Year 5 - Forces

Knowledge

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

Skills

 using test results to make predictions to set up further comparative and fair tests

This could be achieved by... carrying out initial investigations into air resistance and using results to create a new question related to water resistance (e.g. can findings from air resistance to applied to water resistance) to create new question to investigate.

(Comparative and Fair Testing)

 reporting and presenting findings from causal relationships.

This could be achieved by measuring of time/distance of paper aeroplane to investigate air resistance, recording velocity. Reporting findings on the surface area of a spinner/ parachute and the time taken to fall to the ground.

Presenting findings to class in a more formal style.

(Pattern Seeking)

<u>Vocabulary</u>	
Gravity	Mechanisms
Resistance	Levers
Air resistance	Pulleys
Water	Gears
resistance	

Pre-loading

Materials and their properties – discuss which materials would be suitable for a magnet