



QUEENSLAND LEARNER **WORKBOOK**

Marking Guide with answers



CONSTRUCTION INDUCTION

WHITE CARD

CPCWHS1001 -
Prepare to work safely in the
construction industry

Produced by:



**EASY
GUIDES**
Australia Pty Ltd

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SAMPLE

Student and RTO or employer details

Date: / /

Student Details			
Student name:		Signature:	
Address:			
Phone number:		Mobile:	
Date of birth:	Sex: M <input type="checkbox"/>	F <input type="checkbox"/>	Proof of identity sighted: Yes <input type="checkbox"/> No <input type="checkbox"/>
Date of enrolment:		Registration details/USI number:	
Supervising RTO			
RTO name:		Contact person:	
Address:			
Phone number:		Registration number/USI number:	
Employer Details			
Employer name:			
Address:			
Phone number:			
Training details			
Estimated duration of on-the-job training hours:			
Primary location(s):			
Supervision/delivery arrangements:			
Assessment arrangements:			
Plant and equipment required:			
Other resources required:			
Literacy and numeracy support:			

ABOUT CONSTRUCTION INDUCTION



Aims of general induction training

General induction training aims to provide persons with a basic knowledge of workplace health and safety legislative requirements, principles of risk management and the prevention of injury and illness in the construction industry.

General induction training should be undertaken by anybody working in general construction (commercial and civil) as well as those in the residential construction sector.



General induction training should include a formal training program that provides workers in the construction industry with an awareness and understanding of:

- their rights and responsibilities under health and safety law
- common hazards and risks that are in the construction industry
- basic risk management principles
- the standard of behaviour expected of workers on construction sites.



General induction training is recommended for:

- Anybody carrying out construction work including site managers, supervisors, surveyors, labourers and trades persons.
- Anybody with access to operational construction zones unaccompanied or not directly supervised by an inducted person.
- Anybody whose employment causes them to routinely enter operational construction zones.



General induction should be completed upon **entry** to the industry before commencing construction work.

However, general induction may be repeated when the person with control of the construction work decides that there is a need for additional training.

This can be determined through supervision, incidents that may occur, risk management, or when a person re-enters the industry after an extended absence; for example, two consecutive years.



HEALTH AND SAFETY LEGISLATION



Laws to keep your workplace safe

Health and safety requirements are outlined in Acts, Regulations, Codes of Practice and Australian Standards.



Acts

Acts are laws that explain how to improve health and safety in the workplace. Queensland has the Work Health and Safety Act 2011.

Regulations

Regulations explain specific parts of the Act. For example, Queensland has the Workplace Health and Safety Regulations 2002.

Codes of Practice/Compliance Codes

Codes of Practice are practical guidelines on how to comply with (meet the rules of) legislation. For example: HAZARDOUS MANUAL TASKS Code of Practice

Australian Standards

Australian Standards are work guidelines that set the minimum accepted performance or quality for a specific hazard, process or product. For example: AS 2550 – Cranes, hoists and winches – safe use set.

1. Question: The laws in Queensland come under what Act?

Answer: Work Health and Safety Act 2011

2. Question: What is the name of the regulation in Queensland that gives you more information about the Act?

Answer: The Workplace Health and Safety Regulation 2002.

Duty of care under the OHS Act

Everyone employed by a company/PCBU (Person Conducting a Business or Undertaking) on a construction site has a 'duty of care'. The workplace must be a healthy and safe place to be.

Managers, supervisors, team leaders and all workers in general have a duty of care. A work-experience student or sub-contractor on site would also come under the 'duty of care'.

If you do not look out for the health and safety of others you can be fined or punished.

Someone not employed by the PCBU operating a construction site does not have a 'duty of care' for that site.



IDENTIFY CONSTRUCTION HAZARDS AND RISK CONTROL MEASURES



Hazard versus risk

What is the difference?

The constantly changing nature of construction work sets it apart from other types of work. Different hazards and risks emerge constantly—sometimes instantly.

Co-ordinating risk management is made more difficult by the stop and start nature of a construction project, high turnover of workers and temporary workplaces. These features contribute to the high levels of risk in the industry.

Hazard

A hazard is any thing or any situation which could injure or harm you.

In other words, it is anything that can hurt you.



Risk

A risk is the chance of a hazard causing injury or harm.

In other words, how likely it is that somebody or something may be harmed by the hazard.



