Belfairs Academy

Science Fundamentals - Year 8

Knowledge	Skills
• To describe the process of photosynthesis and how leaves are adapted for this process. • To define chemosynthesis • To describe the process of respiration • Draw food chains and webs and describe the relationships shown. • To describe the structure of the Earth and it's atmosphere. • To describe how the atmosphere has changed over time and is continuing to change. • Describe the differences in transverse and longitudinal waves. • Describe porperties of sound waves and how we hear them. • Describe how characteristics are inherited and why there is variation within these characteristics. • Describe how species adapt. • Describe how species evolve. • Define extinction and reasons for extinction. • Describe what is produced when metals and their compounds react with acids. • Describe the process of reflection and refraction. • Describe how we see light using the eye and lenses. • Name the different types of pathogen that cause disease and how to stop the spread of the disease. • Describe how micro-organisms can be useful. • Describe how antibiotics and vaccinations work. • Define mixtures and describe the processes of separating mixtures. • Describe objects found in the night sky and in our solar system. • Describe how we can study stars and the discovery of the universe. • Describe how substances move in and out of cells. • Define endothermic and exothermic reactions. • Calculate energy changes in a reaction. • Describe the properties and uses of the parts of the electromagnetic spectrum.	Interpret observations to identify patterns and draw a conclusion. Present data using tables and graphs. Understand and use official chemical names Use correct methods in laboratory work. Plan and carry out an investigation, identifying independent, dependent, and control variables. Select correct methods, equipment, and materials for a practical. Present data in a graph Evaluate the results of a practical scientifically Evaluate you practice and say how to improve the investigation in the future.