

## Science in the PYP

Science and technology learning takes place within the Units of Inquiry studied. In this way, science is learned in a context that is more relevant and meaningful to the students. The traditional disciplines are still addressed, but presented in a way that is much more student centered and in a way that naturally extends learning beyond the students' own world.

Students explore science concepts through the organizing themes of the PYP programme; who we are, where we are in place and time, how we express ourselves, how the world works, how we organize ourselves, and sharing the planet. Each year group has one unit of inquiry under each organizing theme. This helps to guide the exploration of central ideas in each unit so that they have relevance and significance in the lives of our students.



The students develop their observational skills by using their senses to gather and record information, and then use their observations to identify patterns, make predictions and refine their ideas. They explore the way objects and phenomena function, identify parts of a system and gain an understanding of cause and effect relationships. Students examine change over varying time periods and recognize that more than one variable may affect change. They learn to develop awareness of different perspectives and ways of organizing the world helping them to show care and respect for themselves, other living things and the environment. Students communicate their ideas or

provide explanations using their own scientific experience. In addition, they have the opportunity to identify and reflect on the organizing themes, through the central ideas defined in the programme of inquiry, by making connections between the questions asked and the concepts that should be driving the inquiry. The students will become aware of the relevance these concepts have to all of their learning.

The strands in the Science scope and sequence are:

### Science and technology perspective

Science and technology is an integrated area of inquiry. The unique perspective provided by following the strands outlined below contributes to an understanding of human activity.



**Living things**

The study of humans and other animals, plants, and the environment and the interactions between them.

**Earth and space**

The study of the planet Earth and its relationship to the universe.

**Materials and matter**

The study of the origins, properties and uses of natural and human-made solids, liquids and gases.

**Forces and energy**

The study of energy, its origins and transfer, and its effects.