INTRODUCTION

The activities on the following pages are designed to help you
- Check how well you remember the information in each section of the Study Guide
- Think of ways the information in each section of the Study Guide applies to the work you do
- Write down any questions you may have to ask your instructor or supervisor

On the chart below, keep track of your progress as you prepare to take the Basic Orientation Plus™ class. When you finish each of the activities listed below, write the completion date in that block.

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<tr>
<th>Safety Topic</th>
<th>Reviewed information in Study Guide</th>
<th>Completed activities and quiz for this topic</th>
<th>Reviewed any questions?</th>
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</table>

When you have successfully completed all sections of the Study Guide and this workbook, you should be familiar with basic information related to workplace safety. As you attend the Basic Orientation Plus™ class, you will have the opportunity to ask additional questions, watch videos related to these topics, and learn more about working safely.
TOPIC 1: Hazard Communication

Key Information
Fill in the blanks to complete sentences 1 through 15. Use words from the following list:
(Some of the words will not be used.)

- health
- acute
- right to know
- HMIS
- reactive
- chronic
- physical
- HAAS
- Fire Protection
- Material Safety
- communication
- red
- PEL
- Asbestos
- Occupational
- blue
- STEL
- Lead
- Original
- Radiation

1. Everyone has the ________________ the safety and health hazards of substances they may be exposed to on the job.

2. The name OSHA stands for the ________________ Safety and Health Administration, which is a government agency.

3. A substance that can cause a fire or explosion is called a ________________ hazard.

4. A substance that can make you sick is called a ________________ hazard.

5. A(n) ________________ health hazard causes a sudden reaction.

6. If there are hazardous substances on the worksite, the employer must have a written hazard ________________ program. The program will include lists of chemicals at that site.

7. The NFPA labeling system was developed by the National ________________ Association to help identify chemical hazards.

8. Another type of label or placard that tells you hazard information about chemicals is the ________________ label.

9. The color ________________ indicates a fire hazard on the NFPA and HMIS labels.

10. On an NFPA or HMIS sign, a “4” in the yellow section means the chemical is very ________________.

11. The ________________ Data Sheet (MSDS) provides important safety information about a chemical.

12. The Permissible Exposure Limit, or ________________, identifies the maximum amount of a substance that a person can be exposed to at any one moment in time.

13. ________________ is used in industrial paints because it resists corrosion.

14. ________________ will be a hazard if the fibers are released into the air.

15. ________________ can be caused by microwaves, lasers, or x-raying equipment.
**Applications**

1. Where could you find information about the hazards of gasoline, chlorine or other chemicals?

2. Health hazards may affect you in many ways. What are some health concerns that may be caused by exposure to certain chemicals?

3. What are some substances that may be responsible for physical hazards?

4. Think about one or two chemicals you may work with. What are some of the Personal Protective Equipment (PPE) required when working with those chemicals?

**Questions**

*If you have additional questions about this topic, write them below and ask your supervisor.*
**TOPIC 2: Personal Protective Equipment**

**Key Information**
*Match the type of protection listed in column A with the description in column B of equipment that provides that protection.*

