Protective Equipment

1. **Match the pictures with the items (A) and the kind of protection (B) they offer.**

A-B	Picture
1h	7
2c	3
3b	2
4a	1
5e	9
6d	4
7f	5
8i	6
9g	8

2. **Match the words with the pictures.**

grinding	**welding**	**sawing**
nailing	**cutting**	**chipping**

3. **Match the words relating to potential hazards at a construction site with the pictures**

slip	**cut**	**fall**
electric shock	**scrape**	**burn**
	contamination	

4. **Read the adapted webpage of a protective equipment supplier and then, in pairs, choose the appropriate headings for each paragraph.**

- **Hard hats**
- **Foot protection**
- **Hand protection**
- **Work pants and work shirts**
- **Face and/or eye protection**
- **Hearing protection**
- **Reflective/high-visibility garments**
- **Respiratory protection**

6. The following sentences appear in the text above. Underline the modal verbs and match them with the functions below.

a. can: ability
b. need: necessity can: possibility
c. should: advice should not: advice
d. must: obligation should: advice

7. Complete the sentences in the "Personal Protective Equipment Instructions" below choosing the correct modal verb. You can use the list to get some help.

1. may
2. can
3. should not
4. must/need
5. can
6. may not – should
7. must
8. don't need to

8. Match the verbs in bold to their meanings.

1 e
2 c
3 f
4 g
5 b
6 a
7 d

10. Watch a video - or listen to your teacher talking - about respiratory protection on construction sites and mark the following statements as true (T) or false (F).

You can turn on **subtitles** if you wish to make the video easier to understand.

TRANSCRIPT (it is **also** available if you click on the link View the transcript below the video picture https://www.osha.gov/video/respiratory_protection/construction.html)

"This video provides a brief overview and general information on respiratory hazards in construction and respiratory protection program requirements. The federal Occupational Safety and Health Administration - also called "OSHA" - and State OSHA agencies require employers to have respiratory protection programs, if their workers are required to wear respirators on the job.

This video does not cover all of the things that your employer must do under Federal OSHA or State OSHA respiratory protection standards. This video can be a part of the OSHA-required respiratory protection training, which includes many topics, like how

to put on and take off a respirator and how to use, clean, and maintain your respirator. Your employer must also provide you with worksite-specific training.

While this video discusses some of your *employer's* responsibilities under OSHA's respiratory protection standard, it is important to remember that the purpose of a respirator is to protect *your* health and safety.

Gases, dusts, mists, and fumes may be present at construction worksites. Some of these can make you sick or kill you if you breathe them in. These gases, dusts, mists, and fumes are referred to as respiratory hazards. Some respiratory hazards act quickly, like carbon monoxide which can make you unconscious or kill you in minutes. Other respiratory hazards can take years to make you sick, like asbestos which can cause lung cancer decades after you breathe it in. More examples of respiratory hazards in construction include:

- lead dust and fumes from grinding, welding, cutting, or brazing surfaces coated with lead-based paint;
- silica dust from cutting concrete or sandblasting;
- solvent vapors from adhesives, paints, strippers, cleaning solvents, and spray coatings; and
- isocyanate vapors from spray foam insulation and certain spray paints or coatings.

When there are respiratory hazards at your jobsite, your employer must use several methods to reduce your exposure to them, including:

- engineering controls (such as local exhaust ventilation);
- work practice controls (such as using wet-cutting techniques); and
- administrative controls (such as minimizing the number of workers exposed to the hazard).

When you and your co-workers cannot be adequately protected from respiratory hazards through use of these methods, then your employer must provide you with an appropriate respirator to protect your health.

Respiratory protection must be selected based on the hazard you will be exposed to on the job. Not every respirator will protect against every hazard, so it's important for your employer to select the right one. For example, filtering facepiece respirators may protect you against particulate hazards, such as dusts. However, a filtering facepiece respirator will not protect you against gas and vapor hazards, like solvent vapors. If you are exposed to gases and vapors, you will need a different type of respirator. For example, you could use an air-purifying respirator with chemical cartridges or a supplied-air respirator, such as an airline respirator or self-contained breathing apparatus. In addition, supplied air respirators are the only respirators that will protect you against hazardous atmospheres, such as carbon monoxide and lack of oxygen. Selecting an appropriate respirator is your employer's responsibility.

When respirators must be used on your job site, your employer must have a respiratory protection program. This program must meet the requirements of either the Federal OSHA or your State OSHA respiratory protection standard.

The standard requires your employer to do the following:

- develop and implement a written respiratory protection program;
- evaluate the respiratory hazards in the workplace;
- select and provide appropriate respirators;
- provide worker medical evaluations and respirator fit testing;
- provide for the maintenance, storage and cleaning of respirators;
- provide worker training about respiratory hazards and proper respirator use;
- evaluate workers' use of respirators and correct any problems; and
- provide you with access to specific records and documents, such as a written copy of your employer's respiratory protection program.

Some of these requirements, such as training and fit testing, can be provided by an outside party, including a union, an apprenticeship program, a contractor's association, or a past employer, provided they were conducted within the last twelve months. However, it is still your current employer's responsibility to ensure that all of the requirements of the standard have been met.

Because each workplace is different, it is very important that your employer's respiratory protection program address the conditions found in your specific workplace. For example, workplaces may differ in the following ways:

- the types and amount of respiratory hazards present;
- the people who manage the program;
- the policies and procedures for tasks such as respirator selection, maintenance, and use; and
- other methods for controlling exposure, such as using wet-cutting techniques to reduce airborne dusts.

