

# Science Knowledge Building

Know that air resistance affects the speed at which items fall towards Earth	Know how to provide a clear hypothesis and conclusion linked to an investigation and suggest improvements 'If we...'	Know how to build a lever, pulley or gear system and explain how it is making it easier to move heavier or larger items	Know and understand the terms 'pulley', 'gear', 'spring' and 'resistance'	Compare gear, lever or pulley systems in a range of everyday situations and find those that are most effective	Know how to use a Newton Meter and take measurements
Know that unsupported objects fall towards Earth because of gravity	Know how to carry out a fair test on air or water resistant objects	Know that simple pulleys, levers and gears make it easier to move larger or heavier objects using less force	Know and understand the terms 'accelerate', 'decelerate', 'brake' and 'gravity'	Find and describe other uses for pulleys, lever and gears in everyday situations	Know how to make a useable pulley, lever or gear system
Understand that numerous factors can affect or prevent change	Know what makes a good methodology and explain how adaptations can lead to improvements	Identify, analyse and explain findings to support or dismiss theories or arguments	Know how to use a range of scientific vocabulary in various contexts	Know that science has implications for world issues and that it can be used for good or bad	Understand how their own STEM skills can benefit future science work in school and beyond
<b>Processes and Changes</b>	<b>Methods</b>	<b>Observing and Recording</b>	<b>Scientific Vocabulary</b>	<b>Uses and Implications</b>	<b>Cross-Curricular (STEM)</b>

**A World of Bright Ideas!**