

Syllabus Content/Outcomes

THE EARTH'S SURFACE

ES1 Sedimentary, igneous and metamorphic rocks contain minerals and are formed by processes that occur within Earth over a variety of timescales. (ACSSU153)

- a. describe the [structure](#) of the Earth in terms of core, mantle, crust and lithosphere
- b. [relate](#) the formation of a range of landforms to physical and chemical weathering, erosion and deposition
- c. outline the origins of and relationships between sedimentary, igneous and metamorphic rocks
- d. identify that sedimentary, igneous and metamorphic rocks contain minerals
- e. classify a variety of common rocks and minerals into groups according to their observable properties 📖
- f. describe the conditions under which fossils form
- g. outline how geological history can be interpreted in a sequence of horizontal sedimentary layers, in which the oldest are at the base and the youngest at the top ⚙️
- h. describe examples to show how people use understanding and skills from across the disciplines of science in occupations related to the exploration, mining or processing of minerals in Australia (ACSHE224, ACSHE227) ⚙️🇦🇺

LIVING THINGS

LW1 There are differences within and between groups of organisms; classification helps organise this diversity.(ACSSU111)

- a. identify reasons for classifying living things
- b. classify a variety of living things based on similarities and differences in [structural](#) features
- c. use simple keys to identify a range of plants and animals 📖
- d. identify some examples of groups of micro-organisms
- e. outline the structural features used to group living things, including plants, animals, fungi and bacteria
- f. explain how the features of some Australian plants and animals are adaptations for survival and reproduction in their environment 📖⚙️

LW2 Cells are the basic units of living things and have specialised structures and functions. (ACSSU149)

- a. identify that living things are made of cells
- b. identify structures within cells, including the nucleus, cytoplasm, cell membrane, cell wall and chloroplast, and describe their functions

- c. outline the role of respiration in providing energy for the activities of cells
- d. identify that new cells are produced by cell division
- e. distinguish between unicellular and multicellular organisms
- f. identify that different types of cells make up the tissues, organs and organ [systems](#) of multicellular organisms

MATTER

CW1The properties of the different states of matter can be explained in terms of the motion and arrangement of particles. (ACSSU151)

- a. describe the behaviour of matter in terms of particles that are continuously moving and interacting
- b. [relate](#) an increase or decrease in the amount of heat energy possessed by particles to changes in particle movement
- c. use a simple particle model to predict the effect of adding or removing heat on different states of matter
- d. relate changes in the physical properties of matter to heat energy and particle movement that occur during [observations](#) of evaporation, condensation, boiling, melting and freezing
- e. explain density in terms of a simple particle model
- f. identify the benefits and limitations of using [models](#) to explain the properties of solids, liquids and gases