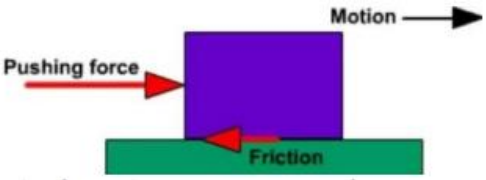
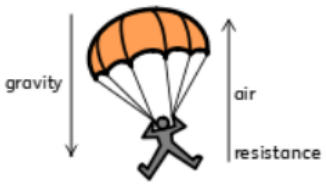
River View Primary School		
Topic: Forces	**Year: 5**	**Strand: Physics**

What should I already know?
• That push and pull are types of forces. • When forces are applied to an object they can slow it down, speed it up or stop it. • That magnets have poles, and that opposite poles attract, while similar poles repel.

What will I know by the end of the unit?	
What is gravity?	• Gravity is the force that pulls things towards the centre of the Earth. • This means that unsupported objects appear to fall downwards.
Which forces can affect the speed of a moving object?	• Friction is a force. It is what slows down an object when it rubs against another surface.  • Air resistance is the opposite force of gravity. It pushes up on a parachute to make the parachute fall more slowly.  • Water resistance is the friction that acts on an object moving through water to slow it down.
What is a mechanism? lever pulley gear	• Mechanisms allow a small force to have a larger effect. **Examples of mechanisms** • **Levers** let us pick up heavy objects with less effort. • **Pulleys** allow us to lift heavy objects using ropes so we can pull downwards instead of lifting upwards. • **Gears** are toothed wheels. Each wheel turns another wheel so forces can move across a surface.

Vocabulary	
friction	the resistance of movement when one object rubs against another
force	the pulling or pushing effect that something has on something else
gear	a simple **mechanism** that causes another part to move
gravity	the force which causes things to fall to the floor
lever	a simple **mechanism** used to lift or pry things open
mechanism	each part that works together in a machine
motion	changing position or moving
pulley	a simple **mechanism** that makes lifting something easier
resistance	a force which slows down moving object or vehicle
streamlined	a shape that lets something move quickly through air or water
surface	The flat top part or outside of something
unsupported	not held up by anything

Data Handling
• Independently select the appropriate graph from a bar chart or line graph, depending on whether their data is discrete (bar chart) or continuous (line graph). • Take average data recordings for accuracy and identify anomalies in data.