



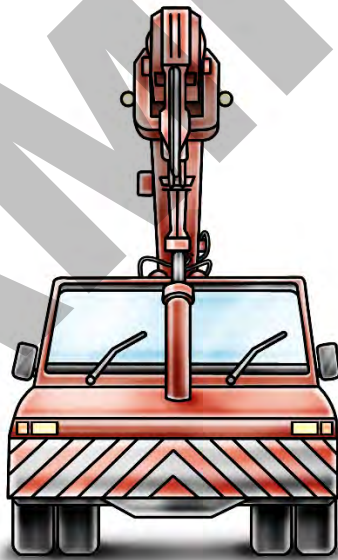
Learner Workbook

(Formative assessment)

STUDENT COPY

TLILIC0040 –

Licence to operate a non-slewing crane (greater than 3 tonnes capacity)



This resource was developed by:



Learner Name: _____

Student Number: _____ Date: _____

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SAMPLE



HIGH RISK WORK LICENSING AND THE LAW

QUESTION 1
What is duty of care?



QUESTION 2
What is the PCBU's/Employer's duty of care?



QUESTION 3
What is a worker's duty of care?



SAMPLE

QUESTION 7

You can be punished (penalised) for not doing high risk licence work safely. There are a number of things that a health and safety regulator (e.g. WorkSafe / WorkCover) can do. What might the punishment be?



QUESTION 8

You have just got your High Risk Work Licence. What should you employer do BEFORE you use a non-slewing crane you are not familiar with?



PLAN WORK / TASK

QUESTION 9

What is the difference between a hazard and a risk?



QUESTION 10

What is a traffic management plan?



QUESTION 11

What are some common workplace hazards?



QUESTION 12

When should you apply risk control measures?



How dangerous?



How likely?

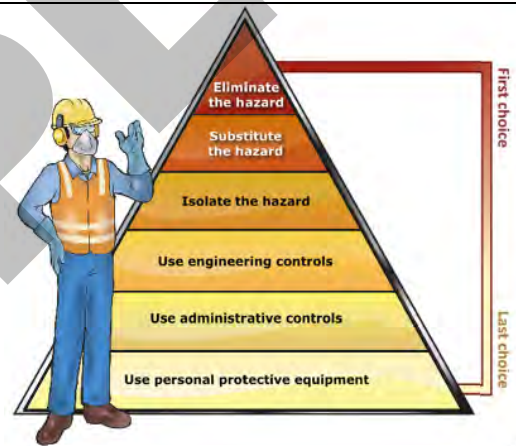
QUESTION 17

Why do you need to check with local authorities before you start work?



QUESTION 18

What is the Hierarchy of hazard control?



QUESTION 19. Name some common items of Personal Protective Equipment (PPE)?



QUESTION 20

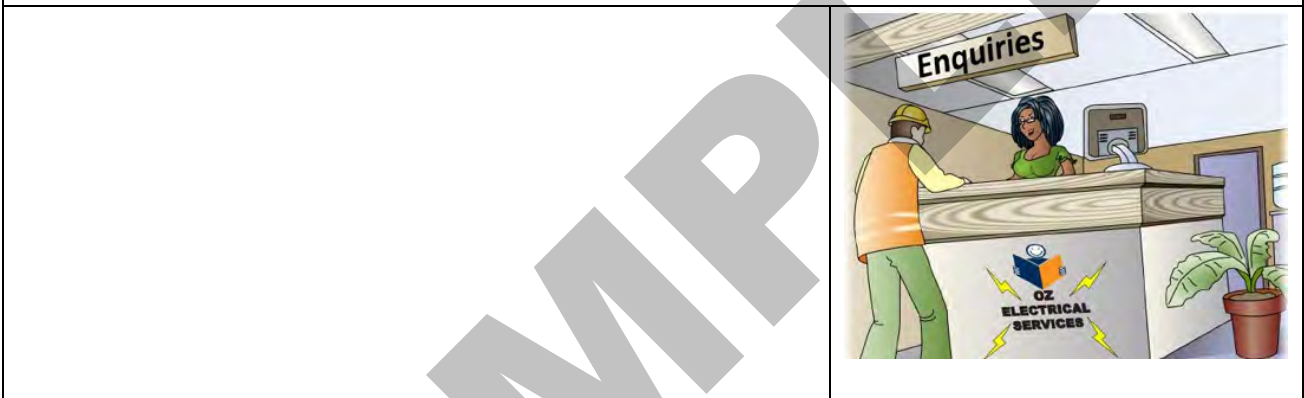
You are working near powerlines. Working near powerlines is very dangerous and can kill you.

What are the minimum safe distance rules you must follow?



