

Union Pacific Railroad

Apprentice Diesel Electrician Test Battery

Practice Questions

Workplace Learning Instructions

This section contains sample items for the Workplace Learning Test. The items contained in this section are meant to provide individuals with an idea of what to expect when they take the actual Workplace Learning Test.

This is a test of your ability to remember and follow directions. During the test, you will listen to instructions given by an audio CD explaining how to complete certain jobs. Once each set of instructions ends, you will be asked to answer a series of questions. You should take notes as the instructions are given. Note-taking sheets will be provided in the test booklet.

The following page provides a passage like the one that would be read for you during the test. You should read through the sample passage and then answer the sample questions provided.

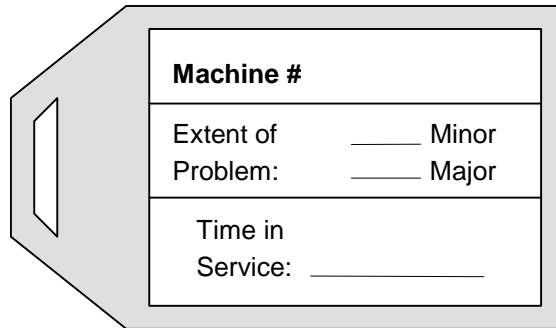
Remember, on the actual test, the instructions or conversation will be read aloud to you via an audio CD. You will need to listen to the instructions or conversation and then answer the questions.

Sample Questions

Use the passage below to answer sample questions 1-4.

In italics below is a sample passage that would be read aloud to you during the test. The equipment problem tag referred to in the instructions is shown below the passage.

Lead Mechanic: When problems occur with your machine contact your supervisor if it's a minor problem and the machine has been in service for more than a year. If a major problem comes up or the machine has been in service for less than one year report that problem to the maintenance department.



The image shows a 3D perspective view of a rectangular equipment problem tag. The tag is oriented horizontally and has a handle on the left side. The front face of the tag is divided into three horizontal sections by thin lines. The top section is labeled "Machine #" and is currently blank. The middle section contains the text "Extent of Problem:" followed by two horizontal lines, each with a radio button to its left. The first line is followed by the word "Minor" and the second line is followed by the word "Major". The bottom section contains the text "Time in Service:" followed by a horizontal line.

| | |
|--------------------|--------------------------------|
| Machine # | |
| Extent of Problem: | <input type="checkbox"/> Minor |
| | <input type="checkbox"/> Major |
| Time in Service: | _____ |

Indicate what action should be taken in sample questions 1-4.

1

| | |
|--------------------|---|
| Machine # | 5731 |
| Extent of Problem: | <input checked="" type="checkbox"/> Minor <input type="checkbox"/> Major |
| Time in Service: | 2 Yrs. |

- A Report to supervisor
- B Report to maintenance
- C Need additional information

2

| | |
|--------------------|---|
| Machine # | 622 |
| Extent of Problem: | <input type="checkbox"/> Minor <input checked="" type="checkbox"/> Major |
| Time in Service: | 6 Mos. |

- A Report to supervisor
- B Report to maintenance
- C Need additional information

3

| | |
|--------------------|---|
| Machine # | 772 |
| Extent of Problem: | <input checked="" type="checkbox"/> Minor <input type="checkbox"/> Major |
| Time in Service: | 8 Mos. |

- A Report to supervisor
- B Report to maintenance
- C Need additional information

4

| | |
|--------------------|---|
| Machine # | 523 |
| Extent of Problem: | <input type="checkbox"/> Minor <input checked="" type="checkbox"/> Major |
| Time in Service: | <input type="text" value="3 Yrs."/> |

- A Report to supervisor
- B Report to maintenance
- C Need additional information

Answers

1. A 2. B 3. B 4. B

Workplace Practices 2.0 Instructions

This section contains sample items for the Workplace Practices 2.0 Test. The items contained in this section are meant to provide individuals with an idea of what to expect when they take the actual Workplace Practices 2.0 Test.

This test has two sub-sections. Both sections include questions that describe peoples' attitudes about themselves and their work. Please answer each question in a way that best describes your own experiences, judgments, and opinions. It is very important that you answer each item honestly and as accurately as possible. There are no right or wrong answers to this test.

In one section you are asked to read each statement, then decide whether you agree or disagree with what it says, and select your answer. If you **strongly agree** with the statement, select choice "A." If you **somewhat agree** with the statement, select choice "B." If you **somewhat disagree** with the statement, select choice "C." Finally, if you **strongly disagree** with the statement, select choice "D."

Section two contains two types of questions. Some questions ask you about work practices. Other questions describe a situation and ask you what to do. Read each question and choose the **one** answer that most accurately reflects your opinion. For some questions, more than one answer may seem appropriate. In these instances, choose the one answer that most accurately reflects your opinion.

