

Year 8 Science SCI081Z
Learning & Assessment Overview 2020

Semester 1		Semester 2	
Unit 1: Survival in the environment	Unit 2: Toy factory	Unit 3: Good to grow	Unit 4: Fast forces!
Students analyse the structural features and behavioural adaptations that assist living things to survive in their environment. They understand that science involves using evidence and comparing data to develop explanations. Students investigate the relationships between the factors that influence how plants and animals survive in their environments, including those that survive in extreme environments, and use this knowledge to design creatures with adaptations that are suitable for survival in prescribed environments. They represent and communicate their observations using scientific language.	Students understand how a push or pull affects how an object moves or changes shape. They understand that science involves asking questions about and describing changes in the way an object moves or can be moved and how this knowledge is used in their daily lives. They pose questions and make predictions about changes that can affect how an object moves, and investigate and explain how pushes and pulls cause movement in objects, comparing their observations with predictions. They use informal measurements to make and compare observations about movement and sort information about the way toys move. They then apply this science knowledge in explaining how pushes and pulls can be used to change the movement of a toy or object they create.	Students investigate the properties of light and the formation of shadows. They investigate reflection angles, how refraction affects our perceptions of an object's location, how filters absorb light and affect how we perceive the colour of objects, and the relationship between light source distance and shadow height. They plan investigations including posing questions, making predictions, and following and developing methods. They analyse and represent data and communicate findings using a range of text types, including reports and labelled and ray diagrams. They explore the role of light in everyday objects and devices and consider how improved technology has changed devices and affected peoples' lives.	Students use games to investigate and demonstrate the direction of forces and the effect of contact and non-contact forces on objects. They use their knowledge of forces to make predictions about games and complete games safely to collect data. Students use tables and column graphs to organise data and identify patterns so that findings can be communicated. They identify how science knowledge of forces helps people understand the effects of their actions.
Unit Duration Weeks 1 - 10 (10 weeks)	Unit Duration Weeks 11 - 20 (10 weeks)	Unit Duration Weeks 21 - 30 (10 weeks)	Unit Duration Weeks 31 - 38 (8 weeks)
Assessment Task/s	Assessment Task/s	Assessment Task/s	Assessment Task/s
<p>Observations and Monitoring</p> <p>SCI 08.01.01 Creating a creature Poster/multi-modal presentation</p> <p><i>On going throughout the term</i> Issued: Week 1 Due: Week 10</p>	<p>Observations and Monitoring</p> <p>SCI 08.02.01 Designing a toy Experimental investigation</p> <p><i>On going throughout the term</i> Issued: Week 11 Due: Week 20</p>	<p>Observations and Monitoring</p> <p>SCI 08.03.01 Exploring growth Supervised assessment</p> <p><i>On going throughout the term</i> Issued: Week 21 Due: Week 30</p>	<p>Observations and Monitoring</p> <p>SCI 08.04.01 Investigating Forces Experimental investigation</p> <p><i>On going throughout the term</i> Issued: Week 31 Due: Week 38</p>