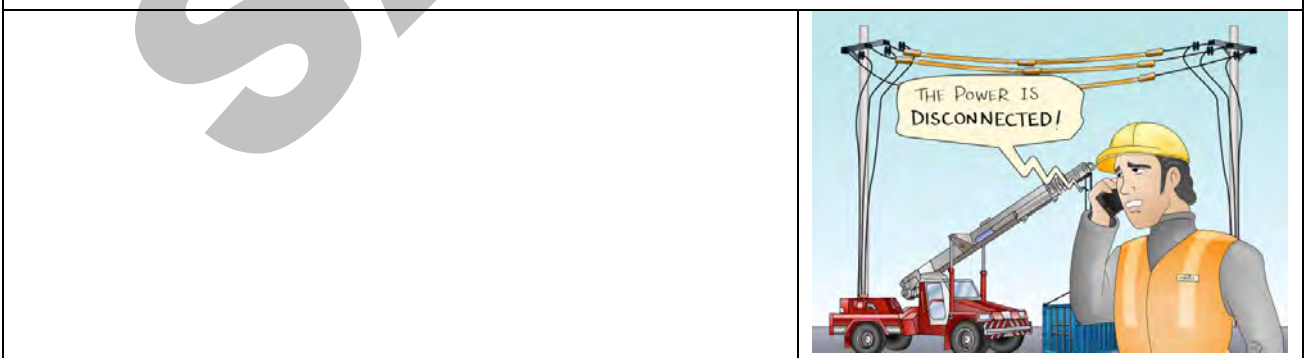
QUESTION 21

Who could you talk to if you need to find out the voltage of overhead powerlines?



QUESTION 22

What are some ways you can work closer to electric power lines than the minimum distances allowed?



QUESTION 23. What are some ways of showing there are powerlines overhead?

QUESTION 26

What is the minimum diameter (thinnest) non-conductive rope you can use as a tagline?
What does it need to be made of?



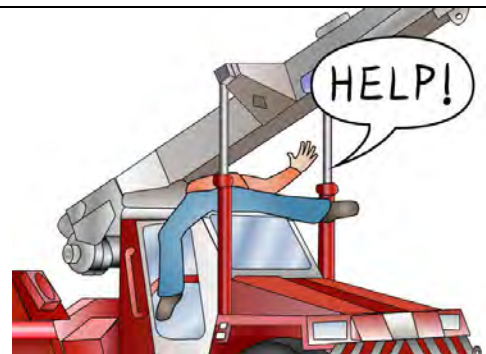
QUESTION 27

What hazards (dangers) are there if you work near (the radius) of the outriggers or chassis of a non-slewing crane?