Managing a risk

There are 5 steps you should take to manage a risk. They are:

- Step 1 - Identify / find the risk.
- Step 2 - Assess the risk. How likely is the risk and what serious would it be?
- Step 3 - Report the risk.
- Step 4 - Control the hazard to lower the risk.
- Step 5 - Review the action you have taken.



The best way to manage a risk is to eliminate (get rid of) it.

18. Question: What is a hazard?

Answer: Anything or situation that could harm you.

19. Question: What is a risk?

Answer: The possibility of a hazard causing injury or harm.

20. Question: Use one or two words to describe each of the 5 steps to manage a risk?

Answer: Step 1 - Identify, Step 2- Assess risk, Step 3 - Report risk, Step 4 - Control risk and Step 5 - Review action.

21. Question: What is the best way to manage a risk?

Answer: Eliminate (get rid of) it.

Reviewing the action you have taken

Once you have applied hazard controls to lower the risk of harm, you need to review how effective the control is and if more needs to be (or can be) done to lower the risk further.

Reasons you may need to review the risk controls control could be:

- when a notifiable incident happens
- when checking shows that the risk control is not working
- when a health and safety representative asks that the review be done (per the Queensland legislation).

You may need to apply more than one control measure to reduce the risk to a minimal level.



Risk assessment and control form	
Responsible unit or person:	Reviewed on:
Compliance:	Date next reviewed:
Signature:	
Hazard identification:	
Risk assessment:	
Control measures:	
Implementation plan:	
Review and follow-up:	
Are control measures in place? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> In progress Are control measures being or monitoring met? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> In progress Are there any new problems with this risk? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> In progress	

Risk assessment management plan

In making a risk assessment management plan you should include the following:

- Identify the hazard
- Assess how likely it is that the hazard will cause harm
- Talk to other workers or health and safety people to find ways to control the hazard
- Talk to other workers or health and safety people to lower the risk
- Finally, are there ways to improve things for the future?

Always re-assess the level of risk after you introduce a control measure. If you are unsure about what other hazard controls can be applied, talk to your health and safety representative or your supervisor.

22. Question: Should you review the controls you have made to manage a risk?

Answer: Yes.....

23. Question: Can a health and safety representative ask that a risk control be reviewed?

Answer: Yes.....

24. Question: Do you only need to check on (monitor) a risk control every month?

Answer: No.....

25. Question: What is the last thing you should do in your risk management plan?

Answer: See if there are ways to improve things for the future.....

26. Question: Should you re-assess the level of a risk after you introduce a control measure?

Answer: Yes.....

Confined spaces

Working in confined spaces requires the following:

- confined space training
- a confined space entry permit
- a written risk assessment



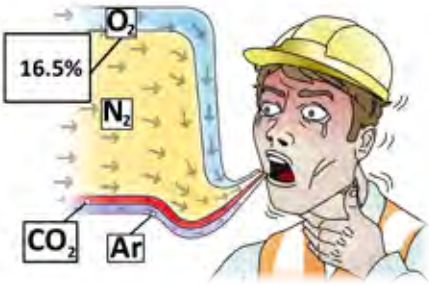


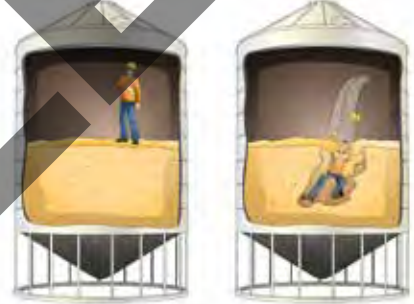
Confined spaces can include:

<p>Pits</p>	<p>Tanks</p>	<p>Ducts</p>
<p>Pipes</p>	<p>Pressure vessels</p>	<p>Roof spaces</p>
<p>Vats</p>	<p>Flues</p>	<p>Chimneys</p>
<p>Silos</p>	<p>Shafts</p>	<p>Trenches</p>

How to identify a confined space

A **confined space** is an area which is enclosed. It is not designed for people to go into. It may be hard to get in and out of because of a small or blocked entry/exit.

