Year 5 Science Knowledge Organiser Forces

Selected Vocabulary and Definitions Forces	
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 weight measured by an objects acceleration under a given force or by the force exerted on it by gravity
Pulleys	A wheel with a grooved rim around that changes the direction of a force applied to the cord
Water Resistance	A force that is caused by water with the force acting in the opposite direction to an object moving through the water

Curriculum Objectives

I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.

I can demonstrate the effects of air resistance, water resistance and friction, which act between moving surfaces.

I can show that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.