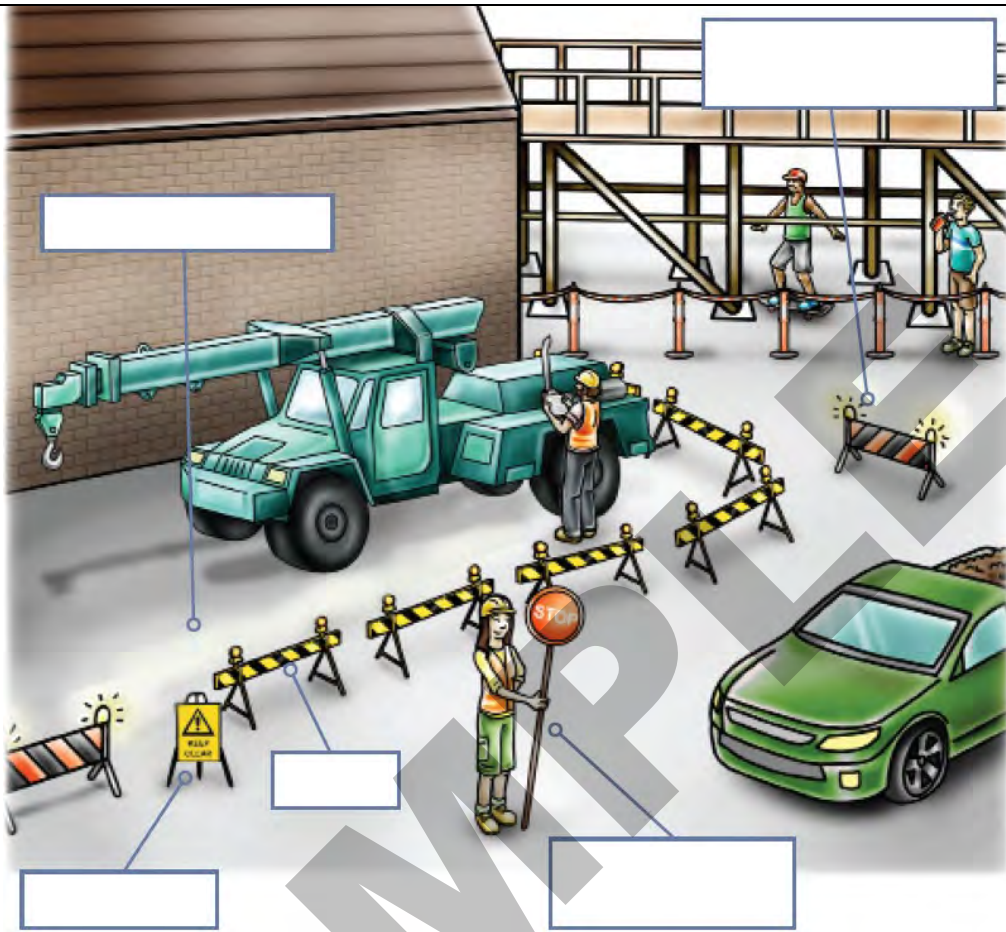
QUESTION 28

The crane operator is folding the boom so he can drive the crane.
What hazards (dangers) do you need to think about in the crane's operating radius or reach?
How can you control the hazards?



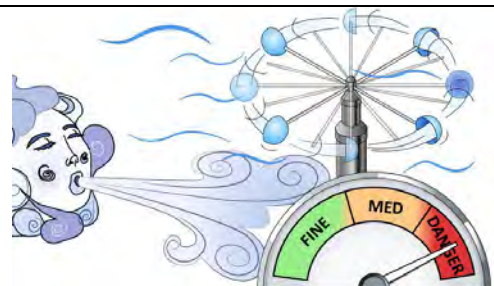
QUESTION 29

What hazard controls can you use for vehicles or plant on the job?



QUESTION 30

You are operating the crane and the wind speed increases.
What should you do?



QUESTION 34

What is the mass (weight) of:

- a) 100 litres of water?
- b) 1 cubic metre of timber (hardwood)?
- c) 1 cubic metre of blue metal?

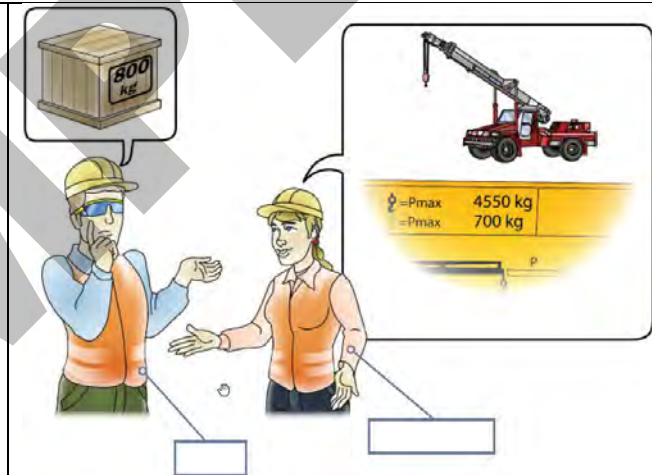
Answer may include but is not limited to:

- a) 100 litres of water =
- b) 1 cubic metre of hardwood timber =
- c) 1 cubic metre of blue metal =



QUESTION 35

Is it the crane operator's job (responsibility) to know the weight of the load?



QUESTION 36. How do you know what crane to choose?



QUESTION 42

You need to mobile the crane to relocate a load.
When do you need to decide on the path you will take?



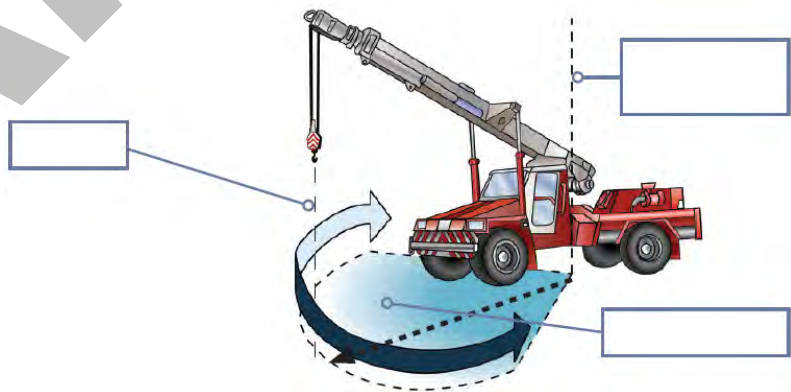
QUESTION 43

When should you test communications equipment to make sure it is functioning correctly?