There is a risk in a confined space with one or more of these dangers:

<p>A dangerous level of oxygen concentration outside the safe oxygen range.</p> 	<p>A concentration of airborne contaminant (such as gasses, vapours or dust) that may cause impairment, loss of consciousness or asphyxiation.</p> 
<p>A concentration of flammable airborne contaminant that may cause injury from fire or explosion.</p> 	<p>Engulfment in a stored free-flowing solid or a rising level of liquid that may cause suffocation or drowning.</p> 

35. Question: What is a confined space?

Answer: An area that is enclosed and not designed for people to go into. It may be hard to get in and out.

36. Question: Can you go into a confined space if there is a confined space sign nearby?

Answer: No.

37. Question: You don't need training to enter a confined space. Is this true or false?

Answer: False.



Electric power tools

Take action if you find a power tool with a damaged lead.

You should:

- remove it from use.
- report the damage to your supervisor.
- place an 'out of service' tag on it.

38. Question: If you found an electrical power tool with a damaged lead should you leave it where it is?.

Answer: No.

Excavations including trenches

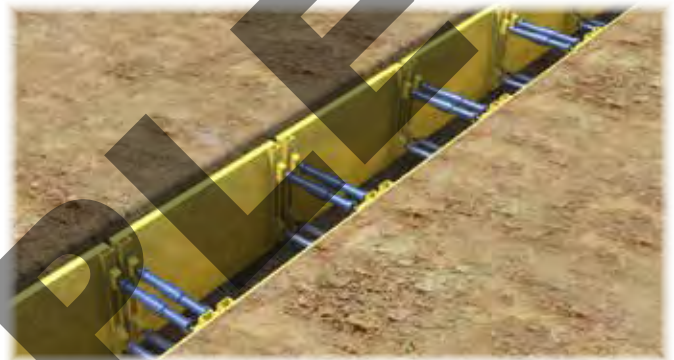
Barricades, guardrails or fencing should be used to prevent access to excavations and to stop people accidentally falling in. Signs should also be put in place warning of the dangers.



There are some cases where an excavation or a trench will need to be shored.

Shoring an excavation or using trench shields should be done whenever:

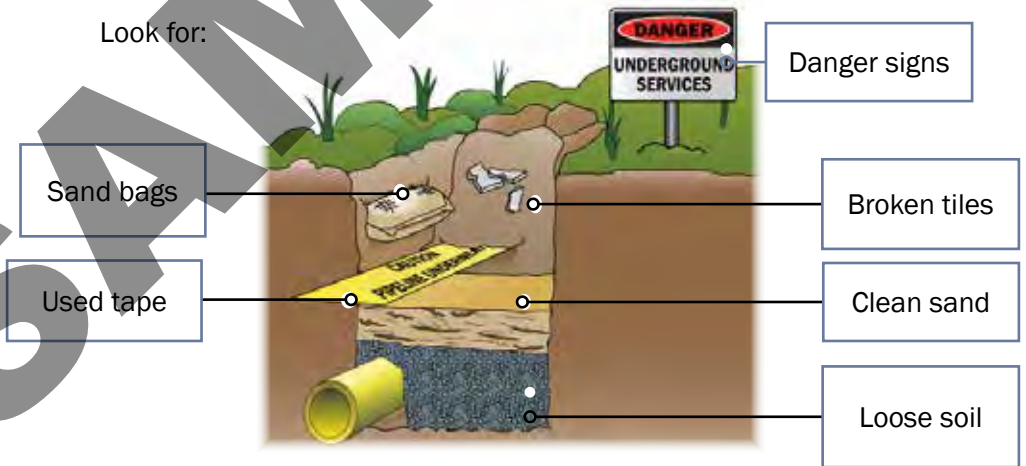
- the trench is more than 1.5 metres deep
- workers need to enter the excavation
- the ground is unstable and there is a likelihood the trench may collapse.



What should you use to excavate if you think there's an underground service nearby?

Stop. Use a non conductive hand tool to expose the service lines. Dig carefully so you will not cause any damage.

Look for:



42. Question: Is ground collapse a hazard of trenches?

Answer: Yes.....

43. Question: Is the possibility of falling into a trench a hazard?

Answer: Yes.....

44. Question: You do not need to worry about underground services when working near a trench. Is this true or false?

Answer: False.....

Dust (cement and wood)

Dust can be dangerous to breathe in. Dust can be made from many activities. These include:

- polishing concrete
- cutting bricks
- sawing fibre-cement sheeting.

Protect yourself with gloves, eye protection (goggles, glasses or a mask).

Wet down dusty areas to prevent the spread of dust in the air.



