

Intent: What are we trying to achieve?

Subject Vision - Science

To provide learners with a high-quality science education providing the foundations for understanding the world through the specific disciplines of biology, chemistry and physics.

Science at Parklands aims to build up a body of key foundational knowledge and concepts, where pupils are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena.

Curious Learners

Our Science curriculum encourages learners to explore essential aspects of the knowledge, methods, processes and uses of science. They will be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, analyse causes, encourage creativity and problem solve.

Respectful Citizens

Our Science curriculum encourages learners to consider the moral, ethical and social issues of a variety of different topics such as IVF, stem cells, electricity generation, resource use and genetic engineering. Students are challenged to consider a wide range of views and opinions as well as drawing on the scientific facts.

Aspiration Individuals

Science teachers have high expectations of all learners that they teach. Assessment in Science takes place in many different forms to allow all learners to have the opportunity to succeed and exceed their own expectations. The assessment model in science is staggered to encourage practice and retention of knowledge. Therefore, supporting the development and ambition of the mindsets required for all learners to believe that they can be successful in life.

Motivated Achievers

Our Science curriculum is designed to encourage learners to be reflective and critical thinkers supporting them in their motivation to be successful. Independent learning is encouraged, taught & developed and is reflected on regularly after assessments whether these be formative or summative. Learners have frequent opportunities to reflect and develop on their acquired knowledge which enables them progress further in Science.

The Key concepts that run through Science:

- The pupils' natural curiosity is sustained and the 'big ideas' in science are referred to throughout all Key Stages, with emphasis placed upon the spiritual, social, moral and cultural elements of the subject. Pupils are eager to master subject content as well as develop the necessary investigative skills.
- There are 10 big ideas within each discipline in Science. These underpin our Science curriculum in Key stages 3 and 4.
- For example in Biology, "All life grows and changes over long periods of time through the processes of evolution and natural selection."