<table>
<thead>
<tr>
<th>Column A: Type of Protection</th>
<th>Column B: Description of Personal Protective Equipment (PPE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Head Protection</td>
<td>a. Earplugs or earmuffs help reduce the noise level.</td>
</tr>
<tr>
<td>2. Eye Protection</td>
<td>b. Safety shoes and boots provide protection against injuries caused by things dropping on this part of your body. Chemical resistant boots may be needed for some jobs.</td>
</tr>
<tr>
<td>3. Face Protection</td>
<td>c. Neoprene or latex gloves provide protection against chemicals; rubber gloves protect you from electrical shock.</td>
</tr>
<tr>
<td>4. Hearing Protection</td>
<td>d. A clear shield is worn if there is a chance that a hazardous chemical could splash on the front of the head.</td>
</tr>
<tr>
<td>5. Body Protection</td>
<td>e. Equipment including a body harness is used to protect a person working six feet or more above the ground.</td>
</tr>
<tr>
<td>6. Foot Protection</td>
<td>f. Hardhats provide protection from injuries caused by falling objects.</td>
</tr>
<tr>
<td>7. Respiratory Protection</td>
<td>g. Safety glasses with a Z87 rating <em>(NOT regular prescription glasses)</em> are shatter resistant.</td>
</tr>
<tr>
<td>8. Fall Protection</td>
<td>h. Respirators provide protection if the air in your work area may be hazardous. There may not be enough oxygen to breathe or there may be contaminants that must be filtered out.</td>
</tr>
<tr>
<td>9. Hand Protection</td>
<td>i. Long-sleeve shirts and full-length pants help protect you from burns and spills. Sometimes flame retardant or chemical resistant clothing may be needed.</td>
</tr>
</tbody>
</table>

**Answer the following questions. You may refer to Section 2 in your Study Guide.**

10. Which should be considered first for protection against hazards—engineering controls or personal protective equipment? _______________________________________________________________

11. What are two examples of engineering controls? _______________________________________________________________

12. What could happen if your PPE does not fit properly or breaks? _______________________________________________________________

13. How often must you check your PPE? _______________________________________________________________

14. What should you do if you are not sure what PPE you need for your job? _______________________________________________________________
Applications

1. Why should you check before starting any job to see what personal protective equipment (PPE) is required?

___________________________________________________________________________________________

2. Where is the ANSI approval information on your safety glasses? (If you aren’t sure where to find this, check with your supervisor.)

___________________________________________________________________________________________

3. If a hazard is identified, there are often several ways to address the problem. Some solutions may be engineering or administrative controls, while other solutions would include the use of PPE. To demonstrate how these different solutions might work, think about the situations described below. Then for each situation, indicate beside each possible solution whether it is an engineering control (write “E” in the blank before the item), an administrative control (write “A”), or a use of PPE (write “PPE”).

   a. A portable piece of equipment is being delivered for use on a special maintenance job. The equipment is very loud (90 to 95 decibels) while it is operating. What could be done?
      _____ Locate the equipment in an area away from other work areas so most workers won’t be exposed to the noise.
      _____ Schedule the work to be done using this equipment at a time when there are few employees in the area.
      _____ Construct a barrier or baffle around the equipment to confine the noise to that area.
      _____ Provide ear plugs or ear muffs to employees working in that area.

   b. The protective cover on a pit must be removed while employees go into the pit to clean it out. What could be done to prevent fall hazards?
      _____ Provide training for those worker who will be completing this job, including ways to prevent falls.
      _____ Set up barricades to prevent others from walking through the work area.
      _____ Use fall protection equipment as needed.

Questions

If you have additional questions about this topic, write them below and ask your supervisor.
TOPIC 3: Respiratory Protection

**Key Information**
Refer to Section 3 in your Study Guide to answer the following questions.

1. What three things must take place before an employee can wear a respirator?
   (1) _______________________________________________ ___________________
   (2) _______________________________________________ ___________________
   (3) _______________________________________________ ___________________

2. Which of the following could be contaminants in the air? (Place a check by each item that could be a contaminant.)
   ___ Particulates, such as sand or fine particles of wood or wallboard
   ___ Dust
   ___ Organic mists or vapors

3. The normal level of oxygen in the air is about 20.5 per cent. If the level drops below _____ per cent, the air is oxygen deficient.