QUESTION 44

You are looking at the crane load chart. What does the operating reach or radius show?

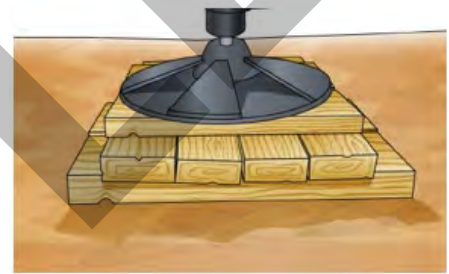


QUESTION 45

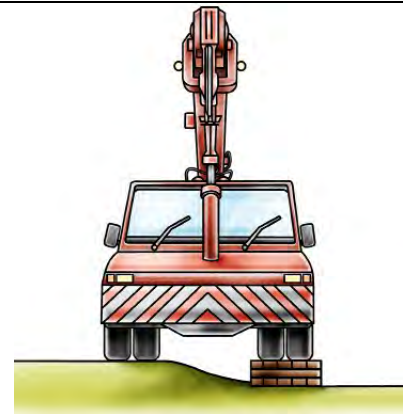
What do you need to plan for when moving a load within a crane's working radius?



QUESTION 46. Why might you need to use packing?



QUESTION 47. Why should you check for ground stability?



QUESTION 48. What are the best ground types for setting up a crane?

QUESTION 57

You will work in an area with soft, wet ground. The crane might sink. How can you make the crane stable?



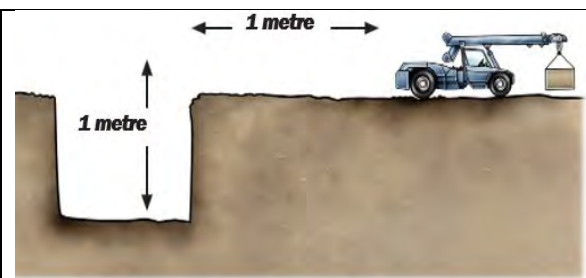
QUESTION 58

You are setting up the crane and see that one of the wheels or outriggers is sinking. What do you have to do?



QUESTION 59

How far away from recent excavations and trenches (holes) should you set up a crane?



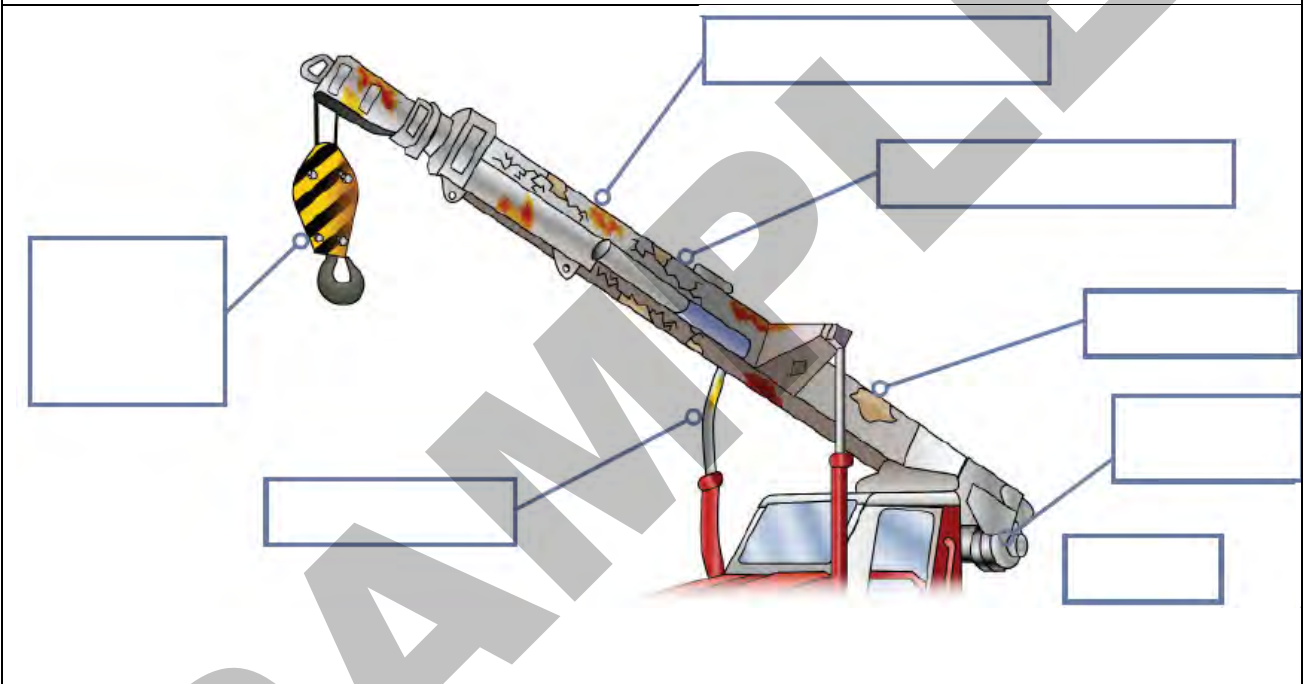
QUESTION 66. Why should you check the crane?



