



2016 Externally set task

Integrated Science – General

Unit 3 content

Science Inquiry Skills

- identify, research and construct questions for investigation; propose hypotheses; and predict possible outcomes
- plan, select and use appropriate investigation methods, including pre-testing, to collect reliable data; assess risk and address ethical issues associated with these methods
- represent data in meaningful and useful ways; organise and analyse data to identify trends, patterns and relationships; qualitatively describe sources of measurement error and use evidence to make and justify conclusions
- interpret a range of scientific and media texts and evaluate the conclusions by considering the quality of available evidence
- use appropriate scientific representations, including diagrams of structures and processes, to communicate conceptual understanding, solve problems and make predictions
- communicate conceptual understanding, solve problems and make predictions
- communicate scientific ideas and information for a particular purpose, using appropriate scientific language, conventions and representations

Science as a Human Endeavour

- the use of scientific knowledge is influenced by social, economic, cultural and ethical considerations
- the use of scientific knowledge may have beneficial and/or harmful and/or unintended consequences

Science Understanding

Earth systems/cycles in nature

- abiotic factors, including temperature, pH, salinity, light, water and atmospheric gases, impact on the survival of organisms within the environment
- food chains and food webs show the feeding relationships between organisms within a community
- the amount of energy transferred between trophic levels in food chains and food webs diminishes as the trophic level increases

Ecosystems and sustainability

- human interference is threatening biodiversity through deterioration of ecosystems and diminishing habitat areas