

Design and Technology – Year 4

Autumn 2

Mechanical Systems

Levers and linkages

- A fixed pivot is where the lever is fixed to the base it is attached to.
- A loose pivot attaches two lever together but it is not attached to the base.
- Using fixed and loose pivots in one mechanism makes different types of movement than just side to side or up and down.

Spring 2

Electrical Systems

Simple circuits and switches

- A circuit is made up of a battery and wire.
- An electrical circuit carries electricity from the battery along wires.
- The circuit needs something to power like a bulb or a motor.
- A switch can be added to the circuit so that it can be switched on or off.

Summer 2

Textiles

3-D products

- Textile is a type of cloth.
- 2D (two dimensions) is a shape that has two measurements (e.g. width and height). It can't be picked up.
- A 2D shape is a flat shape that cannot be used to hold anything.
- 3D (three dimensions) is a shape that has three measurements (width, height, depth). It can be picked up.
- A 3D shape has got side and can be used to put items in.
- A piece of material can be folded to make a 3D shape.