



St Leo's and Southmead
Catholic Nursery and Primary
School

Year
Five

Design Technology Knowledge Organiser

Autumn
Term

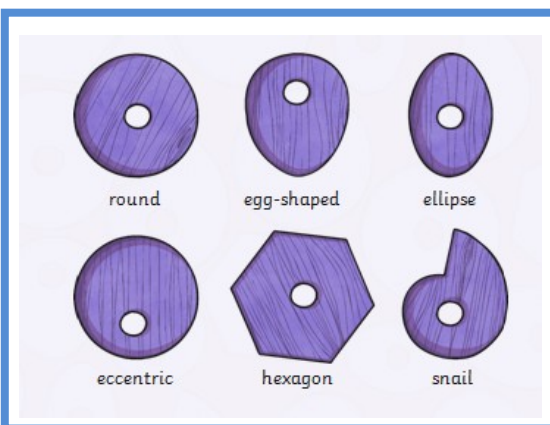
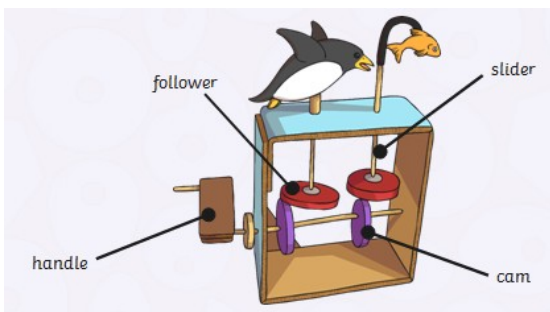
Amazing Activity

Investigate how the
shape of the cam affects
the movement of the toy.

Cam Mechanisms

Key Vocabulary

<u>Vocabulary</u>	<u>Definition</u>
Mechanism	An assembly of moving parts which perform a complete functional motion.
Cam	A slide or roller attached to a rotating shaft to give a particular type of motion.
Slider	Part of the cam mechanism which is attached to the follower.
Follower	Mechanism in contact with the cam.
Linear movement	Moving in a straight line, up or down.
Rotary Movement	Turning around in a circle, like a wheel turning.
Axle	A rod or spindle through the cam.
Score	Using the blade of the scissors to cut a groove in hard cardboard.



Curriculum Links

- Technology:** Search the internet for examples of cam mechanisms used in moving toys
- Maths:** Measuring accurately in cm.

Skills

Research products to inform the design of their own innovative product.

Make careful and precise measurements.

Produce step by step plans to guide the making of the product.

Understand how a cam mechanism creates movement and how the shape can alter this movement.

Evaluate their product and how it could have been strengthened.

Key Concepts

- A cam mechanism is made up of three components: a cam, slider and follower.
- The mechanism causes components to move. Cams can be made from metal, plastic or wood.
- A cam mechanism is made up of a cam, follower, axle, slider and handle.
- Cams come in different shapes which create different motions.
- Cam mechanisms create linear and rotary movements.