

## Knowledge Assessment - 24351 (v3) - Demonstrate knowledge of and use fixed machinery in the construction of BCATS projects

<b>Student Name:</b>	
Project 1:	
Project 2:	

This assessment requires you to record information about **six** fixed machines that could be used for BCATS projects.

Your teacher/tutor will separately assess your safe use of **four** machines. You can include the ones you used in the following tables if you wish but are not required to have used all six you write about.

1. Complete the following table about what each of six fixed machines are designed to be used for and their capabilities and limitations.

	<b>Machine name</b>	<b>What is it used for?</b>	<b>What makes it the ideal machine for this task?</b>	<b>What might make you consider using a different machine?</b>	<b>Project 1 ✓</b> <i>(Tick if you used it for your project.)</i>	<b>Project 2 ✓</b> <i>(Tick if you used it for your project.)</i>
<i>Eg</i>	<i>Band saw</i>	<i>To cut the curves required for the side rails of the outdoor seat</i>	<i>The band saw is designed for straight or curves. Having a 10mm blade fitted meant the gentle curves could be cut with a good degree of accuracy</i>	<i>For thinner material, or for tighter curves, a scroll saw could be used</i>		

	<b>Machine name</b>	<b>What is it used for?</b>	<b>What makes it the ideal machine for this task?</b>	<b>What might make you consider using a different machine?</b>	<b>Project 1 ✓</b> <i>(Tick if you used it for your project.)</i>	<b>Project 2 ✓</b> <i>(Tick if you used it for your project.)</i>
1.						
2.						
3.						
4.						

	<b>Machine name</b>	<b>What is it used for?</b>	<b>What makes it the ideal machine for this task?</b>	<b>What might make you consider using a different machine?</b>	<b>Project 1 ✓</b> <i>(Tick if you used it for your project.)</i>	<b>Project 2 ✓</b> <i>(Tick if you used it for your project.)</i>
5.						
6.						

2. Complete the following table about safely setting up and using the six fixed machines you listed in the previous table.

	<b>Machine name</b>	<b>How is the machine set up for safe use? (Include any safety guards required.)</b>	<b>How is the machine safely used?</b>	<b>What PPE is needed when using this machine?</b>	<b>Project 1 ✓</b> (Tick if you used it for your project.)	<b>Project 2 ✓</b> (Tick if you used it for your project.)
<i>Eg</i>	<i>Band saw</i>	<p><i>Clear the floor area around the band saw of all obstructions.</i></p> <p><i>Ensure that all guards are in position and that guides are correctly set up.</i></p> <p><i>Check that the blade is suitable for the job.</i></p> <p><i>Check that the blade is tensioned correctly.</i></p> <p><i>Adjust the height of the upper guide to protect the operator from the exposed blade.</i></p>	<p><i>Do not wear loose clothing or rings.</i></p> <p><i>Keep fingers clear of line of cut.</i></p> <p><i>Do not force the timber into the blade.</i></p> <p><i>Do not twist the blade by forcing the saw to cut tight curves.</i></p> <p><i>Wait until the blade reaches operational speed before starting the cut. Only cut material when the blade is at full operational speed.</i></p>	<i>Safety glasses and ear muffs.</i>		
1.						

2.						
3.						
4.						
5.						

6.						
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3. Complete the following table for the six fixed machines you listed in the previous table.

	<b>Machine name</b>	<b>What routine maintenance does this machine need?</b>	<b>Project 1 ✓</b> <i>(Tick if you used it for your project.)</i>	<b>Project 2 ✓</b> <i>(Tick if you used it for your project.)</i>
<b>Eg</b>	<i>Band saw</i>	<i>Clean and lightly oil after using. Oil adjusting screws and table slides. Apply grease to bearings if required. Check operation of on/off buttons. Inspect electrical cords and plugs for damage.</i>		
1.				
2.				

	<b>Machine name</b>	<b>What routine maintenance does this machine need?</b>	<b>Project 1 ✓</b> <i>(Tick if you used it for your project.)</i>	<b>Project 2 ✓</b> <i>(Tick if you used it for your project.)</i>
3.				
4.				
5.				
6.				

4. If you have not already described these above, explain how the following parts are maintained.

Part	Maintenance requirements
Cutting edges	
Saw teeth	
Grinder wheels	

Assessor comments and sign off:

<b>Comments:</b>	
Assessor name: .....  Assessor signature:.....  Date:.....	<b>RESULT:</b> A = Achieved, N = Not Yet Achieved