

Junior Primary	Middle Primary	Upper Primary
<p>The students will explore the things that effect movement. Everything in their environment is constantly moving in one way or another and developing an understanding of movement relates to developing an understanding of energy. Through their investigations, students test their ideas about factors that affect movement.</p> <p>Through inquiry-based opportunities students will gain knowledge to find answers to questions such as; What is a force? How much force is needed to move an object? Does the object change shape when force is applied? Why do different objects move when different force is applied to it?</p> <p>The below content descriptors and elaborators will be the emphasis in teaching Science:</p> <p>The way objects move depends on a variety of factors, including their size and shape (ACSSU005)</p> <p>A push or a pull affects how an object moves or changes shape (ACSSU033)</p> <p>Exploring ways that objects move on land, water and in the air.</p> <p>Exploring how different strengths of pushes and pulls affect the movement of objects.</p> <p>Comparing the way different sized, but similar shaped, objects roll and bounce.</p>	<p>Students will have the opportunity to research and investigate how forces act upon objects, including direct forces, such as pushes and pulls, as well as from a distance.</p> <p>Students will gain knowledge through inquiry-based opportunities to quantify their investigations to questions such as; Would a larger object fall to the ground before a smaller object? What happens when there is a balanced force on an object? What are contact and non-contact forces?</p> <p>The below content descriptors and elaborators will be the emphasis in teaching Science:</p> <p>A push or a pull affects how an object moves or changes shape (ACSSU033)</p> <p>Forces can be exerted by one object on another through direct contact or from a distance (ACSSU076)</p> <p>Exploring how non-contact forces are similar to contact forces in terms of objects pushing and pulling another object.</p> <p>Comparing and contrasting the effect of friction on different surfaces, with different objects.</p> <p>Investigating the effect of forces on the behaviour of an object through actions such as throwing, dropping, bouncing and rolling.</p> <p>Exploring the forces of attraction and repulsion between magnets.</p>	<p>The students will have the opportunity to investigate and identify that energy is required to make any changes to their surroundings. Students distinguish the different types of energy and describe how they can be transformed from one form to another. Through their investigations, students test their ideas about factors involving energy and force.</p> <p>Through inquiry-based opportunities students will determine information to questions such as; Are there different types of energy? How have people from different cultures use sustainable sources of energy? What is energy? How does energy transfer and transform?</p> <p>The below content descriptors and elaborators will be the emphasis in teaching Science:</p> <p>Investigate how to harness wind to build a simple machine to produce energy.</p> <p>Investigating common situations where forces are balanced, such as stationary objects, and unbalanced, such as falling objects.</p> <p>Students develop knowledge of renewable and non-renewable energy.</p> <p>Explore how people from different cultures use sustainable sources of energy.</p> <p>Understand how personal and community choices can influence the use of renewable sources of energy.</p>