4. Which type of respirator must be used if the conditions of the air are not known or where the air is Immediately Dangerous to Life and Health (IDLH)?
   (Choose one answer below.)
   ___ Hose line air-supplied respirator
   ___ Self-contained breathing apparatus (SCBA)
   ___ Air-purifying respirator

5. What determines the type of air-purifying respirator to be used?
   ____________________________________________________
   ____________________________________________________

**Applications**
1. Have you ever worn a respirator for protection while you were working? ____________

2. If you have worn a respirator, what were the hazards in the air where you were working?
   ____________________________________________________
   What type of respirator did you use?__________________________
   ____________________________________________________

3. Why is it important to be clean shaven when wearing a respirator?
   ____________________________________________________
   ____________________________________________________

**Questions**
If you have additional questions about this topic, write them below and ask your supervisor.
TOPIC 4: Hearing Conservation

Key Information
Read each statement and determine if it is true or false. Circle “True” or “False” for your answer.
1. Repeated exposure to loud noise will cause permanent hearing loss.
   True  False

2. You must wear some type of hearing protection if your job exposes you to a noise level of 85 decibels TWA (time-weighted average over an eight hour period).
   True  False

3. Tinnitus, or ringing in your ears, is the only symptom of hearing loss.
   True  False

4. One example of an engineering control used to reduce noise is using rubber cushions or cardboard at the end of a chute.
   True  False

5. You must check to be sure that you have a good seal when you wear earmuffs. Glasses or goggles may affect the seal.
   True  False

6. Excessive (or very loud) noise at home will not affect your hearing.
   True  False

Applications
1. Name some work situations where you may need hearing protection.
   ____________________________________________________________
   ____________________________________________________________

2. When should disposable ear plugs be thrown away?
   ____________________________________________________________
   ____________________________________________________________

3. What are some activities away from work that may be loud enough for you to need hearing protection?
   ____________________________________________________________
   ____________________________________________________________

4. Who is responsible for checking your hearing protection to be sure it is in good condition?
   ____________________________________________________________
   ____________________________________________________________

Questions
If you have additional questions about this topic, write them below and ask your supervisor.
KEY INFORMATION

Complete each sentence, using terms in the list below. Each term will be used only once.

- hot work
- energized tools and material
- de-energized circuit conductors
- affected lockout/tagout
- 75 clean and dry authorized

1. OSHA defines a “qualified” electrical worker as someone who has had training on how to avoid the hazards of working on or near exposed ____________ circuits.

2. When equipment is ________________, the circuits have been disconnected from all their power sources.

3. Some materials are _______________ that allow electricity to pass through easily, while other materials are insulators, which prevent electricity from passing through.

4. Wood and fiberglass ladders must be ______________ because oil, grease or water could conduct electricity.

5. You must stay at least _______ feet from electric lines with voltages of 50 kilovolts or less.

6. Unsafe work practices are responsible for over _____ per cent of all occupational fatalities involving electricity.

7. Always use a ground fault ______________ interrupter (GFCI), which will instantly disconnect a circuit when an electrical shock occurs.

8. A _______________ permit is required if the portable equipment you will use is capable of sparking or producing enough heat to ignite flammable or ignitable materials.

9. Using ______________ procedures is the best way you can prevent the risk of electrical shock when you work on or near energized parts.

10. Only the ______________ person who put on the lock can take it off.

11. Before you lock out equipment, always notify ______________ workers (persons who work in the area) so they will not disturb the work being done.

12. Before locks and tags are removed, be sure that all work has been completed and that all ______________ have been removed from the work area.

APPLICATION

1. If you must lock out equipment, who will provide you with a lock and tag?

   ___________________________________________________________  

2. What portable electrical equipment do you use in your work activities?

   ___________________________________________________________
3. Give an example of a work area where non-sparking tools would be needed.

_________________________________________________________________
_________________________________________________________________

4. Which of the following are safe work practices around electricity? (Check ONLY the items that are SAFE work practices.)

____ Inspect your portable electrical equipment before each use.
____ Raise and lower portable electrical equipment by the cord.
____ Have good lighting so you can see clearly the area where you are working.
____ Use a GFCI to protect against serious injury from electrical shock.
____ Cut off the grounding plug if it will not fit the outlet.
____ Check for only one energy source for a piece of equipment.
____ Identify any flammable or combustible materials in the area before starting work.

