



Key Vocabulary

Air resistance – A force that is caused by air, with the force acting in the opposite direction to an object moving through the air

Force – A push or pull upon an object resulting from its interaction with another object

Friction – The resistance that one surface or object encounters when moving over another

Gears – A toothed wheel that works with others to alter the relation between the speed of a driving mechanism (e.g. engine) and the speed of the driven parts (e.g. the wheels)

Gravity – The force that attracts a body towards the centre of the earth

Levers – A rigid bar resting on a pivot that is used to move a heavy or firmly fixed load

Mass – The amount of matter an object is made of

Pull force – To draw or haul towards oneself or itself, in a particular direction

Pulleys – A wheel with a grooved rim around that changes the direction of a force applied to the cord

Push force – To move something in a specific way by exerting force

Water resistance - A force that is caused by water, with the force acting in the opposite direction to an object moving through the water.

Key Learning

The pupils will be taught to

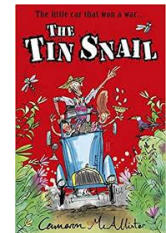
- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

They will design and make products that use levers, pulleys, gears and/or springs, and explore their effects.



Toys

Owls: Construction of toys



Pulley	Lever	Gear
