



## Year 1 DT Knowledge Organiser: Moving Pictures



### Subject Specific Skills:

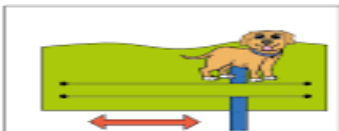
- Create products using levers and wheels.
- Create products using winding mechanisms.
- Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).

### Making a Slider Mechanism 1

1. Use a hole punch to make four holes — not too close to the edges! Cut two straight lines and feed in the slider.



2. Fix a picture to the slider and move it back and forth. You can use a cord strip to cover over the cuts.



### Key Vocabulary

**Mechanism** A system of parts working together in a machine; a piece of machinery

**Lever** A rigid bar resting on a pivot

**Winding Mechanism** Mechanism which tightens the mainspring in a mechanism e.g. in a clock

**Compact** Closely and neatly packed together, dense

**Pulley** A wheel with a grooved rim around which a cord passes, which acts to change the direction of a force applied to the cord and is used to raise heavy weights

**Gear** a toothed wheel that works with others to alter the relation between the speed of a driving mechanism (such as the engine of a vehicle) and the speed of the driven parts (the wheels).

**Direction** The course along which something moves

**Movement** The act of moving

### More Examples Of Mechanisms

Here are some examples of items which are considered to be mechanisms.

- Gears and gear trains
- Belt and chain drives
- Cam and followers
- Linkage
- Friction devices, including  
• brakes and clutches
- Structural components, including a  
frame, fasteners, bearings, springs, lubricants
- Various elements of a machine, including splines, pins, and keys

### 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, textiles and ingredients, according to their functional properties and aesthetic qualities

### Evaluate:

investigate and analyse a range of existing products evaluate their 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