QUESTION 69

You are inspecting the crane.

What are some defects you should look for on the boom or superstructure?



QUESTION 70

You are using a rubber tyre crane. Your crane's tyres must be at the right pressure.

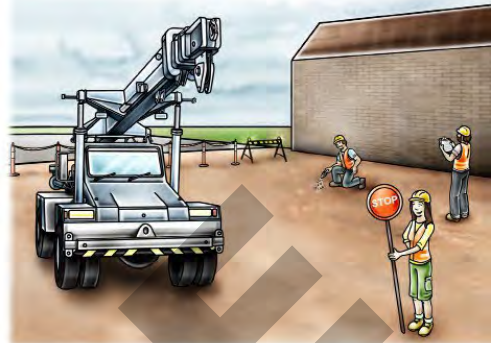
Why is this important?



QUESTION 71

You have some lifting jobs to do.

What kinds of things should you think about and plan for to do the job safely?



QUESTION 72

How do you climb into the crane's cabin safely?



QUESTION 74. What fluid checks might you make on a non-slewing mobile crane?



QUESTION 75. What boom checks might you make on a non-slewing mobile crane?



QUESTION 76

Why is it important to check the crane and equipment before use? Who is responsible for the checks?



QUESTION 77

You are going to use a crane. What kinds of pre-start checks should you do first?



QUESTION 142

Can you give some examples of when the weather is a hazard?



Question 143. Is it safe to work in windy conditions?

Answer may include but is not limited to:

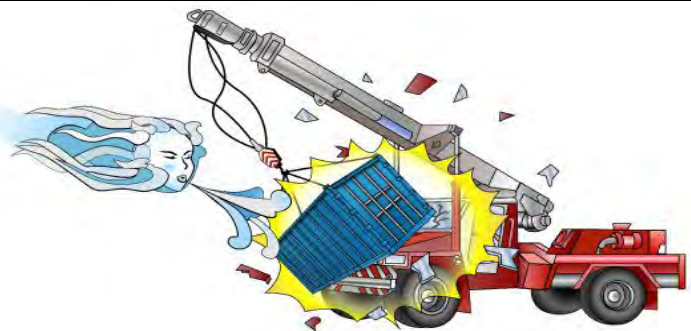
You are planning to use your crane on a job on Thursday. You check the weather forecast. Your crane is rated to a safe wind speed of 35 km/h. Is it safe to use your crane?

Answer:

34 km/h	38 km/h	24 km/h	19 km/h	16 km/h
Monday	Tuesday	Wednesday	Thursday	Friday
16° 9'	13° 7'	14° 8'	15° 9'	13° 6'

QUESTION 144

What might happen if you face the crane into the wind, and the wind is blowing towards the boom?



