

## **The International Year of Family Farming Snapshots in the Australian and Victorian AusVELS curriculum. In the Science Domain**

The content of the Snapshots would fall mainly under the sub- strands of Biological Science, Earth Science and Science as a Human Endeavour. Content descriptions, from <http://ausvels.vcaa.vic.edu.au/Science/Curriculum/F-10> , which may be covered from the Snapshots are listed below.

### **F Science**

In Foundation, students observe and describe the behaviours and properties of everyday objects, materials and living things. They explore change in the world around them, including changes that impact on them

Living things have basic needs, including food and water ([ACSSU002](#))

Objects are made of materials that have observable properties ([ACSSU003](#))

Science involves exploring and observing the world using the senses ([ACSHE013](#))

Respond to questions about familiar objects and events ([ACSIS014](#))

Explore and make observations by using the senses ([ACSIS011](#))

### **Level 1 Science**

They observe changes that can be large or small and happen quickly or slowly. They explore the properties of familiar objects and phenomena, identifying similarities and differences. Students begin to value counting as a means of comparing observations, and are introduced to ways of organising their observations.

Living things have a variety of external features([ACSSU017](#))

Living things live in different places where their needs are met ([ACSSU211](#))

Everyday materials can be physically changed in a variety of ways ([ACSSU018](#))

Observable changes occur in the sky and landscape ([ACSSU019](#))

Science involves asking questions about, and describing changes in, objects and events ([ACSHE021](#))

People use science in their daily lives, including when caring for their environment and living things ([ACSHE022](#))

### **Level 2 Sc**

Living things grow, change and have offspring similar to themselves ([ACSSU030](#))

Earth's resources, including water, are used in a variety of ways ([ACSSU032](#))

Science involves asking questions about, and describing changes in, objects and events([ACSHE034](#))

People use science in their daily lives, including when caring for their environment and living things([ACSHE035](#))

Respond to and pose questions, and make predictions about familiar objects and events([ACSIS037](#))

Compare observations with those of others([ACSIS041](#))

### **Level 3 Sc**

Students order their observations by grouping and classifying; in classifying things as living or non-living they begin to recognise that classifications are not always easy to define or apply. They begin to quantify their observations to enable comparison, and learn more sophisticated ways of identifying and representing relationships, including the use of tables and graphs to identify trends.

Living things can be grouped on the basis of observable features and can be distinguished from non-living things([ACSSU044](#))

Science knowledge helps people to understand the effect of their actions ([ACSHE051](#))

### **Level 4 sc**

In Level 4, students broaden their understanding of classification and form and function through an exploration of the properties of natural and processed materials.

Living things have life cycles ([ACSSU072](#))

Living things, including plants and animals, depend on each other and the environment to survive ([ACSSU073](#))

Natural and processed materials have a range of physical properties; These properties can influence their use ([ACSSU074](#))

Earth's surface changes over time as a result of natural processes and human activity ([ACSSU075](#))

Science knowledge helps people to understand the effect of their actions ([ACSHE062](#))

### **Level 5 science**

Living things have structural features and adaptations that help them to survive in their environment([ACSSU043](#))

Important contributions to the advancement of science have been made by people from a range of cultures ([ACSHE082](#))

Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives ([ACSHE083](#))

Scientific knowledge is used to inform personal and community decisions ([ACSHE217](#))

### **Level 6 science**

The growth and survival of living things are affected by the physical conditions of their environment ([ACSSU094](#))

Sudden geological changes or extreme weather conditions can affect Earth's surface ([ACSSU096](#))

Important contributions to the advancement of science have been made by people from a range of cultures ([ACSHE099](#))

Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives ([ACSHE100](#))

Scientific knowledge is used to inform personal and community decisions ([ACSHE220](#))

### **Level 7 sc**

They use and develop models such as food chains, food webs and the water cycle to represent and analyse the flow of energy and matter through ecosystems and explore the impact of changing components within these systems.

There are differences within and between groups of organisms; classification helps organise this diversity ([ACSSU111](#))

Interactions between organisms can be described in terms of food chains and food webs; human activity can affect these interactions ([ACSSU112](#))

Some of Earth's resources are renewable, but others are non-renewable ([ACSSU116](#))

Water is an important resource that cycles through the environment ([ACSSU222](#))

Scientific knowledge changes as new evidence becomes available, and some scientific discoveries have significantly changed people's understanding of the world ([ACSHE119](#))

Science knowledge can develop through collaboration and connecting ideas across the disciplines of science ([ACSHE223](#))

Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations ([ACSHE120](#))

Science understanding influences the development of practices in areas of human activity such as industry, agriculture and marine and terrestrial resource management ([ACSHE121](#))

People use understanding and skills from across the disciplines of science in their occupations ([ACSHE224](#))

### **Level 8 Science**

Scientific knowledge changes as new evidence becomes available, and some scientific discoveries have significantly changed people's understanding of the world ([ACSHE134](#))

Science knowledge can develop through collaboration and connecting ideas across the disciplines of science ([ACSHE226](#))

Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations ([ACSHE135](#))

Science understanding influences the development of practices in areas of human activity such as industry, agriculture and marine and terrestrial resource management ([ACSHE136](#))

People use understanding and skills from across the disciplines of science in their occupations ([ACSHE227](#))

### **Level 9 sc**

They compare processes of rock formation, including the time scales involved, and analyse how the sustainable use of resources depends on the way they are formed and cycle through Earth systems

Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems([ACSSU176](#))

Advances in scientific understanding often rely on developments in technology and technological advances are often linked to scientific discoveries([ACSHE158](#))

Advances in science and emerging sciences and technologies can significantly affect people's lives, including generating new career opportunities([ACSHE161](#))

The values and needs of contemporary society can influence the focus of scientific research ([ACSHE228](#))