Questions
If you have additional questions about this topic, write them below and ask your supervisor.
**TOPIC 6: Elevated Work**

**Key Information**

Choose the correct answer for each of the multiple-choice questions below. Mark your answer by filling in the box next to that answer.

1. What is one way to prevent material from falling on persons working below an elevated work surface?
   a. Use a safety net
   b. Stack the material on the edge of the working surface

2. Which of the following is part of an approved personal fall arrest system?
   a. Body belt
   b. Body harness

3. What is the name used for the overhead structure that you will connect your lifeline to?
   a. Anchor
   b. Lever

4. What is the purpose of the lanyard or life line?
   a. The life line is an emergency telephone line used to call for help.
   b. The life line connects the harness to the anchor point and catches you if you fall.

5. According to the “free-fall rule,” OSHA requires that a person is protected from falling more than how far?
   a. 10 feet
   b. 6 feet

6. How far must the side rails of a scaffold ladder extend above the work platform?
   a. 36 inches (3 feet)
   b. 24 inches (2 feet)

7. What should you do if you find a problem when you visually check a scaffold before climbing onto it?
   a. Begin to work on the scaffold, report the problem when you see your supervisor
   b. Stay off the scaffold and report the problem immediately

8. How should a portable ladder be secured before anyone works from it?
   a. Lean the ladder against a support if it is set up on an uneven foundation
   b. Tie the ladder off securely at the top

9. How should you go up (ascend) or come down (descend) a ladder?
   a. Face the ladder
   b. Have your back to the ladder
10. When should a ladder be inspected by the person using it?
   a. At least once a week
   b. Before each use

11. What is the proper angle for placing a ladder against a wall?
   a. one foot out from the base for every 4 feet up the ladder reaches
      (a ratio of 1 to 4, or \( \frac{1}{4} \) the working height)
   b. one foot out from the base for every 2 feet up the ladder reaches
      (a ratio of 1 to 2, or \( \frac{1}{2} \) the working height)

12. Why should ladders be kept free of oil, grease, or water?
   a. These materials could create slipping hazards.
   b. These materials could cover up defects, such as splits or cracks.
   c. These materials could conduct electricity.
   d. All the answers above are correct.

Applications
1. If you have any job assignments that include elevated work, list them below.
   ___________________________________________________ ___________________________________________________
   ___________________________________________________ ___________________________________________________

2. How do guardrail systems prevent workers from falling?
   ___________________________________________________ ___________________________________________________

3. Why would it make a difference if your anchor point were located high or low?
   ___________________________________________________ ___________________________________________________

4. What are some things you would check before getting on a scaffold?
   ___________________________________________________ ___________________________________________________

5. What are some things you would check before using a ladder?
   ___________________________________________________ ___________________________________________________

Questions
If you have additional questions about this topic, write them below and ask your supervisor.
**Key Information**

Match the terms in the first column with the definitions in the second column. Write the letter for the correct definition in the space before each term.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Excavation</td>
<td>a. A structure that supports the sides of an excavation, designed to prevent cave-ins</td>
</tr>
<tr>
<td>2. Trench</td>
<td>b. Way to exit or escape, such as ladders or ramps</td>
</tr>
<tr>
<td>3. Shoring</td>
<td>c. An excavation that is deeper than it is wide, but less than 15 feet wide</td>
</tr>
<tr>
<td>4. Atmosphere-related dangers</td>
<td>d. Conditions such as loose rock or water hazards</td>
</tr>
<tr>
<td>5. Physical dangers</td>
<td>e. Any man-made cut, cavity, trench or depression in an earth surface, formed by earth removal</td>
</tr>
<tr>
<td>6. Protective systems</td>
<td>f. Conditions such as low oxygen levels or the existence of flammables or combustible gases</td>
</tr>
<tr>
<td>7. Means of egress</td>
<td>g. Safeguards such as shielding the sides or sloping the dirt gradually away from the opening</td>
</tr>
</tbody>
</table>

Complete the following statements by filling in the blanks. You may refer to the section on Excavation, Trenching and Shoring in your Study Guide.

