| Year 5 Spring 2<br>STEM challenge (science investigators) |
|---|

| Week | NC objectives | REMEMBER<br>(prior knowledge) | KNOW<br>(new knowledge) |
|---|---|---|---|
| 1<br>2<br>3<br>4<br>5<br>6 | **• identify the effects of air resistance, water resistance and friction, that act between moving surfaces**<br>**• identify the effects of air resistance, water resistance and friction, that act between moving surfaces**<br>**• identify the effects of air resistance, water resistance and friction, that act between moving surfaces**<br>**• recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.**<br>**• planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary**<br><br>LO: to make predictions based on prior scientific understanding<br><br>LO: investigate different forms of self-propulsion<br><br>LO: investigate variables within a design | Know the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses<br><br>Know how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.<br><br>- know how to recognise forces<br>- know how energy can be stored to produce a force<br>- know how different things move across a surface<br>- know how to conduct a simple experiment and change a variable<br>- know how to ensure experiment is a fair test<br>- know how to report scientifically and evaluate | - know how forces interact with a system<br><br>- know how energy can be stored and released with different mechanisms<br><br>- know how air resistance can act as an opposing force<br><br>- - know how to reduce air resistance<br><br>- Know how to adapt and plan an experiment controlling a variable |

| | | | |
|---|---|---|---|
| | LO: apply scientific understanding to a design<br><br>LO: to apply scientific understanding to building<br><br>LO: to present and evaluate scientific knowledge | | |