 5
2. Persistence

Job requires persistence in the face of obstacles on the job.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
  
  - 7: Requires high levels of persistence when work becomes difficult.

- **LOW**
  
  - 1: Requires little persistence on the job.

- **NR**: Not relevant at all for performance on this job

**Importance**

How important is this characteristic to performance on this job?

- 1: Not Important
- 2: Somewhat Important
- 3: Important
- 4: Very Important
- 5: Extremely Important
3. Initiative

Job requires being willing to take on responsibilities and challenges.

**Level**

What level of this characteristic is needed to perform this job?

- HIGH
  - Requires taking on new or additional responsibilities and challenges.

- LOW
  - Requires considerable willingness to take on new work responsibilities and challenges.

- Not relevant at all for performance on this job (NR)

**Importance**

How important is this characteristic to performance on this job?

- Not Important (1)
- Somewhat Important (2)
- Important (3)
- Very Important (4)
- Extremely Important (5)
4. Energy

Job requires the energy and stamina to accomplish work tasks.

**Level**
What level of this characteristic is needed to perform this job?

- **HIGH**
  - 7
  - Requires very high levels of energy to get tasks done.

- **LOW**
  - 1
  - Requires little energy to get tasks done.

- **NR** Not relevant at all for performance on this job

**Importance**
How important is this characteristic to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

![Importance Scale]

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5. Leadership Orientation

Job requires a willingness to lead, take charge, and offer opinions and direction.

**Level**
What level of this characteristic is needed to perform this job?

- **HIGH**
  - 7
  - Requires a strong preference for making decisions and leading or directing other organization members.

- **LOW**
  - 1
  - Requires little leading or decision-making.

- **NR** Not relevant at all for performance on this job

**Importance**
How important is this characteristic to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

1 2 3 4 5
6. Cooperation

Job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
  - Level 7
    - Requires working very smoothly and cooperatively with others on the job.

- **LOW**
  - Level 1
    - Requires little interaction with others.

- **NR**
  - Not relevant at all for performance on this job

**Importance**

How important is this characteristic to performance on this job?

- Not Important: 1
- Somewhat Important: 2
- Important: 3
- Very Important: 4
- Extremely Important: 5
7. Concern for Others

Job requires being sensitive to others’ needs and feelings, and being understanding and helpful to others on the job.

**Level**

What level of this characteristic is needed to perform this job?

- HIGH
- LOW
- NR

- **7** Requires very high levels of sensitivity to others’ needs and feelings, and showing consistent caring and support for others on the job.
- **6**
- **5**
- **4**
- **3**
- **2** Requires only moderate levels of sensitivity, caring, and support for others on the job.
- **1**

**Importance**

How important is this characteristic to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

- **1**
- **2**
- **3**
- **4**
- **5**
8. Social Orientation

Job requires preferring to work with others rather than alone and being personally connected with others on the job.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
  - 7
  - Requires a high degree of participation and working closely with other organization members.

- **LOW**
  - 1
  - Requires little participation with other organization members; usually works alone.

- **Not Relevant (NR)**
  - Not relevant at all for performance on this job

**Importance**

How important is this characteristic to performance on this job?

- **Not Important**
  - 1
- **Somewhat Important**
  - 2
- **Important**
  - 3
- **Very Important**
  - 4
- **Extremely Important**
  - 5
9. Self-Control

Job requires maintaining composure, keeping emotions in check, controlling anger, and avoiding aggressive behavior even in very difficult situations.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
  - 7: Requires a very high degree of self-control even in difficult situations.

- **LOW**
  - 1: Requires a moderate degree of self-control.
  - NR: Not relevant at all for performance on this job.

**Importance**

How important is this characteristic to performance on this job?

- 1: Not Important
- 2: Somewhat Important
- 3: Important
- 4: Very Important
- 5: Extremely Important
10. Stress Tolerance

Job requires accepting criticism and dealing calmly and effectively with high stress situations.

