Subject	Science

"Science is a way of thinking much more than it is a body of knowledge."

Carl Sagan

Curriculum Intent

Scientific studies have changed our lives and is vital to the world's future prosperity. A high-quality Science education provides the fundamentals for understanding the universe, life on earth and ourselves through the specific disciplines of biology, chemistry and physics. We encourage our students to be both confident and curious, to apply their knowledge across the curriculum mosaic and into their future pathways.

Powerful knowledge in Science

Students at Breckland School study Science so they can better understand and be inspired by the biological, physical and material world around them. We develop student's ability to think scientifically, question, critique and investigate.

An understanding of the biological world allows students to appreciate how their own bodies work and how living things have adapted and evolved to survive our changing planet. Environmental awareness develops an appreciation for the complex web of interdependence that exists between living things and how we can harness the power of the natural world. Science explains how the physical and material world works across monumental scale, from particles smaller than the atom to the entire Universe. By understanding the properties and behaviour of materials, Science allows us to problem solve, engineer, build and create.

Curriculum Features

Our curriculum is based around mastery in Science. We focus on nine big ideas to encourage deep understanding of key concepts. It is a spiral curriculum that is designed to link in a logical way as students' progress through their studies. From these ideas we teach a broad and balanced range of topics to develop understanding in Biology, Chemistry and Physics. These include cells, genetics, bioenergetics, ecosystems, particle theory, chemical reactions, earth sciences, forces, motion, energy, electricity, natural selection, radioactivity, homeostasis and astronomy.

Lessons encourage students to be curious and ask questions about naturally occurring phenomena. We include models, demonstrations and practical work whenever possible to develop student understanding of scientific approach to enquiry. We use assessment to identify and correct misconceptions that students develop and ensure that this is addressed in lessons.

Curriculum Enrichment

At Breckland School, we are keen to show the applications of Science to global issues, enhancing all students' cultural capital. This includes discussion and debate around caring for our environment (school, local, national and global), climate change, health and medicine and the importance of making informed decisions on the ethical issues around scientific advancements.

We offer STEM based extracurricular activities and celebrate British Science week with demonstrations and 'hands on' practical experiences.