Sample Questions

Section 1: Sample questions 1-4.

| | | |
|----------|---|---------------------|
| 1 | I dislike performing repetitive tasks. | A Strongly Agree |
| | | B Somewhat Agree |
| | | C Somewhat Disagree |
| | | D Strongly Disagree |

| | | |
|----------|--|---------------------|
| 2 | I prefer to be spontaneous and do things on the “spur of the moment.” | A Strongly Agree |
| | | B Somewhat Agree |
| | | C Somewhat Disagree |
| | | D Strongly Disagree |

| | | |
|----------|---|---------------------|
| 3 | I am conscious of the effect my behavior and actions have on others. | A Strongly Agree |
| | | B Somewhat Agree |
| | | C Somewhat Disagree |
| | | D Strongly Disagree |

| | | |
|----------|--|---------------------|
| 4 | I agree with the saying, “the devil is in the details.” | A Strongly Agree |
| | | B Somewhat Agree |
| | | C Somewhat Disagree |
| | | D Strongly Disagree |

Section 2: Sample questions 5-8

| | | |
|----------|--|---------------------|
| 5 | How many absences do you think the typical worker would have over a six-month period? | A None |
| | | B One day |
| | | C Two to three days |
| | | D Four or five days |
| | | E Six or more days |

-
- 6** Suppose we contacted your most recent supervisor. How would he/she rate your adherence to company policies and procedures?
- A Well above average
 - B Somewhat above average
 - C Average
 - D Below average
 - E I have never been employed
-

- 7** Toni, a line worker, has an idea to improve the assembly procedure that would allow workers to produce more widgets per hour. She has presented her idea to her supervisor on more than one occasion, but her supervisor is reluctant to listen to the ideas of his subordinates. Toni really believes that if her idea were implemented, it would improve company profits. If you were Toni, what would you do?
- A Go ahead and make the improvements anyway. After all, if the supervisor could see the improvements, he would have no choice but to agree to the change.
 - B Talk to coworkers about the idea and enlist their help in obtaining the supervisor's buy-in.
 - C Go to the supervisor's boss with the idea.
 - D File a complaint with the company's HR office. It is unfair that the supervisor will not listen to the ideas of his subordinates.
 - E Do nothing. After all, it is the company's loss.
-

-
- 8** During your shift, a co-worker is working with a piece of heavy machinery and has an accident. As a result, he must be rushed to the hospital. Based on your experience, and without knowing more about the situation, what do you think the *most likely* cause of the accident was?
- A Poor maintenance of equipment
 - B Bad luck
 - C Co-worker's failure to adhere to company policies
 - D Lack of attention to safety procedures
 - E Distractions caused by other coworkers
-

Advanced Industrial Problem Solving Instructions

This section contains sample items for the Advanced Industrial Problem Solving Test. The items contained in this section are meant to provide individuals with an idea of what to expect when they take the actual Advanced Industrial Problem Solving Test.

This is a test of your ability to locate and use information presented in tables and charts like those you might find on the job. The test contains a number of tables, charts or graphs, each followed by several questions. Your task on this test is to use information from the tables, charts or graphs to make calculations and determine the correct answer for each question.

Sample Questions

Use the table below to answer Sample Questions 1 - 4.

Per-minute telephone call charges by area code

| | | AREA CODES | | | | |
|---|---------|------------|---------|---------|---------|---------|
| | | From → | 200-245 | 315-355 | 401-485 | 509-599 |
| | | To ↓ | | | | |
| A R E A C O D E S | 200-245 | | \$.15 | \$.28 | \$.47 | \$.43 |
| | 315-355 | | \$.25 | \$.15 | \$.13 | \$.46 |
| | 401-485 | | \$.40 | \$.25 | \$.15 | \$.32 |
| | 509-599 | | \$.50 | \$.40 | \$.30 | \$.15 |

- 1 How much would a two-minute call from area code 205 to area code 403 cost?
- A \$.30
 - B \$.40
 - C \$.63
 - D \$.80

- 2 What is the difference in cost for a call from area code 320 to area code 470 versus one made from area code 470 to area code 320?
- A \$.12
 - B \$.13
 - C \$.25
 - D \$.38

- 3 How much would a five-minute call from area code 425 to area code 405 cost?
- A \$.15
 - B \$.60
 - C \$.65
 - D \$.75

-
- 4** What is the difference in cost for a two-minute call from area code 205 to area code 530 versus one made from area code 530 to area code 205?
- A \$.07
B \$.10
C \$.14
D \$.20
-

Answers

1. D 2. A 3. D 4. C

Tool Knowledge Test Instructions

This section contains sample items for the Tool Knowledge Test. The items contained in this section are meant to provide individuals with an idea of what to expect when they take the actual Tool Knowledge Test.

This is a test of your ability to identify tools and standard hardware and how they are commonly used. The test contains figures and pictures of tools and hardware. Your task is to read each question and select the best answer from the alternatives given. All the information you need to answer the questions will be provided.

Sample Questions

Use the pictures above each question to answer sample questions 1-4.



