3-18 Sciences Curriculum

What is science?

We use science to explore, make sense of, and explain the world around us and the Universe beyond. It involves coming up with ideas, testing them out, collecting evidence by observing, experimenting, and using models. Sharing findings, discussing and debating with others is an important step in building our scientific knowledge and understanding.

The principles that guide us

- Science is for everyone. 'Tha saidheans airson a h-uile duine.'
- All learners should have the opportunity to experience science learning that is engaging
- Science learning should be connected to real life contexts and the world and work.
- Science can help us build a better world.

What should learning in science feel like?

Learning in the sciences inspires a sense of wonder about our world and The Universe. Through science, learners will have the opportunity to have fun, discover exciting new things, and feel a sense of connection and belonging. Learning should build on what learners already know, encouraging them to challenge themselves and deepen their knowledge.

What we want for learners in science

Learning about science helps learners to develop the four capacities and to be:

- · curious, creative, analytical, inventive and adaptive
- well-informed citizens, committed to Learning for Sustainability
- resilient, hopeful, and empowered to take action locally and globally to shape a better future.

Through science, learners will have opportunities to:

- develop their understanding of the big ideas of science.
- use scientific language, formulae and equations accurately and develop practical science skills.
- recognise the impact that science makes on their lives and communities.
- develop creative solutions to real world challenges, including climate change and biodiversity loss.
- develop transferable science and STEM skills and apply these in a wide range of pathways and careers.
- recognise the contribution of diverse cultures and peoples, past and present, to scientific developments and discovery.
- value the natural world and seek to protect it for future generations.
- understand how science builds a reliable body of knowledge to help us make informed and ethical judgements.

A partnership approach

Families, communities, employers and partner organisations play a vital role in supporting learning in science and building <u>science capital</u>.