

# S 3 Science & Technology



## Living World

- plan & conduct a fair test to show the conditions needed for a particular plant or animal to grow and survive in its environment
- describe how changing physical conditions in the environment affect the growth & survival of living things
- test predictions by gathering data & use evidence to develop explanations of events & phenomena
- describe the structural &/or behavioural features of some native Australian animals & plants and why they are considered to be adaptations

(ST3-4LW-S)

- explore examples of managed environments used to produce food & fibre
- investigate how & why food and fibre are produced in managed environments

- identify & sequence the process of converting 'on-farm' food & fibre products into a product suitable for retail sale

(ST3-5LW-T)

## Digital Technologies

- explore how the main components of digital systems connect together to form networks that transmit data
- define problems, & plan & implement digital solutions, using an appropriate visual programming language involving branching and iteration, & requiring user input
- design, modify & follow algorithms involving

branching & iteration

(ST3-11DI-T)

## Physical World

- investigate how electrical energy can be transferred & transformed in electrical circuits & can be generated from a range of sources
- describe examples where light, sound, heat & electrical energy transform from one type of energy to another
- investigate how electrical energy can control movement, sound, or light in a product or system
- design, test & evaluate a product or system that involves an energy transformation to meet an identified need using electrical energy

(ST3-8PW-ST)

## Digital Technologies

- identify how whole numbers are used to represent all data (binary)) in digital systems
- collect, store & interpret different types of data
- use software to interpret & visualise data
- investigate internal & external components of digital systems that perform functions
- describe how data can be transmitted between two digital components
- identify & explain how existing information systems meet the needs of present & future communities

(ST3-11DI-T)

## Earth and Space

- compare the key features of the planets of our solar system
- Research & communicate how Aboriginal &/or Torres Strait Islander Peoples use observations of the night sky to inform decisions about resources & significant cultural events
- examine & discuss current developments in astronomy, space & planetary science, particularly related to making observations & gathering data
- investigate the effects of sudden geological changes & extreme weather events on the Earth's surface

(ST3-10ES-S)