Lanyon High School

Year 7 — Australian Curriculum: Science

Identify curriculum	**Achievement standard**	By the end of Year 7, students describe techniques to separate pure substances from mixtures. They represent and predict the effects of unbalanced forces, including Earth's gravity, on motion. They explain how the relative positions of Earth, the sun and moon affect phenomena on Earth. They analyse how the sustainable use of resources depends on the way they are formed and cycle through Earth systems. They predict the effect of human and environmental changes on interactions between organisms and classify and organise diverse organisms based on observable differences. Students describe situations where scientific knowledge from different science disciplines and diverse cultures has been used to solve a real-world problem. They explain possible implications of the solution for different groups in society. Students identify questions that can be investigated scientifically. They plan fair experimental methods, identifying variables to be changed and measured. They select equipment that improves fairness and accuracy and describe how they considered safety. Students draw on evidence to support their conclusions. They summarise data from different sources, describe trends and refer to the quality of their data when suggesting improvements to their methods. They communicate their ideas, methods and findings using scientific language and appropriate representations.

		Semester 1			Semester 2	
Teaching and learning	**Semester overview**	**Science Understanding** **CHEMISTRY** - describe techniques to separate pure substances from mixtures. **Science Inquiry Skills** - identify questions that can be investigated scientifically - plan fair experimental methods, identifying variables to be changed and measured. - draw on evidence to support their conclusions.	**Science Understanding** **INVESTIGATION UNIT** **Science Inquiry Skills** - explain possible implications of the solution for different groups in society. - identify questions that can be investigated scientifically - plan fair experimental methods, identifying variables to be changed and measured. - select equipment that improves fairness and accuracy and describe how they considered safety.	**Science Understanding** **PHYSICS** - represent and predict the effects of unbalanced forces, including Earth's gravity, on motion. **Science Inquiry Skills** - describe situations where scientific knowledge from different science disciplines and diverse cultures has been used to solve a real-world problem. - identify questions that can be investigated scientifically - plan fair experimental methods, identifying variables to be changed and measured. - summarise data from different sources, describe trends and refer to the quality of their data when suggesting improvements to their methods.	**Science Understanding** **BIOLOGY** - predict the effect of human and environmental changes on interactions between organisms and classify and organise diverse organisms based on observable differences. **Science Inquiry Skills** - identify questions that can be investigated scientifically - draw on evidence to support their conclusions. - communicate their ideas, methods and findings using scientific language and appropriate representations.	**Science Understanding** **EARTH AND SPACE SCIENCES** - explain how the relative positions of the Earth, sun and moon affect phenomena on Earth. - analyse how the sustainable use of resources depends on the way they are formed and cycle through Earth systems. **Science Inquiry Skills** - describe situations where scientific knowledge from different science disciplines and diverse cultures has been used to solve a real-world problem. - draw on evidence to support their conclusions.
	General capabilities and Cross curriculum priorities					
	Key to general capabilities and cross-curriculum priorities	Literacy, Numeracy, ICT capability, Critical and creative thinking, Ethical behaviour, Personal and social capability, Intercultural understanding, Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia's engagement with Asia, Sustainability				

		Semester 1		Semester 2	
Develop assessment	**Assessment**	**Week**	**Assessment instrument**	**Week**	**Assessment instrument**
		3-4	Science skills assessment	3-4	Space test
		7-8	Separating mixtures assessment	7-8	Wind Turbine assessment

		14-15	Investigation unit assessment	14-15	Choice chamber assessment
		16-17	Friction assessment	16-17	Ecology Test
Make judgments and use feedback	**Moderation**	**Semester 1**		**Semester 2**	
		Teachers moderate assessment tasks to ensure consistency of judgments.			