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| Forces | | | | | |
| Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 |
| **WALT understand that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.**  **WALT use prompts to support predictions and make links between weight and mass. (see lesson 1 and 2)** | **WALT understand that forces act in a particular direction**  **(see lesson 1 and 2)** | **WALT understand how to plan and conduct an investigation in to the effect of air resistance and perform a fair test.**  **(see lesson 3)** | **WALT Understand how to plan an enquiry, take measurements and report findings on the effect of water resistance. (see lesson (see lesson 4)** | **WALT understand how to use test results to make conclusions about friction.**  **(see lesson 5)** | **WALT design and make a mechanism that enables a smaller force to have a greater effect.**  **(DT topic – catapults)** |
| Key Vocabulary | | | | | |
| words relating to forces and the measurement of forces eg weight, gravity, upthrust, newton, forcemeter • near synonyms eg still, stationary, at rest, not moving • generalisations about patterns in behaviour • descriptions and explanations involving a sequence of ideas.Force, Gravity, Pulling, Opposite, Size, direction, Balanced, unbalanced | | | | | |
| Milestone Indicator | | | | | |
| * Take measurements, using a range of scientific equipment, with increasing accuracy and precision. * Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models. * Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. * Present findings in written form, displays and other presentations. * Use test results to make predictions to set up further comparative and fair tests. * Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.   • Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.   * Identify the effect of drag forces, such as air resistance, water resistance and friction that act between moving surfaces * Describe, in terms of drag forces, why moving objects that are not driven tend to slow down. * Understand that some mechanisms including levers, pulleys and gears, allow a smaller force to have a greater effect. | | | | | |