

Term 5: Material properties

<u>Unit 1</u>	RED	AMBER	GREEN	Do you need further support following DIRT?	Final rating		
					R	A	G
A. Material properties							
Start introducing the Unit 3 work and explain the outcomes.							
Introduce the students to what the properties are and how heat can affect them.							
Start filling in the work sheet 3.1, just the justifications.							
DIRT 1: What are the material properties aluminium and explain your answer.							
Continue filling in the 3.1 work sheet.							
Continue filling in the 3.1 work sheet.							
Continue filling in the 3.1 work sheet.							
DIRT 2: find out what material is best suited for an engine cylinder head and why.							
Start filling in the effects of heat on the assignment 3.1							
Continue filling in the effects of heat.							
Conclude with 3.1							
DIRT 3: explain what is the ideal material for a race car body with an unlimited budget.							
Start going through materials properties of specific materials that relate to the industry.							
Referring to the dirt tasks, start to fill in the assignment 3.2 and use the know provided in previous lesson.							
Continue filling in 3.2 work sheet							
Continue filling in 3.2 work sheet.							
Summative Assessment – short/ long answered questions for learning outcome A- All topics listed above.							

Percentage	I can ...	Prove it!- check your book
	<p>I am able to work safely and effectively without presenting danger to myself or others. I understand how to correctly operate equipment and able to identify tools.</p> <ul style="list-style-type: none"> • <i>Choose the optimal material for the component</i> • <i>Consider the surrounding team members when performing group tasks</i> • <i>Explain the properties of different materials</i> 	<p>Create a reference book for your future notes including what each material properties means and how heat affects it.</p> <p>:Key :</p> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: blue; margin-right: 5px;"></div> LPA <div style="width: 20px; height: 10px; background-color: yellow; margin-right: 5px; margin-left: 10px;"></div> MPA <div style="width: 20px; height: 10px; background-color: green; margin-left: 10px;"></div> HPA </div>

L2M/D



The fabrication exercises go towards part of your final grade. You will need to demonstrate that you are able to confidently and confidently use tools and work in a safe manor.

Demonstrate the correct working practices shown to you and complete work confidently and competently.