8. When working in any excavation, you must be alert to any changing ____________________.

9. Excavation Protective Systems are required for all excavations EXCEPT those that are less than ____ feet deep that do not have any __________________ or ____________________.

10. If the trench is more than ______ feet deep, there must be a means of exit.

**Applications**

1. If your job assignments include work in excavations, describe the tasks that you would be doing and the protection you would need?

   __________________________________________________________
   __________________________________________________________

2. What are some of the hazards associated with excavation and trenching?

   __________________________________________________________
   __________________________________________________________

**Questions**

*If you have additional questions about this topic, write them below and ask your supervisor.*
TOPIC 8: Process Safety Management (PSM)

Key Information
Choose the correct answer for each of the multiple-choice questions below. Mark your answer by filling in the box next to that answer.

1. What is the primary goal of Process Safety Management?
   a. To reduce unscheduled increases in the process budget
   b. To prevent unwanted releases of highly hazardous chemicals

2. What study helps identify what could go wrong with process chemicals, technology, or equipment?
   a. Process hazard analysis
   b. Environmental protection report

3. Who must be trained about the hazards of highly hazardous chemicals, along with the ways to protect themselves and others?
   a. Only full-time operations personnel
   b. All employees, including maintenance and contractor employees who may be impacted by a chemical’s hazards

4. What is a key part of mechanical integrity?
   a. Replacing equipment when it begins to wear out
   b. Running equipment for as long as possible, until a part breaks down

5. What is used to give workers the authorization to do special tasks?
   a. Manpower reports
   b. Work permits

6. Which work permit is needed before isolating equipment from all energy sources?
   a. Lockout/Tagout permit
   b. Line breaking permit

7. Which work permit must be issued before anyone can begin work that could produce enough heat or sparks to ignite the materials around it?
   a. Confined space permit
   b. Hot work permit

8. What is an example of managing change properly?
   a. Making sure that equipment being replaced is identical to what is being removed
   b. Using a different material for replacement without checking compatibility or documenting the change

9. Which accidents, injuries, and incidents should be reported?
   a. Only accidents that result in injury
   b. All accidents, injuries, and incidents (even “near-miss” incidents)
10. Where does the employer provide information about how to evacuate if there is a release of hazardous chemicals?
   a. On the NFPA label
   b. In the Emergency Action Plan

**Applications**

1. What information should you know about hazardous chemicals that you are working near?

2. If your job assignments require you to have work permits, list the permits below and explain why each one is needed.

3. How do work permits help communicate information between work groups (operations, maintenance, contractors, security, safety, environmental, and emergency response)?

4. What information should you know about the Emergency Action Plan at the plant where you will be working?

**Questions**

*If you have additional questions about this topic, write them below and ask your supervisor.*
TOPIC 9: Emergency Response

Key Information
Read each statement and determine if it is true or false. Circle “True” or “False” to indicate your answer.

1. Only employees with proper identification (and clothing) will be allowed into a facility.
   - True
   - False

2. You can let someone use your badge to pick up materials at the supply room.
   - True
   - False

3. Cellular phones and pagers may be prohibited at some sites.
   - True
   - False

4. You do not need permission to operate your own vehicle on a plant site.
   - True
   - False

5. Pedestrians, bicycles, and emergency equipment have the right-of-way.
   - True
   - False

6. Cranes must be positioned so their boom or line is at least 10 feet away from any overhead power line.
   - True
   - False