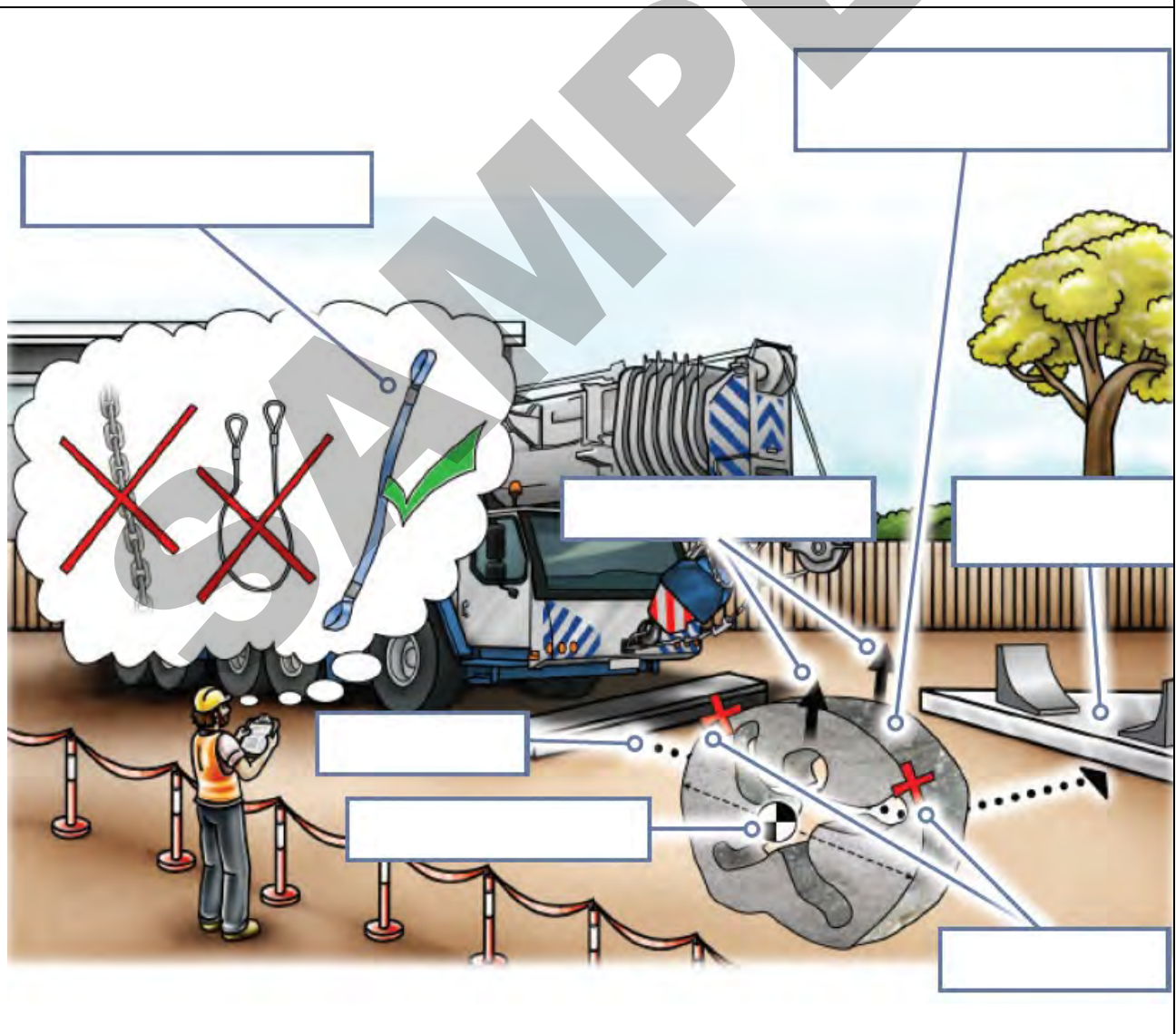
QUESTION 160

How should you lift special loads?

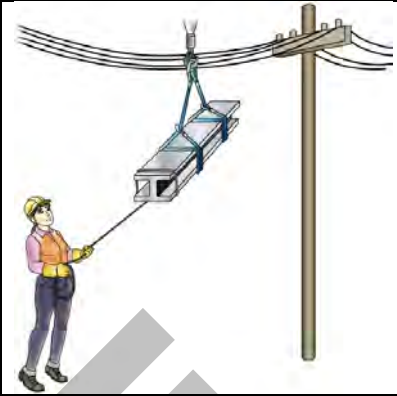


QUESTION 161

You are going to lift a special or unusual load. What should you do?