45. Question: How can you help prevent the spread of dust in the air?

Answer: Wet down dusty areas.

46. Question: Look at the information above. What are three activities that cause dust?

Answer: Polishing concrete, cutting bricks and sawing fibre-cement sheeting.

Falling objects

People can be hurt or killed from objects falling from above. Here are some ways to stop things like tools from falling.



Use a safety helmet or hard hat.



Use perimeter containment screens



Store materials on overhead gantries.



Use a tool belt for small pieces of equipment such as bolts, nuts and



WARNING
Falling objects

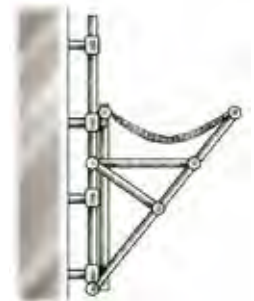
Erect and place appropriate signs warning of the



Use wrist straps for larger tools like hammers



Keep any tools in a toolbox when you are not using them



Use netting to catch objects if you are working from height.

47. Question: Does a fall restraint system stop objects from falling on people below?

Answer: No.

Noise

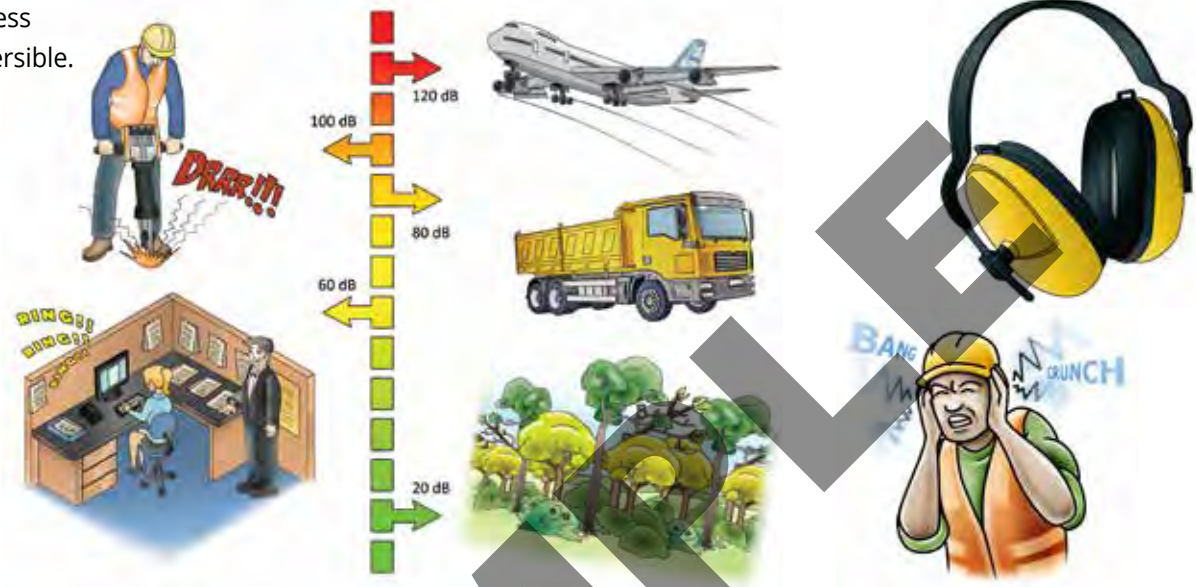
Noise which is usually caused by heavy vehicles and equipment can damage your hearing permanently.

Decibel levels of common sounds

8 hours of noise at 85db or noise levels of 140db even briefly can permanently damage your hearing.

Hearing loss is:

- slow
- painless
- irreversible.



Hearing protection

You should wear hearing protection like ear plugs or ear muffs whenever there is noise that could contribute to the loss of hearing.

If possible, stay out of areas where noisy work is being done. When deciding which tool to use, choose the quieter one.

52. Question: Can hearing loss be reversed?

Answer: No.

53. Question: What PPE should you use when there is noise that could contribute to the loss of hearing?

Answer: Ear plugs or ear muffs.



Using ladders

Maintain three (3) points of contact on a ladder at all times.

54. Question: Should you have one, two or three points of contact when using a ladder?

Answer: Three.

Personal protective equipment (PPE)

Personal protective equipment (PPE) provides you with basic protection from hazards. It is not a guarantee that it will prevent injury, but it should help.

