



Year 4 Knowledge Organiser

DT Spring Term
Imaginary World Creation

What I should already know.

- Be able to describe the materials used to make a structure.
- Select appropriate tools and materials, explaining choices.
- Use folding and joining to make materials for a structure stronger.

Electrical and Mechanical Systems

What will I know by the end of the unit?

To be able to create a stable structure based on the Year 4 'Imaginary Worlds' theme.

To make an imaginative model world including the use of recycled materials for specific moveable and visual effects.

To incorporate an electrical circuit.

Vocabulary

Electronic / electrical

Tunnel

Hinged

Reflective

Moveable

Rigid

Base

LED / Sparkle

Motor

Platform

Recycled materials

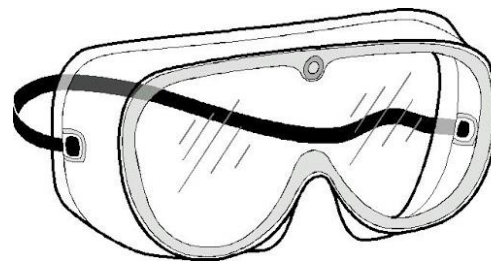
Rollers

Circuit

Arch

Crumble board

Levels



Key Knowledge

Record the plan by drawing (labelled sketched) or writing.
Create shell or frame structure.
Make structures more stable by giving them wide base.
Incorporate a circuit with a light or motor into a model.
 Consider and explain how the finished product could be improved.
 Discuss how the finished product meets the design criteria and how well it meets the needs of the user.

Outcome



Investigate!

Create an imaginative and stable 3D 'Imaginary World' map model linked to the Year 4 theme. The model will use recycled materials for specific moveable and visual effects. Pupils will incorporate an electrical circuit or apply their understanding of computing to program, monitor and control these moveable and visual effects.