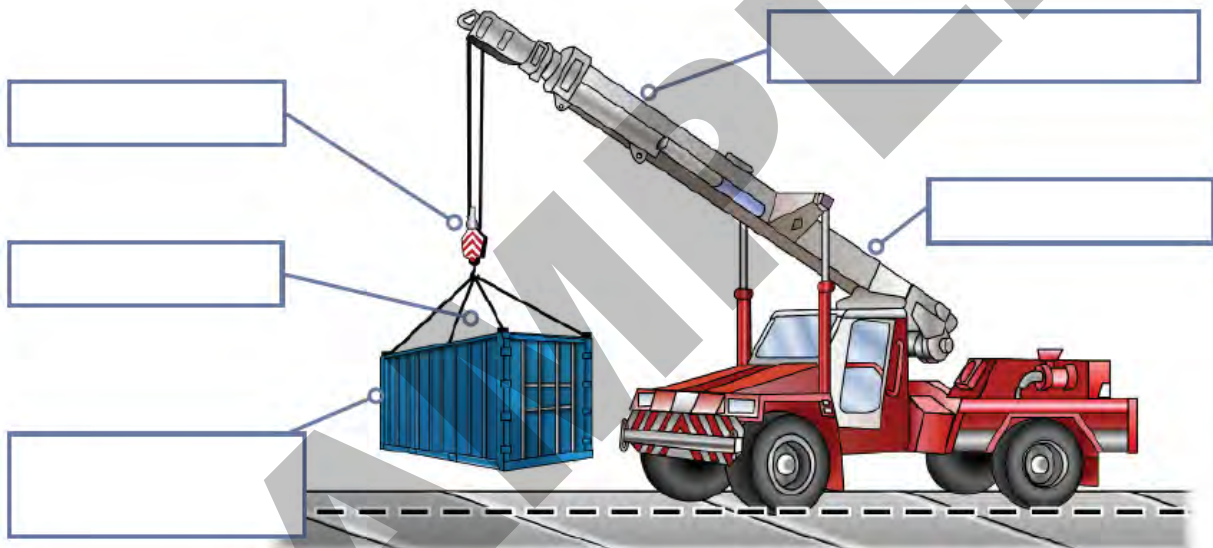


QUESTION 184. What are taglines used for?



QUESTION 185

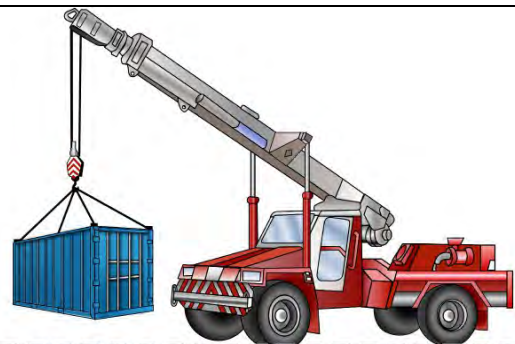
Why is it important to do a test lift?



QUESTION 186

You are doing a test lift and you have lifted the load just off the lifting plane (ground). You find there is a problem with the lift.

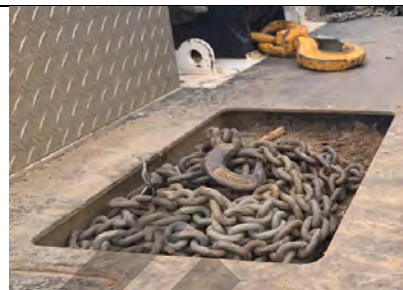
What do you need to check and do?



PREPARE TO DRIVE AN ARTICULATED MOBILE CRANE

QUESTION 217

What should you do with any items on the cranes body?

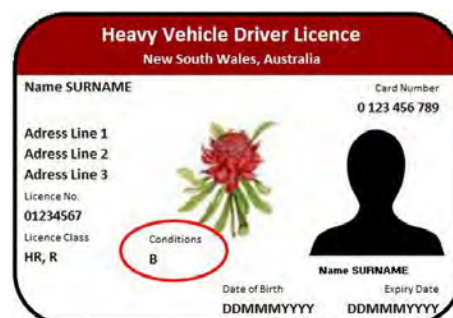


QUESTION 218. What steps should you follow when shutting down a crane?



QUESTION 219

What checks should you make before driving an articulated mobile crane on a public road?



Practical Assessment 1 – PRE-START CHECKS



Student is to conduct a pre-start of crane before use.

Items needed for task:

- Non-slewing mobile crane.
- Pre-start checklist



Skill to be demonstrated	✓ Tick if demonstrated
<ul style="list-style-type: none"> • Apply relevant procedures that reflect legislative requirements, e.g. need the relevant high risk work licence • Comply with Commonwealth, state and territory work health and safety (WHS)/occupational health and safety (OHS) legislation and safe work procedures 	
<ul style="list-style-type: none"> • Read and interpret relevant instructions, procedures, information and signs 	
<ul style="list-style-type: none"> • Interpret and confirming relevant documentation for the work task and relevant area 	
Complete pre-start checks, including: <ul style="list-style-type: none"> • visual damage or equipment faults 	
<ul style="list-style-type: none"> • battery power level as required by manufacturer requirements 	
<ul style="list-style-type: none"> • engine/mechanical fluid level checks as required by manufacturer requirements 	
<ul style="list-style-type: none"> • presence of correct logbook 	
<ul style="list-style-type: none"> • evidence of damage 	
<ul style="list-style-type: none"> • fluid leaks 	
<ul style="list-style-type: none"> • lights work effectively 	
<ul style="list-style-type: none"> • locating, identifying and confirming all controls 	
<ul style="list-style-type: none"> • mirrors and seat are adjusted appropriately 	
<ul style="list-style-type: none"> • safety equipment checks 	
<ul style="list-style-type: none"> • signage and labels to ensure they are visible and legible 	
<ul style="list-style-type: none"> • checking for signs of paint separation and stressed welds indicating potential structural weakness 	
<ul style="list-style-type: none"> • tyres and wheels for damage/wear and correct inflation (water/air) 	
<ul style="list-style-type: none"> • updating records as required 	