It is up to your employer to provide the necessary PPE for you to operate safely and also to make sure that you are trained to fit and use it properly. Look for safety signs around your worksite to show you when you need to wear different types of PPE.

It is a condition of entry on some construction sites that you wear specific PPE.



The best way to make the workplace safe is to take away hazards altogether. But often you can't do this. This is where Personal Protective Equipment (PPE) can help.

PPE is clothing or equipment worn on the body to help protect you from hazards. PPE will not take away the risk of harm altogether, but it will help keep you safe.

Here are some examples of PPE:



70. Question: What is the main purpose of PPE?

Answer: To protect you from hazards.

Knowing the right PPE to use

71. Question: Draw a line to match the right PPE with the hazard it can help protect you from.

Answer:..

Falling objects on your foot.

Object hitting or falling on your head.

When there is a chance of noise causing a loss of hearing.

When exposed parts of your skin might get sunburn.

To prevent cuts or burns on your hands.



SAMPLE

SPEAKING - ORAL COMMUNICATION



Speaking on the job

In the following section you will practise speaking (oral communication). Your trainer will ask you the questions.

Question 1. Look at the pictures below. Look at the hazard and the controls that have been put in place.

Barricades, guardrails or fencing should be used to prevent access to excavations and to stop people accidentally falling in. Signs should also be put in place warning of the dangers.



There are some cases where an excavation or a trench will need to be shored.

Shoring an excavation or using trench shields should be done whenever:

- the trench is more than 1.5 metres deep
- workers need to enter the excavation
- the ground is unstable and there is a likelihood the trench may collapse.



(a) What is the hazard? Answer: Falling into a trench or trench collapsing.....

(b) What control could you use? Answer: Put up barricades. Use signs to warn of the excavation. Put up shoring.....



(a) What is the hazard? Answer: Sunburn..Heat stroke.....

(b) What control could you use? Answer: Keep hydrated..Take breaks in shaded areas..Avoid hot surfaces.....

Question 3.

Job Safety Analysis (JSA)



A Job Safety Analysis (JSA) is a way to make jobs safer. It involves looking at each step of a job, finding things that could be dangerous, and figuring out how to stop accidents from happening. This keeps workers safe and helps companies follow safety rules.

A JSA includes the following:

- it assesses a risk so that a job can be done safely
- it breaks down a job step by step
- it looks at steps and their hazards so that controls can be put into place
- it documents a safe work plan for the job.

Safe Work Method Statement (SWMS)



A Safe Work Method Statement is a site specific statement that must be prepared before any high-risk construction work is commenced.

It covers the job and safety responsibilities of each member of a work group. Workers should be involved in discussions of tasks, associated hazards, risks and controls.

A SWMS includes the following:

- it assesses a risk so that a job can be done safely
- it shows you how to do high risk construction work safely
- it shows you step by step how to control a hazard.

Safety Data Sheet (SDS)



Always check the Safety Data Sheet (SDS) before handling any chemicals.

A SDS includes the following:

- it explains what to do if there is an emergency involving a chemical
- it outlines the risks associated with a hazardous chemical
- it give information about assessing the risks involved in using a hazardous chemical
- it has safety information about hazardous chemicals
- it helps people know the hazards in using a chemical.

Question 3.

(a) What document tells you about the risks with using a hazardous chemical?

Answer: A Safety Data Sheet

(b) What document tells you the steps needed to control a hazard?

Answer: A Job Safety Analysis.

(c) What document assesses a risk so that a job can be done safely?

Answer: A Safe Work Method Statement.

(d) If you had to evacuate in an emergency, where would you go?







Answer: Emergency assembly area or emergency evacuation point...



Fire safety equipment

Different fires need different equipment

Common causes of fire on a construction site include:

<p>Chemicals</p> 	<p>Electrical</p> 	<p>Explosion</p> 
<p>Friction</p> 	<p>Flammable materials</p> 	<p>Mechanical equipment and welding</p> 

Fire extinguishers

Shown on the next two pages are common types of fire extinguishers that may be on a worksite and the types of fires they should be used for.

Fire extinguishers are generally designed for one or more classes.

Commonly available are:

- A** - Water
- BC** - Carbon dioxide
- ABE** - Dry powder







Note:
Fire extinguishers should be regularly inspected, tested and maintained.



You must use different types of fire extinguishers and other firefighting equipment depending on what has caused or fuelled the fire.

