

# Deyes High School Remote Learning



DEYES  
HIGH  
SCHOOL  
LYDIATE  
LEARNING TRUST

Engage, Enable and Empower

# Year 8 D&T Metals Project

Work for individual students not attending school

Half Term 3: January to February

Pupils who are absent should select the activity that they are up to. Click on the link in the activity box below. This will take you to Office 365 where the work is stored. In the lesson it will tell the pupil if they need to submit the work to their teacher.

## Lessons

Date (week commencing)	Lessons	Focus/Topic/Theme	Hyper link to Activity
4/1/2021	1	Material selection	Year 8 Metals Booklet <a href="https://deyes.sharepoint.com/:p:/s/TemporaryCurriculumResources/EUFHroObwzVLky_KQDJl1ggBnr8nacV96o8s0DuoH0j4Cw?e=3WnYqi">https://deyes.sharepoint.com/:p:/s/TemporaryCurriculumResources/EUFHroObwzVLky_KQDJl1ggBnr8nacV96o8s0DuoH0j4Cw?e=3WnYqi</a>
11/01/2021	2	Timber Types	
18/1/2021	3	Specification	
25/01/2021	4	Ideas	
1/2/2021	5	Final Design	
8/2/2021	6	Tolerance	
15/2/2021	7	Types of finish	

**Year 8 - Low Carbon Energy (LC)** **Metals Knowledge Organizer – Low Co2 Vehicle**

Lesson 1: The Earth's crust contains many types of rock. Metallic minerals are found naturally in rock or ore. Ore is obtained by mining and the metals within it are extracted.

Lesson 2: **Stainless steel**  
Stainless steel is suitable for a huge range of products. It is often chosen for its specific properties as it is a good conductor of heat, is tough and durable, does not rust and is easy to clean. It is often used for kitchen utensils and equipment.

Lesson 3: **Renewable Energy sources:** Wind, Solar, Tidal, Biomass, Hydroelectric. **Fossil Fuel Energy sources:** Coal, Oil, Gas. **Non Renewable – (Finite) Will eventually run out!**

There are different types of metals. Non-ferrous metals don't contain iron. Ferrous metals contain iron and may rust. Recycling metals: Recycling metal is very beneficial to the planet. Metal can be recycled without altering its properties. It's then processed, shredded, melted, purified and ready again for use.

### Who to contact

You can email **your class teacher** if you have any questions regarding the activities set.

[d.jones@deyeshigh.co.uk](mailto:d.jones@deyeshigh.co.uk)  
[s.norbury@deyeshigh.co.uk](mailto:s.norbury@deyeshigh.co.uk)  
[e.fearon@deyeshigh.co.uk](mailto:e.fearon@deyeshigh.co.uk)

### Local Context – Possible Career Pathways!

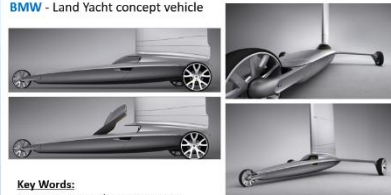
**Low Carbon Energy - 22,000 people employed**  
Liverpool City Region's coastal location and low carbon and energy business capabilities mean it is in a strong position to capture and realise the job growth potential from a low carbon economy.

e.g. Centre for Offshore Renewable Engineering (Liverpool)  
e.g. Sustainable Energy Action Plan (Liverpool)

### Cultural Capital – Human Creativity

Innovative Design,  
Previous designs and design possibilities:

#### BMW - Land Yacht concept vehicle



#### Key Words:

**Ferrous** – A metal containing iron  
**Non Ferrous** – A metal that does not contain iron  
**Biodegradable** – Will decompose (Break down into natural state)  
**Renewable** – Can be replanted; re grown; naturally replenished  
**Non Renewable** – Can not be replaced  
**Fossil Fuel** – Coal, Oil, Gas  
**Finite** – Not unlimited

Further Reading:  
• DT Online – Metals  
• [ypte.org.uk/factsheets/renewable-energy/fossil-fuels-non-renewable](http://ypte.org.uk/factsheets/renewable-energy/fossil-fuels-non-renewable)

