# Term 6: Material properties

| ***Unit 1*** | 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 of common materials are | | | | | | | |
| Start filling in the work sheet 3.2, just the justifications. | | | | | | | |
| **DIRT 1: What are the material properties aluminium and explain your answer.** | | | | | | | |
| Continue filling in the 3.2 work sheet. | | | | | | | |
| Continue filling in the 3.2 work sheet. | | | | | | | |
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| **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 3.2 | | | | | | | |
| Try and think of the optimal solution to the problem | | | | | | | |
| Conclude with 3.2 | | | | | | | |
| **DIRT 3:** explain what is the ideal material for a race car body with an unlimited budget. | | | | | | | |
| Start introducing the revision packs again for exams in year 11 | | | | | | | |
| Continue with revision packs | | | | | | | |
| Continue with revision packs | | | | | | | |
| Continue with revision packs | | | | | | | |
| Summative Assessment – short/ long answered questions for learning outcome A- All topics listed above. | | | | | | | |

| Percentage | I can … | Prove it!- check your book |
|---|---|---|
| L2P | **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.**<br>• ***Choose the optimal material for the component***<br>• ***Consider the surrounding team members when performing group tasks***<br>• ***Explain the properties of different materials*** | Fill in the paperwork to the highest ability ensuring to use the optimum material for its application.<br>:Key :<br>LPA<br>MPA<br>HPA |
| **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. |