| Previous Knowledge | Students may have some knowledge of Forces from KS2. |  |  |  |  |
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| Lesson <br> Number | Title | Lesson Objectives | Content | Key words | Assessment |
| 1 | Forces | - What can forces do? | - Describe the different types of forces <br> - Look at how forces can change how an object moves, and how forces can change the shape of an object <br> - Units for measurement of force <br> - How arrows are used to represent forces and the size of the force | - Contact Force <br> - Non-contact Force <br> - Examples: Gravity, air resistance, friction, upthrust, magnetism, static |  |
| 2 | Balanced and unbalanced | - What effect do balanced forces have on objects? | - Forces always act in pairs <br> - learn about balanced and un-balanced forces and their effect on objects | - Balanced and unbalanced forces <br> - Resultant <br> - Equilibrium |  |
| 3 | Weight and mass | - What's the difference between weight and mass? | - Recognise weight as a force <br> - Units for measuring weight and mass <br> - Calculating weight | - Weight and mass |  |


| 4 | Springs | - What is the effect of gravity on springs? | - How we show the pattern when a force stretches a spring <br> - Hookes law | - Axes and labelling <br> - Divisions <br> - Trend <br> - Line of best fit | Graph Plotting and Writing a Conclusion |
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| 5 | Friction | - How can we control friction? | - Recall the effects of friction <br> - Determine when friction is useful and when it is not <br> - Describe how friction can be increased and decreased | - Friction <br> - Lubricants <br> - Air resistance <br> - Water resistance | 20 Mark Quiz |
| 6 | Pressure | - What is pressure? | - Calculate pressure <br> - Recall units <br> - Describe effects of high and low pressure | - Pressure <br> - Pascal <br> - Area |  |
| Where we will use these ideas again | KS4: Phys unit 5 - Forces and Motion: |  |  |  |  |
|  | KS4: Phys unit 3 - Particle Model: |  | 4.3.3.1 |  |  |
|  | KS4: Triple only, Physics Unit 5 Forces and Motion: |  | 4.3.3.2 | 4.5.5.1.1 |  |

