



**Year 5**  
**Forces**  
**Science Knowledge Organiser**

*Knowledge                      Skills                      Vocabulary*



<u>Knowledge Progression</u>
What is a force?
Can I explore the effect that gravity has on objects?
Can I explain how air resistance affects moving objects?
Can I explain the effects of water resistance?
Can I explain the effects of friction on a moving vehicle?
Can I investigate the effects of friction created by different materials?
Can I explain how different mechanisms work?
Can I design my own mechanism for a given purpose?

<u>Curriculum Coverage</u>
<ul style="list-style-type: none"> <li>• Observe how forces act in real life scenarios</li> <li>• Find out and describe different forces and what forces are at play in real life scenarios</li> </ul>

<u>Skills Progression</u>
<ul style="list-style-type: none"> <li>• describe observations using scientific vocabulary</li> <li>• suggest how to find things out</li> <li>• identify key features</li> <li>• ask questions</li> <li>• use first hand experiences to answer</li> <li>• begin to suggest improvements in work</li> <li>• Be able to conduct an experiment independently</li> </ul>

<u>Scientific vocabulary</u>
Push, Pull, Gravity, Air Resistance, Water Resistance, Sir Issac Newton, Newton Metre, Newtons, Force, Galileo, streamline, matter, weight, prediction, investigation, measure, observe, variables, results.
<u>Scientific enquiry</u>
How does gravity effect different objects? Is mass the same as weight? Who was Sir Isaac Newton?

## TYPES OF FORCE