Fire safety equipment

Question 4. Name the type of safety equipment in each picture and name its purpose.

Equipment	Name / type	Purpose
 <p>A red square icon showing a person pulling a white fire blanket over a fire. Below the icon, the text 'FIRE BLANKET' is written in white on a black background.</p>	Fire blanket	Put out fires from cooking fats or oil.
 <p>A red square icon showing a white fire hose reel with a nozzle. Below the icon, the text 'HOSE REEL' is written in white on a black background.</p>	Hose reel	Used for large fires that need high pressure water.
 <p>A red fire extinguisher with a blue label and a black handle.</p>	Foam fire extinguisher	Put out fires involving wood, paper, cloth, plastic, rubber, grass, oils, petrol, paint, flammable or combustible liquids, Class A and Class B fires.
 <p>A red fire extinguisher with a white label and a black handle.</p>	Powder fire extinguisher	Put out fires involving electrical, oils, petrol, paint, flammable or combustible liquids, Class B and Class E fires.
 <p>A red fire extinguisher with a black handle and a black horn.</p>	Carbon dioxide fire	Put out fires involving electrical, oils, petrol, paint, flammable or combustible liquids, Class B and Class E fires.
 <p>A red fire extinguisher with a black handle and a black horn.</p>	Water fire extinguisher	Put out fires involving paper, wood, cloth, plastic, rubber, grass and Class A fires.

Safety signs and symbols

There are lots of different safety signs and symbols at any worksite. These signs are important because they can let you know if there is a hazard or if there are any special requirements on the worksite. You must follow any instructions on the signs — they have been posted to keep you safe.


Australian Standards for safety signs have standard colours, designs, shapes and sizes. These safety signs fit into four (4) different groups as shown in these tables.

Safety signs and symbols are instructions you MUST follow

1. Regulatory signs

Description	Prohibition signs	Mandatory signs	Limitation or restriction signs
	White with a red circle with a line through it. These signs tell you what you MUST NOT do.	White with a blue circle containing an image. These signs tell you what you MUST do.	White with a red circle around a black image or number. These signs let you know of any restrictions in place.
Example:	No smoking 	Safety helmet must be worn 	Speed limit is 50 kilometres per hour 

2. Emergency information






Description	Green in colour
	These signs identify directions to find exits, first aid facilities and equipment.
Example:	First Aid facility 

3. Fire signs

Description	Red in colour
	These signs identify where to find fire-fighting equipment, alarms and exits.
Example:	Fire extinguisher 

Safety signs and symbols

Question 5. Name the type of safety sign or symbol below and explain its meaning.

Sign	Type of sign	Meaning of sign
	<p>Fire</p>	<p>This sign shows you where you will find the fire extinguisher.</p>
	<p>Warning</p>	<p>Look out for moving vehicles as they could be a hazard.</p>
	<p>Limitation</p>	<p>This sign shows that the speed limit is 100 km per hour.</p>
	<p>Danger</p>	<p>This sign shows an electrical hazard that could possibly be life threatening.</p>
	<p>Prohibited</p>	<p>No smoking allowed / smoking prohibited.</p>

PERSONAL PROTECTIVE EQUIPMENT - PPE



Fitting PPE

Personal protective equipment (PPE) provides you with basic protection from hazards. It is not a guarantee that it will prevent injury, but it should help.

Your trainer will demonstrate the correct fitting of PPE. It will then be your turn to practise until you get it right.

You will be asked to demonstrate the correct fitting of the following:



If using safety glasses or goggles they must cover the eyes. They must sit on the bridge of the nose and the bent arms must fit around the ears.

- **eye protection (safety goggles or glasses)**



If using ear plugs, the student must put an ear plug in each ear according to the manufacturer's instructions (e.g. roll ear plug in fingers; pull ear up and back; place ear plug in ear and release so that it expands). If using ear muffs, the student must place the muffs over their ears so that they are fully covered by the muffs and adjust the head piece where needed so that it sits close to the head.

- **hearing protection (ear plugs or earmuffs)**



Fit and adjust the head harness where needed so that the hat is positioned comfortably, ie. it should not sit too high, it should be on straight and not backwards.

- **hard hat**



The vest, shirt or jacket must be sized correctly, for example, not too tight or too loose. If using a vest it must be secured at the front.

- **high visibility vest, shirt or jacket.**