Organisation of Living Things

BIO11-9

3 inquiry questions · 13 dot points

1 How are cells arranged in a multicellular organism?

- compare the differences between unicellular, colonial and multicellular organisms by:...
- investigate the structure and function of tissues, organs and systems and relate those functions to cell differentiation and specialisation
- justify the hierarchical structural organisation of organelles, cells, tissues, organs, systems and organisms

2 What is the difference in nutrient and gas requirements between autotrophs and heterotrophs?

- investigate the structure of autotrophs through the examination of a variety of materials, for example:...
- investigate the function of structures in a plant, including but not limited to:...
- investigate the gas exchange structures in animals and plants through the collection of primary and secondary data and information, for example:...
- interpret a range of secondary-sourced information to evaluate processes, claims and conclusions that have led scientists to develop hypotheses, theories and models about the structure and function of plants, including but not limited to:...
- trace the digestion of foods in a mammalian digestive system, including:...
- compare the nutrient and gas requirements of autotrophs and heterotrophs

3 How does the composition of the transport medium change as it moves around an organism?

- investigate transport systems in animals and plants by comparing structures and components using physical and digital models, including but not limited to:...
- investigate the exchange of gases between the internal and external environments of plants and animals
- compare the structures and function of transport systems in animals and plants, including but not limited to:...
- compare the changes in the composition of the transport medium as it moves around an organism