-
- 1 The tool shown in the figure above is called a(n):
- A Pliers
 - B Scissors
 - C Wrench
 - D Awl
-



-
- 2 The item shown in the figure above is a:
- A Beater
 - B Socket extension
 - C Tap handle
 - D Ratchet handle
 - E Torque wrench
-



-
- 3** The tool shown in the figure above is a:
- A Slip-joint pliers
 - B Wire stripper
 - C Snips
 - D Lineman's pliers
-



-
- 4** The tool shown in the figure above is called a:
- A Bow saw
 - B Coping saw
 - C Back saw
 - D Hack saw
-

Answers

1. B 2. D 3. B 4. D

Mechanical Comprehension Instructions

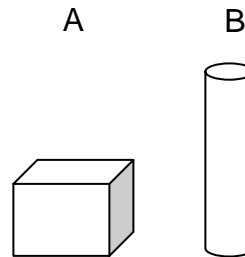
This section contains sample items for the Mechanical Comprehension Test. The items contained in this section are meant to provide individuals with an idea of what to expect when they take the actual Mechanical Comprehension Test.

This is a test of your ability to solve problems that involve mechanical principles and problems. The test contains questions that show you an illustration of a practical problem, and ask you to determine the correct answer. Use your experience and judgment to choose the answer you think is best.

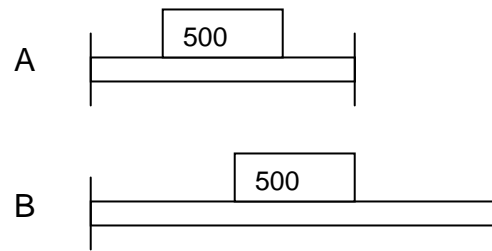
Sample Questions

For sample questions 1-4, examine the pictures to the right of each question.

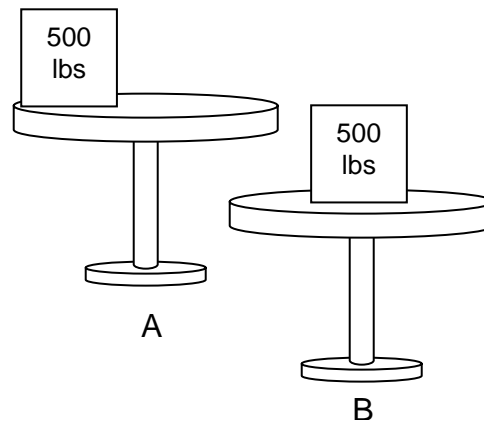
- 1 Which of the following two objects would be easier to tip over, assuming that both are made of the same material and weigh the same? (If no difference, mark C.)



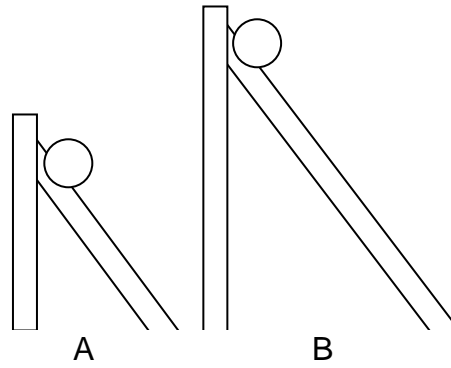
- 2 Which beam is more likely to break, assuming that both beams are of equal thickness and are made of the same material? (If no difference, mark C.)



- 3 Which table is more likely to tip over, assuming that both tables are made of the same material, are the same size, and weigh the same? (If no difference, mark C.)



- 4 Which ball will be rolling faster when it reaches the bottom of the slide, assuming that both balls are made of the same material, are the same size, and weigh the same? (If no difference, mark C.)



Answers

1. B 2. B 3. A 4. B

Electronics Knowledge Test Instructions

This section contains sample items for the Electronics Knowledge Test. The items contained in this section are meant to provide individuals with an idea of what to expect when they take the actual Electronics Knowledge Test.

This is a test of your electrical/electronics knowledge. This test contains a series of questions from topics such as AC/DC theory, variable speed drives, basic electronics, and instrumentation. Your task is to read each question and select the best answer from the alternatives given. All the information you need to answer the questions will be provided.

Sample Questions

| | | |
|----------|---|---|
| 1 | When inspecting a high voltage switch gear you should: | A Use a tic-tracer to see if it is de-energized |
| | | B Isolate all power sources |
| | | C Use grounding straps |
| | | D All of the above |

| | | |
|----------|---|--------------------------------|
| 2 | Which condition is most likely to cause a shock from electrical devices? | A Too much voltage |
| | | B Overloaded circuits |
| | | C Improper grounding of wiring |
| | | D Wrong wire size |

| | | |
|----------|-----------------------------------|------------|
| 3 | Resistance is measured in: | A Coulombs |
| | | B Volts |
| | | C Farads |
| | | D Ohms |

| | | |
|----------|--|-------------------------|
| 4 | Limit switches are used for which of the following? | A Limit travel |
| | | B Indicate position |
| | | C Enable output devices |
| | | D All of the above |

Answers

1. D 2. C 3. D 4. C