Start-up is in accordance with manufacturer requirements and workplace procedures	
<ul style="list-style-type: none"> there are no unusual noises 	
<ul style="list-style-type: none"> steering, transmission and brake functions comply with operating requirements 	
Complete operational checks ensuring:	
<ul style="list-style-type: none"> all controls are located, identified and tested for functionality 	
<ul style="list-style-type: none"> all hydraulic functions are operational 	
<ul style="list-style-type: none"> lifting gear movements and control functions are smooth and comply with lift plan 	
Hazard warning systems, safety, audible and visual warning devices are checked to ensure they are functional, including:	
<ul style="list-style-type: none"> reversing beepers 	
<ul style="list-style-type: none"> lights 	
<ul style="list-style-type: none"> horns 	
<ul style="list-style-type: none"> rated capacity (RC) indicator alarm (where fitted) 	
<ul style="list-style-type: none"> anti-two block alarms (where fitted) 	
<ul style="list-style-type: none"> determine any defects or faults with operation of crane and reporting to relevant person/s 	

The applicants' performance in Practical Assessment 1 - was deemed to be:

Satisfactory

Not yet satisfactory

Applicant signature:

Date:

Trainer/assessor signature:

Date:

Practical Assessment 2 – LIFT PLAN



Student is given a lifting task that includes lifting a load and landing it in its destination.

Items needed for task:

- Non-slewing mobile crane.
- Load.
- Slings.



Skill to be demonstrated			✓ Tick if demonstrated
First, a lifting plan is made that includes:			
Lift Details: Load weight, dimensions, and handling needs.			
Equipment: Crane specs, capacity, and rigging. Demonstrated by applying relevant mathematical calculations in conjunction with lift plan and load chart, radius requirements and relevant lifting gear to perform work/task to enable crane to be configured for load, including: <ul style="list-style-type: none"> • boom • fly-jib (where fitted) • line pull • travelling • type of hook • side slope derations • articulation derations 			
Site Conditions: Site layout, ground conditions, and environmental factors.			
Personnel: Roles and responsibilities of the team, e.g.			
Team member	Role	Responsibility	
Team member 1			
Team member 2			
Team member 3			
Team member 4			
Safety Measures: Safety procedures and precautions e.g. Set up an exclusion zone.			

Lift Procedure: Step-by-step process for the lift.	
Communication: How team members will stay in contact.	

The applicants' performance in Practical Assessment 2 - was deemed to be:

Satisfactory

Not yet satisfactory

Applicant signature:

Date:

Trainer/assessor signature:

Date:

SAMPLE

Assessment Summary – Competency Sign Off

Note: The Learner Workbook can be used as formative assessment (provide ongoing feedback). Therefore the student can use the Learner Guide and/or get help from the trainer in completing the workbook.

Knowledge questions	Satisfactory	Not Satisfactory
1. High risk licensing and the law	<input type="checkbox"/>	<input type="checkbox"/>
2. Plan work / task	<input type="checkbox"/>	<input type="checkbox"/>
3. Prepare for work / task	<input type="checkbox"/>	<input type="checkbox"/>
4. Perform work / task	<input type="checkbox"/>	<input type="checkbox"/>
5. Prepare to drive an articulated crane	<input type="checkbox"/>	<input type="checkbox"/>
6. Drive an articulated mobile crane	<input type="checkbox"/>	<input type="checkbox"/>
7. Pack up	<input type="checkbox"/>	<input type="checkbox"/>
Practical training tasks		
1. Pre-start checks	<input type="checkbox"/>	<input type="checkbox"/>
2. Lift plan	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify and control hazards	<input type="checkbox"/>	<input type="checkbox"/>
4. Operate crane with a load	<input type="checkbox"/>	<input type="checkbox"/>
5. Operate crane without a load	<input type="checkbox"/>	<input type="checkbox"/>
6. Keep load stable	<input type="checkbox"/>	<input type="checkbox"/>
7. Communication signals	<input type="checkbox"/>	<input type="checkbox"/>
8. Prepare to travel on road	<input type="checkbox"/>	<input type="checkbox"/>
Competency:	Not Yet Competent <input type="checkbox"/>	Competent <input type="checkbox"/>
	Date _____	Date _____

Feedback to be given to candidate:

Trainer signature:

Date:

The learner has been assessed as **Not Yet competent** / **competent** in the elements and performance criteria, critical aspects for assessment, required skills and knowledge for this unit and the evidence presented is:

Authentic **Valid** **Reliable** **Current** **Sufficient**

SAMPLE