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| Year 7: Physics - Forces | Introducing forces | I can draw diagrams indicating forces with arrows. |  |
| I can describe forces as pushes, pulls or twists. |  |
| I can describe the effects of a force acting on an object as a change in speed, shape or direction. |  |
| I can measure unknown forces using a forcemeter. |  |
| Gravity & weight | I can describe mass as the sum of particles in an object. |  |
| I can describe weight as the effect of gravity on a mass. |  |
| I can carefully carry out an investigation into the effect of an increasing weight on an object. |  |
| Friction | I can describe friction as a contact force that opposes motion. |  |
| I can give examples of situations where high friction (grip) and low friction (lubrication) are desirable. |  |
| I can report on an investigation into a factor that affects friction (e.g. surface, mass). |  |
| I can describe how a forcemeter pulling an object is measuring a force equal to friction. |  |
| Speed | I can use force arrows in a diagram to describe the forces affecting the movement of an object. |  |
| I can describe motion as the result of balanced or unbalanced forces. |  |
| I can use careful measurements of distance and time to calculate speed. |  |
| Air resistance | I can name forces which slow an object down by opposing motion. |  |
| I can calculate the resultant force on an object from diagrams. |  |
| I can show resultant forces in force diagrams. |  |
| Floating | I can draw diagrams indicating named forces with arrows. |  |
| I can describe the effects of changing the size of forces in a balanced situation such as floating. |  |
| extn. I can relate the density of a material to floating and sinking. |  |

**7P2 Forces**