

SCIENCE

YEAR 7

Particle Pioneers

Embarking on an exciting scientific journey into the world of particle theory, students are introduced to the complex and intriguing properties of matter at a sub-microscopic level. Through a series of engaging experiments and investigations, they explore how matter is composed and behaves, focusing on the separation of mixtures and the physical properties of substances. Ethical considerations and cultural impacts of scientific practices are also tackled, enhancing their understanding of science as a human endeavor.

Bio-Quest

Venturing into the vast and dynamic realms of biological diversity and ecosystem dynamics, this unit challenges students to explore and understand the interdependencies within ecosystems and the importance of biodiversity. Hands-on experiments and field investigations allow students to predict and analyze the effects of environmental changes on ecosystems. They also learn about the historical and cultural perspectives on biological classification and its impact on scientific knowledge and environmental policies.

Exploring Cosmic Connections

Delving into the Earth-sun-moon system, students uncover the fundamental principles of celestial mechanics. This unit provides an in-depth look at how these cosmic bodies interact and the effects of their movements on Earth's environment. Engaging in simulations and model-building activities, students visualize and predict celestial events like eclipses and tides, while considering the broader implications of these cosmic phenomena on climate, navigation, and ancient and contemporary cultures.

Unleashing Forces

Investigating the fascinating world of physics, this unit focuses on the dynamics of motion and the forces that govern movement. A hands-on approach helps students understand how different forces act on objects and the resultant effects. Experiments are conducted to measure and analyze forces such as gravity, friction, and air resistance, providing insights into the laws of motion. Students also learn to represent their data effectively through graphs and models, enhancing their ability to communicate complex scientific ideas clearly and accurately.