There will be an interim assessment in each units; strengths and areas for development will be identified.



Half

term

2

## Centrel Lancaster High School Yr9 Design Technology at CLHS

skills to

draw in

projection.

orthographic

3. Sketching techniques

Pupils will use inspiration from a past or

Pupils will develop their drawing

present designer to create design ideas for their storge product.

#### 1. Health and safety

Pupils will recall the importance of health and safety. Students will understand the different coloured safety signs.

Half

term

Low stakes tests 0 Performed weekly using a do now activity, based around previous

learning.

### 2. User centered design and research

Pupils will be introduced to the user centred design approach to designing. Pupils will learn about primary and secondary research, focusing on a guestionnaire and survey. Pupils will **summarise** the results and represent the data.



# 1

Year

9

START!

#### 5. CAD and CAM

Pupils will draw their storage box on 2D and 3D computer aided design software to be able to then **manufacture** the box using **compute aided manufacture**. They will also combine hand craft skills to complete a mechanism to allow the box to open and close.

Half

term

Δ

Half

term

5

Pupils will apply a suitable finish to present their product to a high standard. Pupils will make a handle to allow the box to open easily. The box will combine **timber**, **polymers** and **metals** to create a functional, aesthetical final prototype. The CAD drawings will then be used to create working drawings and cutting lists. Pupils will learn about the use of **production** documents to communicate for manufacture.

#### 6. Introduction to metals

Pupils will learn about metals as a material in design and technology. They will study the categories of metals, their uses and properties, source and origin and stock forms. Pupils will learn about the appropriate tools, equipment and processes, surface treatments and finishes which can be used with metals.

Low stakes tests of work and are based around the learned.

Input







Pupils will use the principles of iterative design to create a storage product. They will **consider user centred design** and their research. Pupils will make models and test the idea, reaching conclusions to develop into a final prototype. They will write a brief and specification based on research and testing. Pupils will produce a manufacturing **specification** based on decisions made.

#### 7. Electronic for intelligence

Pupils will investigate how their product could be made 'intelligent' using electronics. They will look at sensors, switches, programming and microcontrollers.

> Output Process

Half

term

6

Assessments End of year assessment

#### 8. Packaging

Pupils will produce a packaging proposal for their product. They will need to design a logo and brand. Pupils will consider ecological and social footprint aspect of their design with the focus on sustainability and the 6 R's.