7. The crane load must be controlled with a tag-line.
   - True
   - False

8. Crane operators can only take directions from a designated spotter.
   - True
   - False

9. No deaths related to forklift operation involve pedestrians (people walking in the area).
   - True
   - False

10. A fire can continue to burn even if there is no fuel or oxygen.
    - True
    - False

11. In a Class A fire, the fuel may be wood, paper, or cloth.
    - True
    - False

12. A Class B fire involves electrical equipment.
    - True
    - False

13. If you are reporting an emergency, state your name and location then hang up so the phone line will be free for other calls.
    - True
    - False

14. Different emergency alarms are used on most sites, so you must know what type of alarm you hear and whether it is necessary to evacuate for that alarm.
    - True
    - False
Applications
1. What identification will you be required to have at the site where you will be working?

____________________________________________________________________________________

____________________________________________________________________________________

2. What cautions would you give someone about operating vehicles on a plant site? (truck, crane, forklifts, etc.)

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

3. The characteristics of a fire and the ways to fight that fire will vary depending on the class of fire—A, B, C, or D. List below the information you know about each class of fire.
   Class A: 
   __________________________________________________________
   __________________________________________________________

   Class B: 
   __________________________________________________________
   __________________________________________________________

   Class C: 
   __________________________________________________________
   __________________________________________________________

   Class D: 
   __________________________________________________________
   __________________________________________________________

4. If you know the Emergency Action Plan for the site where you will be working, fill in the information below.
   What is the alarm sound for plant evacuation?
   __________________________________________________________
   __________________________________________________________

   Where is the primary assembly area? The secondary assembly area?
   __________________________________________________________
   __________________________________________________________

   What is the “all clear” sound?
   __________________________________________________________
   __________________________________________________________

   What other alarms are used at this site?
   __________________________________________________________
   __________________________________________________________

Questions
If you have additional questions about this topic, write them below and ask your supervisor.
As you review the topics in the Study Guide, you will see that OSHA regulations and other general safe work rules are based on simple, common sense principles. Each of the topics in Basic Orientation Plus™ focuses on how these rules can reduce or eliminate hazards in the workplace.

For example, consider the statements below. For each statement, take a minute to write down the commonsense reasons for that safety practice and the reasons you think the rule would contribute to a safer workplace.

1. One requirement of a Hazard Communication Program is that the company must maintain a list of all chemicals at that site.
   Why is this a common sense rule?
   
   How does this rule contribute to a safer workplace?

2. All containers must be labeled, tagged, or marked to identify what is in them.
   Why is this a common sense rule?
   
   How does this rule contribute to a safer workplace?

3. Special training is required before performing jobs that may disturb asbestos fibers or lead particles.
   Why is this a common sense rule?
   
   How does this rule contribute to a safer workplace?

4. Safety shoes, safety glasses, long-sleeve shirts and full-length pants may be required in your work area.
   Why is this a common sense rule?
   
   How does this rule contribute to a safer workplace?

5. You must have medical clearance, training, and a fit test before using a respirator.
   Why is this a common sense rule?
   
   How does this rule contribute to a safer workplace?

6. Beards are not allowed when wearing a respirator.
   Why is this a common sense rule?
   
   How does this rule contribute to a safer workplace?

7. Never raise or lower portable electrical equipment by its cord.
   Why is this a common sense rule?
   
   How does this rule contribute to a safer workplace?
8. Only specially-designed equipment can be used in areas where combustible gases could build up.
   *Why is this a common sense rule?*

   *How does this rule contribute to a safer workplace?*

9. Body belts are not acceptable as part of a personal fall arrest system.
   *Why is this a common sense rule?*

   *How does this rule contribute to a safer workplace?*

10. The life line of a personal fall arrest system must be attached to the anchor point so that a person can not fall more than six feet.
    *Why is this a common sense rule?*

    *How does this rule contribute to a safer workplace?*

11. When portable ladders are used to get to an upper walking/working surface, the ladder side rails must extend at least 3 feet above the upper surface.
    *Why is this a common sense rule?*

