



Topic: Forces (Science)

Term: Summer 1

Year Group: 5

NC OBJECTIVES	KEY KNOWLEDGE AND VOCABULARY
<ul style="list-style-type: none">• 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.• Experience how forces make things begin to move, get faster or slow down• Find out about scientists developed the theory of gravitation	<ul style="list-style-type: none">• Know that unsupported objects fall toward the Earth because of the force of gravity• Know that objects fall towards the centre of Earth• Know that Isaac Newton developed the theory of gravity• Know what weight is• Know how the impact caused by falling objects can vary depending on size, shape, mass and height they fall from• Know that friction is the resistance to motion of one object moving against another• Know the effects of friction acting between moving surfaces• Know that friction can be high and low• Know that air resistance is a force that slows objects moving through the air• Know how air resistance affects moving objects• Know that water resistance is a force that slows an object moving through water• Know how water resistance affect moving objects• Know that levers and pulleys allow a small force to have a greater effect• Know that levers and pulleys are simple machines that make it easier to move objects• Know that gears allow a smaller force to have a greater effect• Know that the speed or amount of force transmitted is affected by changing the size of the gears in a transmission