**Level**
What level of this characteristic is needed to perform this job?

- **HIGH**
  - 7
  - Requires being extremely calm and tolerant of stress imposed by other people or by circumstances.

- **LOW**
  - 1
  - Requires being moderately calm and tolerant of stress imposed by other people or by circumstances.

- **NR**
  - Not relevant at all for performance on this job

**Importance**
How important is this characteristic to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

- 1
- 2
- 3
- 4
- 5
11. Adaptability/Flexibility

Job requires being open to change (positive or negative) and to considerable variety in the workplace.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
  - Requires being highly flexible and adaptable even to rapidly changing work situations.
- **LOW**
  - Requires being moderately flexible and adaptable to changing work situations.
- **NR** (Not Relevant)
  - Little flexibility or adaptability to changing work situations is required for this job.

**Importance**

How important is this characteristic to performance on this job?

- Not Important
  - 1
- Somewhat Important
  - 2
- Important
  - 3
- Very Important
  - 4
- Extremely Important
  - 5
12. Dependability

Job requires being reliable, responsible, and dependable, and fulfilling obligations.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
  - Requires very high levels of responsibility and dependability in fulfilling job and work obligations.

- **LOW**
  - Requires moderate levels of responsibility and dependability in fulfilling job and work obligations.

- **NR** Not relevant at all for performance on this job

**Importance**

How important is this characteristic to performance on this job?

- Not Important: 1
- Somewhat Important: 2
- Important: 3
- Very Important: 4
- Extremely Important: 5

12 1080
13. Attention to Detail

Job requires being careful about detail and thorough in completing work tasks.

Level
What level of this characteristic is needed to perform this job?

HIGH

LOW

NR: Not relevant at all for performance on this job

Importance
How important is this characteristic to performance on this job?

Not Important Somewhat Important Important Very Important Extremely Important

1 2 3 4 5
14. Integrity

Job requires being honest and avoiding unethical behavior.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
  - Requires a very high level of integrity and a willingness to abide by a strict code of ethics and behavior.

- **LOW**
  - Requires a high level of integrity and a willingness to abide by a standard code of ethics and behavior.
  - Requires integrity, but this is not a central part of the job.
  - Not relevant at all for performance on this job

**Importance**

How important is this characteristic to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important
15. Independence

Job requires developing one's own ways of doing things, guiding oneself with little or no supervision, and depending on oneself to get things done.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
  - 7
  - Requires a very high level of autonomy, with little or no dependence on supervisors or others to get the job done.

- LOW
  - 1
  - Requires little autonomy; job activities are closely supervised.

- **NR** Not relevant at all for performance on this job

**Importance**

How important is this characteristic to performance on this job?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
<th>Very Important</th>
<th>Extremely Important</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
16. Innovation

Job requires creativity and alternative thinking to come up with new ideas for and answers to work-related problems.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**
  - Requires a lot of creative thinking and coming up with new ideas related to work, to address job and work issues or problems.

- **LOW**
  - Requires moderate levels of creative thinking and coming up with ideas related to work to address job and work issues or problems.
  - Requires little creative thinking related to work issues and problems.

- **NR** Not relevant at all for performance on this job

**Importance**

How important is this characteristic to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important
17. Analytical Thinking

Job requires analyzing information, and using logic to address work or job issues and problems.

**Level**

What level of this characteristic is needed to perform this job?

- **HIGH**

- **LOW**

**Importance**

How important is this characteristic to performance on this job?

- Not Important
- Somewhat Important
- Important
- Very Important
- Extremely Important

1. Not relevant at all for performance on this job
2. Requires little analysis of issues, data, or problems related to work.
3. Requires being generally good at analyzing complex issues, data, or problems related to work, and coming up with useful information.
4. Requires being very good at analyzing complex issues, data, or problems related to work, and consistently coming up with useful information.