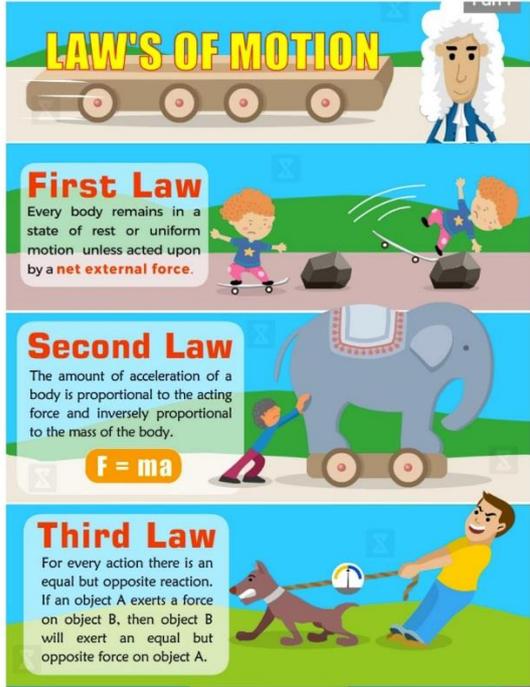


Key questions:		
<ul style="list-style-type: none"> Can you explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object? Can you identify the effects of air resistance, water resistance and friction that act between moving surfaces? Can you recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect? 		
Key Information		
Isaac Newton	Isaac Newton was born in 1643 and became famous for his work on gravity and his three laws of motion. The famous story of an apple falling to the ground from a tree illustrates how Newton's work on gravity was inspired by things he observed in the world around him.	
Three Laws of Motion		
Air Resistance	Air resistance occurs between the surface of a falling object and the air that surrounds it and it also works to slow the rate at which the object falls.	
Friction	Friction is the resistance of motion when one object rubs against another. Anytime two objects rub against each other, they cause friction. Friction works against the motion and acts in the opposite direction.	
Did you know?		
<ul style="list-style-type: none"> Newton discovered that white light is made up of a range of colours. Newton was born very early (premature) and his family thought he would die, but he actually went on to live to the age of 85. Any kind of force is really just a push or pull. Even magnetism is a force, which is exactly the same as a magnet that makes things move. 		
Key vocabulary or people		
<ul style="list-style-type: none"> Earth gravity mass weight force newton 	<ul style="list-style-type: none"> air resistance water resistance upthrust friction moving surface 	<ul style="list-style-type: none"> mechanism lever pulley gear force meter