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

# Yr8 Design Technology at CLHS

Central Lancaster High School

## 1. Health and safety

Pupils will **recall** the importance of **health and safety**, and **interpret** general and specific health and safety rules.

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

START!

Year 8

Half term 1

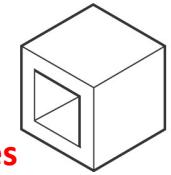
## 2. Inspiration sources to designers

Pupils will be able to understand a design **brief** and write a **specification** based on the real-life context of the Eden project. Pupils will **explore** how designers use biomimicry and biomorphic to help **design** products, taking **inspiration** from nature.

Half term 2

## 2. Sketching techniques

Pupils will be able to **apply** the skills learned to **freehand draw**, **annotate** and **shade** ideas generated for their clock. They will then **develop** sketching skills to produce an **isometric** sketch of their clock.



Half term 3

## 3. Models and prototypes

Pupils will gain **knowledge** of **manufacturing processes** using **hand tools** and **fixed machinery**, **accurately** and **safely** to produce a **prototype** of their clock design. Pupils will then be able to **evaluate** their **prototype** against the **design criteria** and recall what they have learned during the design and manufacturing process.

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

Half term 4

## 4. Introduction to Timbers

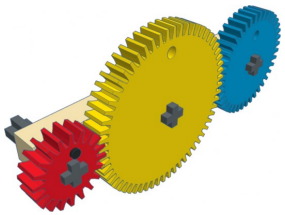
Pupils will learn about **timber** as a material in design and technology. They will **study** the **categories**, their **uses** and **properties**, **source** and **origin** and **stock forms**. Pupils will learn about the appropriate **tools**, **equipment** and **processes**, **surface treatments**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

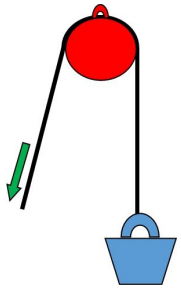

FSC


Half term 5

## 5. Mechanisms and electronics

Pupils will study the use of **gears**, **levers**, **pulleys**, **CAMS**, and **linkages** to create **motion**, **movement** and **mechanical advantage**. Pupils will be able to **identify** and **explain** the use of different **gears**, **levers**, **pulleys**, **CAMS**, and **linkages**.






Half term 6

Pupils work through various examples of **code** and **programmes** to **develop** logic based skills using the **crumble** software, **sparkles** and **motors**. They will **apply** computing and use electronics to embed **intelligence** in products that respond to **inputs** and control **outputs** using **programmable components**. Pupils will use this **knowledge** to suggest **developments** for an advanced clock.

**Assessments**
End of year assessment