Since construction work settings change over time, the written program must be updated as necessary to account for those changes in workplace conditions that affect respirator use. For example, changes in workplace conditions could include:

- new work processes or techniques, such as introducing sandblasting into an area;
- the use of new or different building materials or chemicals;
- changes in the amount of a respiratory hazard in the workplace; or
- changes in the types of respirators being used.

Notify your supervisor if something changes in your workplace that conflicts with, or may not be covered by, your respirator training or established workplace policies or procedures.

Your employer's respiratory protection program must be managed by a qualified, trained program administrator. This person must monitor the program and make sure that you and your co-workers are adequately protected. The program administrator will know a lot about your workplace respiratory protection program, and should be able to answer any questions you may have about respirator use. The program administrator must know about the requirements of the OSHA Respiratory Protection Standard and must periodically evaluate the program, and make any necessary changes.

This video has provided you with a brief overview of respiratory hazards in construction and respiratory protection program requirements. There are many other things that you must know and do before you can safely use a respirator in a hazardous work environment. While this video may be a part of your respiratory protection training, your employer must also provide you with additional training on respirators, including worksite-specific training. Remember, if you don't know if a respirator is needed for the task you will be doing, or if you are unsure about how to properly use a respirator or which filter or cartridge to use, talk to your supervisor before entering the hazardous area."

True or *False* ?

		T/F	Extract from the Transcript
1.	Employers must provide workers too with worksite-specific training.	**T**	Your employer must also provide you with worksite-specific training.
2.	Asbestos makes you unconscious or kills you in minutes.	**F**	Some respiratory hazards act quickly, like carbon monoxide which can make you unconscious or kill you in minutes. Other respiratory hazards can take years to make you sick, like asbestos which can cause lung cancer decades after you breathe it in.
3.	A good respirator will protect you against every hazard.	**F**	Respiratory protection must be selected based on the hazard you will be exposed to on the job. Not every respirator will protect against every hazard, so it's important for your employer to select the right one.
4.	According to the standards, the workers themselves are responsible for correcting any problems they may have with their respirators.	**F**	The standard requires your employer to do the following: ▪ evaluate workers' use of respirators and correct any problems
5.	It is the workers' union's responsibility to ensure that all of the requirements of the standard have been met	**F**	Some of these requirements, such as training and fit testing, can be provided by an outside party, including a union, an apprenticeship program, a contractor's association, or a past employer, provided they were conducted within the last twelve months. However, it is still your current employer's responsibility to ensure that all of the requirements of the standard have been met.
6.	It is necessary for the written protection programme to remain stable and unchanged over time in all workplace conditions.	**F**	Since construction work settings change over time, the written program must be updated as necessary to account for those changes in workplace conditions that affect respirator use.
7.	The respiratory protection programme must be managed by a qualified, trained programme administrator.	**T**	Your employer's respiratory protection program must be managed by a qualified, trained program administrator.

11. Watch and listen carefully again and answer the following questions in pairs.

a. What does OSHA stand for?
The federal Occupational Safety and Health Administration - also called "OSHA"

b. Give an example of what you can learn in a respiratory protection training.
This video can be a part of the OSHA-required respiratory protection training, which includes many topics, like how to put on and take off a respirator and how to use, clean, and maintain your respirator.

c. Name some respiratory hazards.
Gases, dusts, mists, and fumes may be present at construction worksites. Some of these can make you sick or kill you if you breathe them in. These gases, dusts, mists, and fumes are referred to as respiratory hazards. Some respiratory hazards act quickly, like carbon monoxide which can make you unconscious or kill you in minutes. Other respiratory hazards can take years to make you sick, like asbestos which can cause lung cancer decades after you breathe it in. More examples of respiratory hazards in construction include:

- lead dust and fumes from grinding, welding, cutting, or brazing surfaces coated with lead-based paint;
- silica dust from cutting concrete or sandblasting;
- solvent vapors from adhesives, paints, strippers, cleaning solvents, and spray coatings; and
- isocyanate vapors from spray foam insulation and certain spray paints or coatings.

d. What kinds of controls must an employer introduce when there are respiratory hazards at the job site?
When there are respiratory hazards at your jobsite, your employer must use several methods to reduce your exposure to them, including:

- engineering controls (such as local exhaust ventilation);
- work practice controls (such as using wet-cutting techniques); and
- administrative controls (such as minimizing the number of workers exposed to the hazard).

e. Does every respirator protect you against every hazard? Why / why not?
Because each workplace is different, it is very important that your employer's respiratory protection program address the conditions found in your specific workplace. For example, workplaces may differ in the following ways:

- the types and amount of respiratory hazards present;
- the people who manage the program;
- the policies and procedures for tasks such as respirator selection, maintenance, and use; and
- other methods for controlling exposure, such as using wet-cutting techniques to reduce airborne dusts.

12. Watch and listen carefully again and complete the missing words in the following sentences.

1. If you are exposed to **gases and vapours**, you will need a different type of respirator.
2. The standard requires your employer to evaluate the respiratory **hazards** in the workplace.
3. Some of these requirements, such as training and fit testing, can be provided by an **outside party**, including a union, an apprenticeship programme.
4. Since construction work settings change over time, the written programme must be updated as necessary to account for those changes in **workplace conditions.**
5. Notify your supervisor if something changes in your workplace that conflicts with, or may not be covered by, your **respirator training.**
6. This video has provided you with a brief overview of respiratory hazards in **construction** and respiratory protection programme requirements.