



My Knowledge Organiser for:  
**Can I be an architect?**

Year 1 - Spring Term 2



I can build using a variety of materials including wooden blocks or junk modelling.

**Prior knowledge that will help me for this ILP.**

I know that buildings or structures need to have a purpose. For example, water passes under bridges.

**Sticky knowledge that I will know by the end of this ILP.**

## Can I be an architect?

### Science

Question words include what, why, how, when, who and which.

**Simple tests** can be carried out by following a set of instructions.

Simple equipment is used to take measurements and observations. Examples include meter sticks, measuring tapes, egg timers and hand lenses.

Objects, materials and living things can be looked at and compared.

The results are information that has been found out from an investigation.

Materials have different properties, such as **hard or soft; stretchy or stiff; rough or smooth; opaque or transparent; bendy or rigid; waterproof or not waterproof; magnetic or non-magnetic.**

### History

Isambard Kingdom-Brunel was a Victorian engineer who designed many famous bridges, tunnels, and railways.

### Design and Technology

Pictures, words and labelled diagrams can show what I want to design.

Different materials are suitable for different purposes, depending on their specific properties e.g. construction materials.

A strength is a good quality of a piece of work and a weakness is an area that can be improved.

Inventors such as Isambard Kingdom Brunel helped to shape the world.

### Geography

Important buildings in London include Big Ben, Buckingham Palace, The Shard and The London Eye.

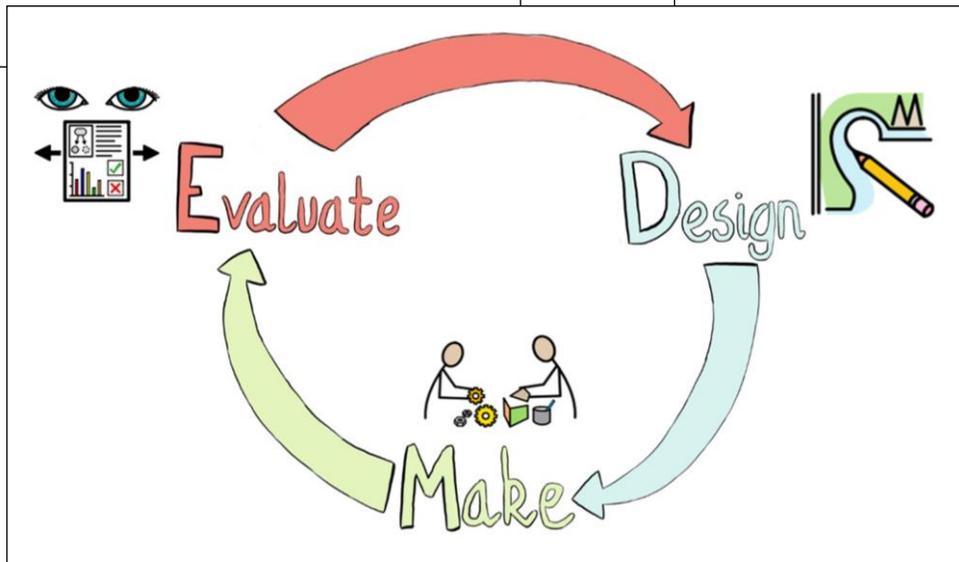
An aerial photograph or plan perspective shows an area of land from above.

Milton Keynes and London can be compared by size, landmarks, transport, location.

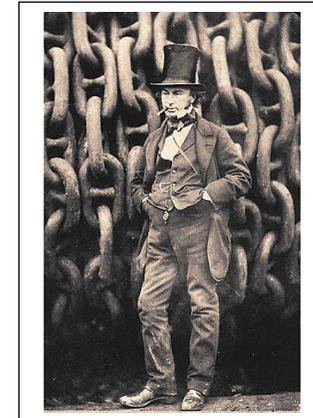
## Design and Technology:

Evaluating is key in the reflection of your creation. A detailed evaluation will identify the strengths and weaknesses of the process and the next steps or changes you would make.

Planning your design is the initial starting point for your idea. This can be demonstrated through drawing pictures, writing down ideas, mind mapping, or labelling diagrams.



To make your design you need to consider what will be the best tools and materials to use. If your design is required to get wet, you need to ensure your materials are water resistant so that it is suitable for its purpose.



Inventors are important because they have created something that is vital to everyday life. **Isambard Kingdom Brunel** was fundamental to the design of railways, bridges, and tunnels.

London has famous landmarks including Big Ben, The London Eye and Buckingham Palace.

An aerial photograph is taken from above, it is also known as a bird's eye view.

Milton Keynes and London can be compared as a big city and a small city. We can compare size, buildings and transport.

Stadiums in London are significant part of British sporting culture.



Geography:

History:



Isambard Kingdom Brunel was an **engineer**. He is famous for some of the most known **bridges, tunnels, railways** and **boats** in the world. His designs changed the lives of many people.

Science:

We can predict, experiment and test materials in order to identify the most appropriate material for a building. We can test the strength or if it is waterproof or not. Once we have completed our tests, we can look at our information and the results of our investigations.



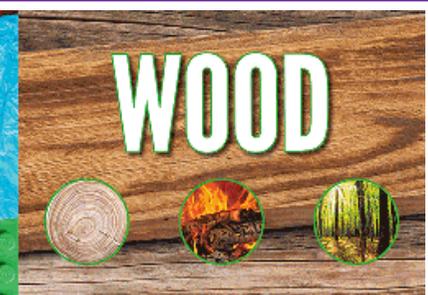
Fabric



Brick



PLASTIC



WOOD



GLASS



METAL

