



7

Topics include the Nature of Science, Kitchen Chemistry, Forces, Gas, Cellulose, Chemical Separation, Adaptation to Aid Survival, and Sound. There is a strong focus on experimental and hands-on learning, with students sharing their observations using a range of digital media.

The course engages students in exploring Cells, Particles and Matter, Elements and Compounds, Rock Hunter, Roller Coaster Physics, Body System and Chemical Changes. When conducting experimental tasks students are encouraged to identify and construct questions and problems.

Year 9 Science has an emphasis on students understanding the Scientific Method of enquiry and fair testing, how to distinguish between science and pseudoscience, and on being able to design effective experiments. Students apply these skills to gain a better understanding of how Energy is transferred and recycled around the Earth, the rules behind how Atoms are combined to form molecules and how global patterns have formed varied Ecosystems. Students are challenged to develop their independent learning skills through a Blended Learning unit on Light.

10

Students are introduced to the concept of genetics and how DNA contains the blueprint for all living things. They explore the ideas behind evolution. Physics is taught through an analysis of the motion and safety features of vehicles. The focus for Chemistry is on the reactions between atoms and ionic bonding.

Biology topics look into the microbes that cause diseases and how our body defends against them. Chemistry explores the Chemistry of Water, with students performing a detailed analysis on Billarook's own Brandy Creek. Physics and Psychology are investigated through an exploration of what it would take to conduct a Mission to Mars.

11

1 & 2

12

8

In Unit 1 students explain what is needed by an organism to stay alive. They examine the cell as the structural and functional unit of life, and the requirements for sustaining cellular processes in

Through their studies in Science, students will explore ideas in the areas of Biology, Physics, Chemistry and Psychology. Emphasis is placed on developing skills for a critical approach to information, and the ability to build and test an hypothesis.