    *How does this rule contribute to a safer workplace?*

12. Ways to get out of an excavation (such as ladders or ramps) must be located no more than 25 feet apart.
    *Why is this a common sense rule?*

    *How does this rule contribute to a safer workplace?*

13. A confined space entry permit must be in place before anyone can enter a confined space.
    *Why is this a common sense rule?*

    *How does this rule contribute to a safer workplace?*

14. All accidents, incidents and injuries must be reported.
    *Why is this a common sense rule?*

    *How does this rule contribute to a safer workplace?*

15. Never fight a fire if the fire can block your only escape route.
    *Why is this a common sense rule?*

    *How does this rule contribute to a safer workplace?*

These are just a few examples of the safe work practices you will learn about in Basic Orientation PlusTM. As you continue to increase your knowledge about safety, don’t forget to think about why these rules are important and how you can put them into action on the job and at home. **ALWAYS WORK SAFELY!**
**ANSWER KEY**

**Topic 1: Hazard Communication**

Key Information

1. right to know
2. Occupational
3. physical
4. health
5. acute
6. communication
7. Fire Protection
8. HMIS
9. red
10. reactive
11. Material Safety
12. PEL
13. Lead
14. Asbestos
15. Radiation

Applications

These questions should be answered based on work experience and consideration of the work assignments this person will have.

**Topic 2: Personal Protective Equipment**

Key Information

- f 1. Head Protection
- g 2. Eye Protection
- d 3. Face Protection
- a 4. Hearing Protection
- l 5. Body Protection
- b 6. Foot Protection
- h 7. Respiratory Protection
- e 8. Fall Protection
- c 9. Hand Protection

Applications

These questions should be answered based on work experience and consideration of the work assignments this person will have. For Question 3, answers for situation “a” should be E, A, E, PPE and for situation “b” should be A, E, PPE.

**Topic 3: Respiratory Protection**

Key Information

1. Training, Medical Clearance, Fit Test
2. All three items should be checked.
3. 19.5
4. Self-contained breathing apparatus (SCBA)
5. Type of contaminant and concentration

Applications

These questions should be answered based on work experience and consideration of the work assignments this person will have.

**Topic 4: Hearing Conservation**

Key Information

1. True
2. True
3. False
4. True
5. True
6. False

Applications

These questions should be answered based on work experience and consideration of the work assignments this person will have.
**Topic 5: Electrical Safety for Non-Qualified Workers**

**Key Information**

1. energized
2. de-energized
3. conductors
4. clean and dry
5. 10
6. 75
7. circuit
8. hot work
9. lockout/tagout
10. authorized
11. affected
12. tools and material

**Applications**

These questions should be answered based on work experience and consideration of the work assignments this person will have. For Question 4, items 1, 3, 4, and 7 should be checked.

**Topic 6: Elevated Work**

**Key Information**

1. a
2. b
3. a
4. b
5. b
6. a
7. b
8. b
9. a
10. b
11. a
12. d

**Applications**

These questions should be answered based on work experience and consideration of the work assignments this person will have.

**Topic 7: Excavations, Trenching and Shoring**

**Key Information**

1. Excavation
2. Trench
3. Shoring
4. Atmosphere-related dangers
5. Physical dangers
6. Protective systems
7. Means of egress

**Applications**

These questions should be answered based on work experience and consideration of the work assignments this person will have.

**Topic 8: Process Safety Management (PSM)**

**Key Information**

1. b
2. a
3. b
4. a
5. b
6. a
7. b
8. a
9. b
10. b

**Applications**

These questions should be answered based on work experience and consideration of the work assignments this person will have.

**Topic 9: Emergency Response**

**Key Information**

1. True
2. False
3. True
4. False
5. True
6. True
7. True
8. True
9. False
10. False
11. True
12. False
13. False
14. True

**Applications**

These questions should be answered based on work experience and consideration of the work assignments this person will have.