

## Year 10 Sciences Overview

Unit	Key Concept	Related Concept	Global Contexts & Explorations	Statement of Inquiry	Skills	Areas of learning
Life Processes	Change	Form, interaction	Scientific and Technical Innovation - systems and processes	Life exists due to the interaction between processes, that allow change from one form to another.	Critical thinking	<ul style="list-style-type: none"> <li>- Cell biology</li> <li>- Plant biology</li> <li>- Photosynthesis</li> <li>- Cellular respiration</li> </ul>
Atomic Structure, Bonding & Kinetics	Relationships	Patterns, forms	Scientific and Technical Innovation - atomic models	Patterns in the periodic table help us identify the bonding in compounds through scientific innovations and experiments.	Critical Thinking	<ul style="list-style-type: none"> <li>- Periodic table</li> <li>- Electron configuration</li> <li>- Ionic &amp; covalent compounds</li> <li>- Types of chemical reactions</li> <li>- Balancing chemical equations</li> <li>- Rate of reaction</li> </ul>
Principles of Safety Design	Relationships	Energy	Scientific and technical innovation	The relationship of Force, Impulse and Momentum can allow us to innovate safety design in devices to minimize injury and/or death in collisions.	Information & literacy Communication	<ul style="list-style-type: none"> <li>- Newton's Laws of Motion</li> <li>- Momentum</li> <li>- Elastic and inelastic collisions</li> <li>- Impulse</li> </ul>
Homeostasis	Systems	Balance, consequences	Scientific and Technical Innovation - Consequences and responsibility	Health is a result of making sound choices that work with your body in maintaining an internal balance.	Critical thinking Research	<ul style="list-style-type: none"> <li>- Homeostasis</li> <li>- Endocrine system</li> <li>- Central nervous system</li> </ul>
Thermo-dynamics	Currently updating.					