



**Year 8  
Autumn Term**

**Pathway 2/3/4**

**Subject: Design Technology (Resistant Materials)  
Tea Light Project**

**Learning Intention: Metals categories and Processes** This project is about metals ferrous and non ferrous . Students will learn the difference between these categories of metals and their characteristics. Students will learn about aluminium and how to bend and rivet it. They will also learn how to put a pattern in the aluminium . The project is a tea light holder and will be used to aid the learning.

**Key knowledge that should be learned during this SoW**

**All (Pathway 2)**

**Most (Pathway 3)**

**Some (Pathway 4)**

**Concept:**

To construct a tea light holder using aluminium sheet buy bending ,filing and riveting it together. Using design skills to make a design and transfer it to the aluminium sheet

**Knowledge:**

All students should be able to state the main difference of ferrous and nonferrous metals.

All students will be able to use the tools to make the tea light holder with some support

Most students will be able to name some of the different metals that make up the two different categories of metals.

Most students should be able to make the tea light holder buy choosing the relevant tools with little support

Some students will be able to name the different metals that make up the ferrous and non ferrous metal categories and their characteristics.

Some students will be able to choose the tools to make the tea light and bend and metal and put a design on it independently

<b>Key Skills:</b>	To know the names of different metal categories and some of the different metals .To know some of the tools names to make the tea light.	To know the different metal categories and characteristics . and most of the tools and processes to make a tea light holder	Some of the students will be able to state the metal categories and characteristics of metals including tools and how to use them to make a tea light
<b>Language and/or communication skills:</b>	<p>Ferrous Metals</p> <p>Iron Steel</p> <p>Magnetic ,They rust, Are hard and can be cast</p>	<p>Non Ferrous Metals</p> <p>Copper brass lead gold silver</p> <p>Are non magnetic,do not rust ,are softer than iron and steel can be cast</p>	Tools File ,drill punch ,folding bar,hammer rivets.
<b>Curricular Links</b>	Links to other learning within the subject are: Science and maths		