

Lanyon High School

Year 7 – Australian Curriculum: Science



Identify curriculum	Achievement standard	<p>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.</p> <p>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.</p>							
Teaching and learning	Term overview	Term 1		Term 2		Term 3		Term 4	
	Science Understanding CHEMISTRY <ul style="list-style-type: none"> - pure substances and mixtures - solution, solvent, solute - physical separation techniques Science Inquiry Skills <ul style="list-style-type: none"> - 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. - evaluating and communicating Science as a Human Endeavour <ul style="list-style-type: none"> - Separating mixtures at work or in the home 	Science Understanding BIOLOGY <ul style="list-style-type: none"> - Biological classification - Interactions between organisms and food webs Science Inquiry Skills <ul style="list-style-type: none"> - 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. - evaluating and communicating Science as a Human Endeavour <ul style="list-style-type: none"> - Human effect on the environment and ecosystems 	Science Understanding EARTH AND SPACE SCIENCES <ul style="list-style-type: none"> - Day and Night/Seasons - Position and motion of objects in our solar system - Renewable and non-renewable resources - The water cycle and water management Science Inquiry Skills <ul style="list-style-type: none"> - 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. - evaluating and communicating Science as a Human Endeavour <ul style="list-style-type: none"> - Human management of natural resources 	Science Understanding PHYSICS <ul style="list-style-type: none"> - Forces - Balanced / unbalanced forces - Simple machines Science Inquiry Skills <ul style="list-style-type: none"> - 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. - evaluating and communicating Science as a Human Endeavour <ul style="list-style-type: none"> - Safety features that limit force on the body 					
	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							
Develop assessment	Assessment	Term 1		Term 2		Term 3		Term 4	
		Week	Assessment instrument	Week	Assessment instrument	Week	Assessment instrument	Week	Assessment instrument
		4	Science skills assessment	14	Choice chamber assessment	4	Space test	14	Friction assessment
		7	Separating mixtures assessment	17	Ecology Test	7	Wind Turbine assessment	17	Forces test
		All Semester	Ongoing continuous assessment			All Semester	Ongoing continuous assessment		
Make judgments and use feedback	Moderation	Term 1		Term 2		Term 3		Term 4	
Teachers moderate assessment task to ensure consistency of judgments.									