

Our Learning Keys

Making Skills: Catapults and Supercars

Design Technology

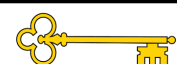
Year 4

Summer 1

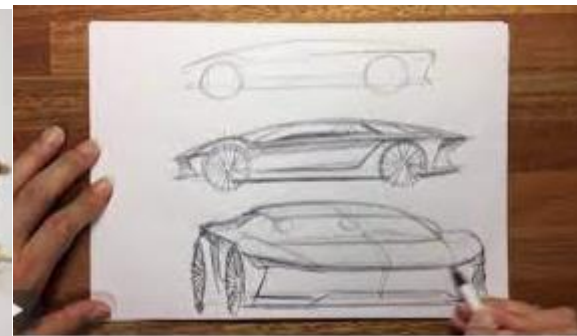


Questions

- How do vehicles move?
- How can we make moving parts?
- How have the way machines work changed through time?



Images



Links

- Literacy: What existing ideas can I incorporate into my designs?
- Maths: How can I measure and cut accurately for a better finish?
- History: How have products changed and improved over time?



Vocabulary

innovation	Exciting and new designs
prototype	'practise' or first attempt at making a product
shaping	Using tools to create a shape
aesthetic	The way that something appeals to look at
gears	Usually used to increase the speed of something
pulleys	A way of moving a component by using ropes and wheels
levers	A rigid beam that can cause movement with little effort



Skills

Design - 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 exploded diagrams, prototypes, pattern pieces and computer-aided design.

Make - Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Select from and use a wider range of materials and components, including construction materials and textiles according to their functional properties and aesthetic qualities.

Evaluate - investigate and analyse a range of existing products. Evaluate ideas and products against their own design criteria and consider the views of others to improve their work. Understand how key events and individuals in design and technology have helped shape the world.

Technical knowledge - Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use mechanical systems in their designs - use gears, pulley and levers.

Tools - select appropriate materials and tools for their design. Scissors, rulers, hole punches.

Joining - glue, tape, paper clips, tying, split pins, paper mache. linkages] Use levers / gears / pulleys

Previously...

In Year 3 we designed and made products using a variety of joining skills and a wider range of materials.

Year 4

Summer
Term

Next...

In Year 5 we will be able to apply the skills we have learned to make more inspiring products, designed with a purpose and using a range of tools and materials.

Doors this will open...

Engineer

Architect

Builder

Designer

Teacher

Mechanic

