Forces

| Forces |  | a push or pull that acts on an object due to the <br> interaction with another object |
| :--- | :--- | :--- |
| 1 | Force | Newton meter |
| 3 | Magnetic | force experienced by a magnet or magnetic materials |
| 4 | Friction | force against the movement of an object |
| 5 | Electrostatic | force experienced by a charged particle in an electric <br> field |
| 6 | Upthrust | upward force that is exerted on an object floating on a <br> liquid or gas |
| 7 | Air resistance | force that acts on an object which is moving through <br> the air |
| 8 | Contact force | force between 2 objects that are touching |
| 9 | Examples of <br> contact forces | air resistance, thrust, tension, compression |
| 10 | Non-contact <br> force | force between 2 objects that are not touching |
| 11 | Examples of non- <br> contact forces | electrostatic, gravitational, magnetic |
| 12 | Balanced force | no overall force acting on an object |
| 13 | Unbalanced force | a resultant force acting on an object |
| 14 | Resultant force | overall force acting on an object |
| 15 | At rest | when an object is not moving |
| 16 | Free body <br> diagram | a diagram that models the forces acting on an object |
| Gravity and Weight | Measure of the concentration of the mass of an object. <br> density = mass $\div$ volume |  |
| 17 | Mass | measure of the amount of matter an object is made <br> from |
| 18 | Weight | force acting on an object due to gravity |
| 19 | Gravity | force that pulls 2 masses towards each other |
| 20 | Gravitational field <br> strength | 10N / kg on Earth |
| 21 | Density |  |

## Speed and movement

| 22 | Distance | how far an object moves |
| :--- | :--- | :--- |
| 23 | Speed | distance travelled in a given time |
| 24 | Time | how long an event lasts |
| 25 | Speed equation | speed = distance $\div$ time |
| 26 | Constant speed | the speed remains the same |
| 27 | Accelerating | change of speed |
| 28 | Stationary | the object is not moving |
| 29 | Gradient | Measure of the steepness of a straight line |
| Units |  |  |
| 30 | Force | Newtons (N) |
| 31 | Mass | kilograms $(\mathrm{kg})$ |
| 32 | Distance | metres (m) |
| 33 | Time | seconds (secs) |
| 34 | Speed | metres per second $(\mathrm{m} / \mathrm{s})$ |
| 35 | Volume | Centimetres cubed $\left(\mathrm{cm}^{3}\right)$ |
| 36 | Density | Grams per centimetre cubed $\left(\mathrm{g} / \mathrm{cm}^{3}\right)$ |

