



Article 2: Non-discrimination  
Article 13: Freedom of expression

Year 5: How does engineering in the past effect the future?

Learning to change the World.

Exploration  
Innovation  
Ambition

**PROVE IT: Challenge**

We will design a mini model of a future transport for the city with mechanisms.

“Act justly, love mercy and walk humbly with your God” – Micah 6:8

**WOW!**

-Explore engineering! What is it? What famous engineers do we know? What skills do you need to be an engineer?

-Create a plan (children are being engineers!)

**TRY IT: Skills**

We will make our own collage.

We will sort key events in Stone and Iron Age onto timeline.

We will plan a model of a chosen method of transport currently used.

We will label diagrams to show the forces acting upon different objects.

We will sort different items of machinery into their correct group.

**Immersion: knowledge**

We will explore what collage is.

We will explore the Stone Age and Iron Age.

We will explore the Roman Empire and its impact on us.

We will explore transport in Bristol.

We will explore the difference forces which act upon us.

We will explore levers, pulleys and gears and how they are used.

**USE IT: Skills**

We will complete a comparison between Stone Age and Iron Age.

We will create a power point on Romans and the Roman Empire.

We will create a model of a chosen method of transport currently used in Bristol.

We will write an explanation text on the forces acting upon us and their roles.

We will create a ‘how to’ guide for levers, pulleys and gears.

**Key vocabulary**

Key Vocabulary		
<p><b>Stone Age</b> The Stone Age was a period in history during which stone was widely used to make tools with an edge or point.</p>	<p><b>Engineering</b> Engineers, as practitioners of engineering, are professionals who invent, design, analyze, build and test machines, complex systems, structures and gadgets.</p>	<p><b>Pulley</b> A pulley is a wheel on an axle or shaft that is designed to support movement and change of direction of a taut cable or belt, or transfer of power between the shaft and cable or belt.</p>
<p><b>Iron Age</b> The Iron Age is the final stage of a three-age division of the prehistory. It was preceded by the Bronze Age and the Stone Age</p>	<p><b>Transport</b> Transport, or transportation, is the movement of humans, animals and goods from one location to another.</p>	<p><b>Lever</b> A lever is a simple machine consisting of a beam or rigid rod pivoted at a fixed hinge</p>
<p><b>Roman Empire</b> The Roman Empire was the post-Republican period of ancient Rome.</p>	<p><b>Gravity</b> Gravity is a force of attraction that exists between any two masses, any two bodies, any two particles.</p>	<p><b>Forces</b> A force is a push or pull that causes a change in speed, direction or shape</p>
<p><b>Air resistance</b> Air resistance is a type of friction between air and another material.</p>	<p><b>Water resistance</b> Water resistance is a type of force that uses friction to slow things down that are moving through water.</p>	<p><b>Friction</b> Friction is a force between two surfaces that are sliding, or trying to slide, across each other</p>