



BLACKBURN LAKE SANCTUARY

Year Six: Activity Overview and Curriculum Links



AusVELS –Year 6 Science

The *Science Inquiry Skills* and *Science as a Human Endeavour* strands are described across a two-year band. In their planning, schools and teachers refer to the expectations outlined in the Achievement Standard and also to the content of the *Science Understanding* strand for the relevant year level to ensure that these two strands are addressed over the two-year period. The three strands of the curriculum are interrelated and their content is taught in an integrated way. The order and detail in which the content descriptions are organised into teaching/learning programs are decisions to be made by the teacher.

Over Years 3 to 6, students develop their understanding of a range of systems operating at different time and geographic scales. In Year 6, students explore how changes can be classified in different ways. They learn about transfer and transformations of electricity, and continue to develop an understanding of energy flows through systems. They link their experiences of electric circuits as a system at one scale, to generation of electricity from a variety of sources at another scale and begin to see links between these systems. They develop a view of Earth as a dynamic system, in which changes in one aspect of the system impact on other aspects; similarly they see that the growth and survival of living things are dependent on matter and energy flows within a larger system. Students begin to see the role of variables in measuring changes and learn how look for patterns and relationships between variables. They develop explanations for the patterns they observe, drawing on evidence.

Activity / Time	Overview	Strand and Link
Bushland Habitat 45 min	Students will discuss their basic needs and what their own habitat provides. They will then explore different layers of the bush, learning about why certain creatures live where they do. Older students will make predictions about what would happen if the habitat was impacted by humans or natural events such as fire.	Science Understanding: Biological- The growth and survival of living things are affected by the physical conditions of their environment (ACSSU094) Science as a Human Endeavour: Use and influence of science – Scientific knowledge is used to inform personal and community decisions (ACSHE220)
Aquatic habitat 45min	Students will explore the role of the lake as habitat and determine water quality using pH meters, thermometers and turbidity tubes. They will assess the health of the lake as wetland habitat by looking at vegetation and the effects of human impacts including introduced flora and fauna species.	Science Understanding: Biological- The growth and survival of living things are affected by the physical conditions of their environment (ACSSU094) Science as a Human Endeavour: Nature and development of science - Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena (ACSHE098) Science as a Human Endeavour: Use and influence of science – Scientific knowledge is used to inform personal and community decisions (ACSHE220) Science Inquiry Skills: Questioning and predicting - With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be (AC SIS232) Planning and conducting - Use equipment and materials safely, identifying potential risks (AC SIS105) Processing and analysing data and Information - Construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in data using digital technologies as appropriate (AC SIS107) Evaluating - Suggest improvements to the methods used to investigate a question or solve a problem (AC SIS108)
Lake Life 45 min	Can we predict the water quality of the Lake by looking at what is living in it? Students collect a sample from the lake and use magnifying glasses, microscopes and charts to identify what is living on and just below the surface. Learn how the organisms can be grouped to assist us to determine the water quality (tolerant/sensitive)? Make predictions based on your findings: What would happen if there was more/less water pollution? What would happen if there was more rubbish at the Sanctuary? What might happen if people were allowed to swim, fish and use boats in the lake?	Science Understanding: Biological- The growth and survival of living things are affected by the physical conditions of their environment (ACSSU094) Science as a Human Endeavour: Nature and development of science - Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena (ACSHE098) Science as a Human Endeavour: Use and influence of science – Scientific knowledge is used to inform personal and community decisions (ACSHE220) Science Inquiry Skills: Questioning and predicting - With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be (AC SIS232) Planning and conducting - Use equipment and materials safely, identifying potential risks (AC SIS105) Processing and analysing data and Information - Construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in data using digital technologies as appropriate (AC SIS107) Evaluating - Suggest improvements to the methods used to investigate a question or solve a problem (AC SIS108)