Our Lady and St Edward's Knowledge Organiser	Year 5- Design and technology	Spring	Design & Construction: Greek Buildings

Outcome: To explore the architecture of Ancient Greece and design and build a model temple in the correct architectural style.

Key Knowledge and Concepts

To explore the features of Ancient Greek architecture.
To understand the purposes of different Ancient Greek buildings.
To research and design a temple using the principles of Ancient Greek architecture.
To choose appropriate materials to build a model of a temple.
To select and use a wider range of tools and equipment to create a model temple.
To understand how key events and individuals in design and technology have helped shape the world.
To explore and apply their understanding of how to strengthen and reinforce more complex structures.
To evaluate the structures created.

Key Vocabulary

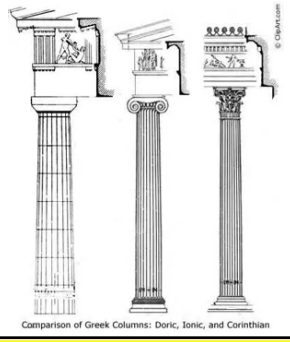
Architecture: The art or practice of designing and constructing buildings. Design: A plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is made. Appropriate: Suitable or proper in the circumstances Doric Relating to or denoting a classical order of architecture characterised by a sturdy fluted column and a thick square abacus resting on a rounded moulding.
Ionic: Relating to or denoting a classical order of architecture characterised by a column with scroll shapes (volutes) on either side of the capital.
Corinthian: The Corinthian order is the last developed of the three principal classical orders of Ancient Greek architecture. It is elaborate and decorative. Columns: An upright pillar, typically cylindrical.
Temple: A building devoted to the worship of a god or gods.
Ancient: Belonging to the very distant past and no longer in existence. Reinforce: Strengthen or support (an object or substance), especially with additional material.
Post and lintel: In architecture, post and lintel is a building system where strong horizontal elements are held up by strong vertical elements with large spaces between them.
Complex: Consisting of many different and connected parts.
Style: A particular procedure by which something is done; a manner or way.
Materials: The matter from which a thing is or can be made.

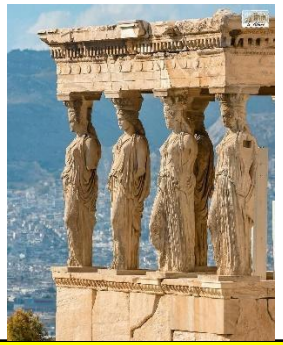
Key Information about Ancient Greece

About 2,500 years ago, Greece was one of the most important places in the ancient world. The Greeks were great thinkers, warriors, writers, actors, athletes, artists, architects and politicians.
Greek architecture is a very specific and influential type of design, which was based off of the post-and-lintel system. The post-and-lintel system is made up of columns, which are large upright posts, with a roof, or architrave, over the top. This type of architecture began with the Greeks, but has persisted throughout the ages to live on today.
Main Greek Architectural Orders: Doric: The Doric order is the oldest and most simple order. The columns have no base and the columns have a very simple capital. Ionic: The Ionic order is more decorative than the Doric. The columns are taller and thinner, and the capitals at the top of the columns are decorated with scrolls and other patterns. Corinthian: The Corinthian order is a lot like the Ionic order, but the capitals are even more elaborately decorated, usually with leaves and floral patterns.

Health and Safety

All children should be supervised when using equipment.


Comparison of Greek Columns: Doric, Ionic, and Corinthian



What I should already know:

- How to design purposeful, functional, appealing products for themselves and other users based on design criteria. • Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] • Build structures, exploring how they can be made stronger, stiffer and more stable.

By the end of this unit, I will know:

Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.
Investigate and analyse a range of existing products.
Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and diagrams.