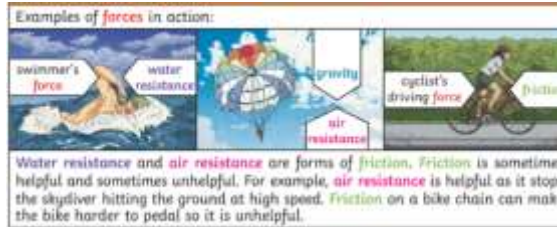
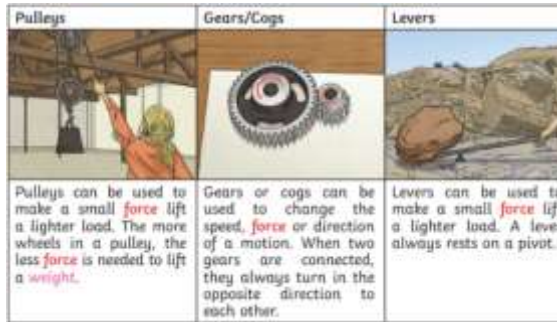
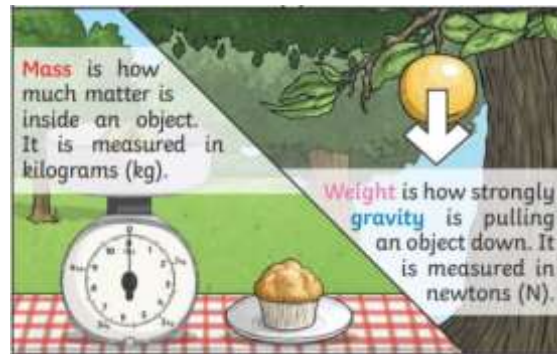


Key Information	
Forces	Forces are referred to as pushes and pulls. They cause an object to move, stop, speed up, slow down and change direction.
Some types of forces	Gravity, reaction force, friction, air resistance, driving force, water resistance.
Isaac Newton	Discovered gravity.
Galileo Galilei	Italian scientist and mathematician who investigated speed of objects being pulled down to Earth by gravity.
Newton metre	Measures how hard gravity is pulling down on an object.
Friction, water resistance and air resistance	These all cause objects to slow down due to the force they put on an object.
Streamlining	Design of an object to reduce air and water resistance. E.g., an aeroplane has a pointed nose and a smooth curved back to reduce air resistance and travel quickly and smoothly.
Working scientifically:	Independent variable – what is changing in an experiment? Dependent variable – what are you measuring? Controlled variable – what are you keeping the same each time?
Mechanisms:	3 kinds. Levers, pulleys and gears. The moon has a smaller mass than Earth, so the gravitational pull on Earth is greater than that on the moon. Jupiter has a greater mass than Earth, so the gravitational pull on Jupiter is stronger than on Earth.

Key Diagrams



Vocabulary	
Gravity	Pulling force. A pulling force exerted by the Earth (or anything else which has mass)
Earth's Gravitational Pull	The pull that Earth exerts on an object, pulling it towards Earth's centre. It is the Earth's gravitational pull that keeps us on the ground.
Action force	A force acting in one direction
Reaction force	Force acting in the opposite direction
Air resistance	A force that acts in the opposite direction of a moving object and is a type of friction
Water resistance	Type of friction caused by water pushing against a moving object
Friction	The resistance of movement when one object rubs to another
Mass	The amount of matter an object contains
Weight	Measures the strength of gravity acting on the object. Measured in Newtons (N).
Mechanism	A device that causes a small force to turn in to a greater force
Buoyancy	An upward force that liquid applies to the objects
Viscosity	the state of being thick, sticky, and semi-fluid in consistency, due to internal friction.

