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

Yr7 Design Technology at CLHS

Central Lancaster High School

1. Health and safety

Pupils will **understand** the importance of **health and safety**. They will learn the **safety rules** of the workshop and the expectations working in a workshop.

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

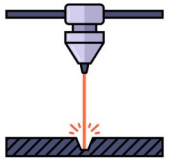
Year 7

Half term 1

2. Introduction to Polymers and workshop tools and equipment

Using creativity and imagination, pupils **design** and **make** an keyring by hand. Working with a design **brief** and **specification**, focused on advertising. Pupils **develop** a keyring to meet the needs, wants and values of others. They will **develop** **freehand sketching**, **annotation**, and **shading** skills to present **design ideas.** They will **develop** a broad range of material **knowledge** focusing on **polymers**, with a key focus on **sustainability**. They will learn where they come from and their **properties** and **uses**. Pupils will also gain **knowledge** and **understanding** of **specialist workshop tools** and **machinery** and use these **skills** to **produce** a **prototype** of their keyring. They will then evaluate the **prototype**, did it meet the **design brief** and **specification** successfully? How could the outcome be **improved**?

Half term 2



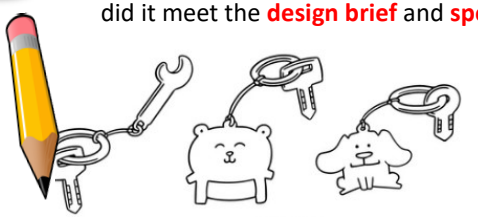
Half term 3

3. Introduction to Paper, Boards, CAD and CAM

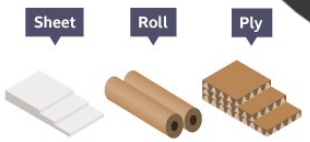
Pupils will be able to use and follow a design **brief** and **specification** to **design** and **make** a bookmark with a literacy theme. Pupils will **develop** **knowledge** and **understanding** of **paper and boards.** They will learn where they come from and their **properties** and **uses**. Pupils will gain knowledge of automated **manufacturing processes** using **CAD/CAM**, also looking at the advantages and disadvantages. Pupils will learn how to **generate** **protypes** using **CAD/CAM**. Pupils will be able to **evaluate** their outcome against the **design criteria** and recall what they have learned during the **design process**. Lastly, pupils will compare the use of **automation** verses making by hand.

Half term 4

Low stakes tests
Performed per unit of work and are based around the skills learned



4. Introduction to Textiles and Electronics

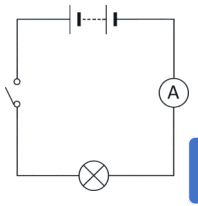


Half term 5

Half term 6

Assessments
End of year assessment

Pupils will be able to write a design **brief** and **specification** to **design** and **make** an **e-textiles** product to meet the context, *be safe, be seen*. Pupils will **develop knowledge** and **understanding** of a **systems approach** to designing. They will learn about **electronic components**, the **functions** of them and how **circuits** are constructed. Pupils will be able to **draw** a **schematic diagram** of their **circuit** using **symbols**. Pupils will gain **knowledge** and **understanding** of **textiles** as a material used in design. They will learn where they come from and their **properties** and **uses.** Pupils will **evaluate** their outcome against the **design criteria** and recall what they have learned during the design process.



Input → Process → Output