Atherton State High School
On Eagles' Wings

Year 7 Science
Learning and Assessment Overview

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Welcome to Year 7 Science at Atherton SHS. We are committed to the delivery of quality education to students and excellence in teaching and learning. Our Junior School program is shaped by the Australian Curriculum and the C2C units of Education Queensland and is adapted to suit the context of our learners in the Far North Queensland region. We welcome open communication with our teaching staff and look forward to working with you. This overview gives you a picture of the units we study, as well as the types and dates for assessment items.

SEMESTER ONE	Unit Title	Time	Unit Focus	Assessment	Due Date
Water: waste not, want not		Weeks 1-10 Term 1 (10 weeks)	**Chemistry** - the water cycle and its importance, distinguishing between mixtures, including solutions, and pure substances, comparing a range of separation techniques and assessing which techniques can be used for specific purposes, everyday applications of the separation techniques including those used by different cultures and relating the use of different separation techniques to a variety of occupations, planning and conducting investigations into the separation of mixtures, using data to evaluate the effectiveness of different techniques and drawing conclusions. **Earth Sciences** - the importance of sustainable, clean water in the community, exploring Aboriginal peoples' and Torres Strait Islander peoples' values about water, investigating the application of separation techniques in water treatment and recycling processes, comparing and contrasting artificial treatment processes with the water cycle to understand how humans have impacted on and mimic natural processes, ways in which science understanding contributes to the development of water management processes to produce sustainable, clean water supplies both locally and in developing countries.	**Experimental Investigation Discussion**	End Week 8 Term 1

Organising Organisms	Weeks 1-10 Term 2 (10 weeks)	**Biology** — classifying organisms based on their physical characteristics, construction and use dichotomous keys to assist and describe classification, analysing the effectiveness of dichotomous keys and suggesting improvements, changes in classification systems, occupations that use classification systems, feeding relationships between organisms in an environment using food chains and food webs.	Formative Data Test Exam	Week beginning Week 5 Week 9 Term 2

SEMESTER TWO	Unit Title	Time	Unit Focus	Assessment	Due Date
Heavenly Bodies & Agriculture		Weeks 1-5/6-10 Term 3 (5 weeks)	**Introduction to Agriculture** – poultry raising skills, planting theory and practice, soil, plant production, and sustainability	Ag Multimodal Oral Presentation Space exam	Week beginning Week 5/10 Term 3
		Weeks 6 – 10/1-5 Term 3 (5 weeks)	**Space** –the relative positions of the Earth, moon and sun in space, the rotations and orbits of the Earth and moon relative to the sun, eclipses, tides, phases of the moon and solar phenomena, exploring and comparing cultural beliefs related to phases of the moon, eclipses and solar phenomena, the relationship between the tilt of the Earth on its axis, its rotation and revolution around the sun and seasons, the contribution of science in understanding solar storms and reducing their effects on Earth and understanding that science knowledge changes with new evidence		
Moving Right Along		Weeks 1-10 Term 4 (10 weeks)	**Physics** - forces and how they affect motion, balanced and unbalanced forces and applying these to predict and justify conclusions about changes in motion, the effects of gravitational force on motion, the difference between mass and weight, forces involved in simple machines and mechanical advantage, how people make use of force and motion in their occupations, the contribution that the development of simple machines have made to solving problems in the community, how changes to levers and pulley systems affect forces within more complex systems and the application of scientific understanding of force and motion in transport systems **Investigations** - identifying questions or problems, planning and conducting investigations, selecting appropriate equipment, ensuring fair testing and following safety guidelines, summarising and using data to identify relationships and draw conclusions, evaluating the quality of the data, reflecting on experimental methods to identify improvements and communicating using scientific terminology and representations, including force diagrams.	**Experimental Investigation Report**	Week beginning Week 7 Term 2

We encourage all students to have a display folder to file their handouts and resources. This can be very helpful when it comes to reviewing the work done in class, preparing for tests and completing assignments. Weekly tutoring is also available.

Please do not hesitate to contact your child's classroom teacher if you have any questions. We welcome open communication with our parents and caregivers.