

# STUDY GUIDE

# **Year 8 Science**

## TERM 1

### Assessment

Tasks Inquiry report End of Chapter Test

End of a chapter End of a chapter End of chapter

#### Content Chapter **Elaborations Description Science Inquiry** Questioning and predicting Formulate questions or hypotheses that can be investigated scientifically (ACSIS164) **Skills** Plan, select and use appropriate investigation methods, include Planning and conducting Chapter 1 field work and laboratory experimentation, to collect reliable data; (1 week) assess risk and address ethical issues associated with these methods (ACSIS165). Select and use appropriate equipment, include digital technologies, to systematically and accurately collect and record data Processing and analysing data and Analyse patterns and trends in data, include describe relationships information between variables and identifye inconsistencies (ACSIS169) Use knowledge of scientific concepts to draw conclusions that are consistent with evidence (ACSIS170) Evaluate conclusions, include identifye sources of uncertainty and Evaluating and possible alternative explanations, and describe specific ways to Communicating improve the quality of the data (ACSIS171). Critically analyse the validity of information in secondary sources and evaluate the approaches used to solve problems (ACSIS172) Communicate scientific ideas and information for a particular purpose, include constructe evidence-based arguments and use appropriate scientific language, conventions and representations (ACSIS174) **Cells** Cells are the basic units of living examine a variety of cells use a light microscope, by things and have specialised digital technology or by viewing a simulation Chapter 2 structures and functions distinguish plant cells from animal or fungal cells (5 weeks) identify structures within cells and describe their (ACSSU149) function recognise that some organisms consist of a single recognise that cells reproduce via cell division describe mitosis as cell division for growth and repair

#### Multi-cellular Organisms Chapter 3 (4 weeks)

Multi-cellular organisms contain systems of organs that carry out specialised functions that enable them to survive and reproduce (ACSSU150)

- ★ identify the organs and overall function of a system of a multicellular organism in supporting the life processes
- describe the structure of each organ in a system and relating its function to the overall function of the system
- ★ examine the specialised cells and tissues involved in structure and function of particular organs
- ★ compare similar systems in different organisms such as digestive systems in herbivores and carnivores, respiratory systems in fish and mammals