Holmesdale primary science curriculum aims to develop every child's knowledge and understanding of the incredible world of science by fostering their natural excitement and curiosity through inclusive and meaningful learning experiences. We want every child, regardless of their starting point or background, to make excellent progress in science through a strong focus on developing knowledge, alongside scientific skills, across Biology, Chemistry and Physics. Studying science at Holmesdale encourages children to appreciate how scientific understanding can be fundamental to solving arising global challenges, such as climate change.

An emphasis on practical scientific activity supports children to understand the world in which they live and thrive in STEM subjects at secondary school. Drawing on their own experiences and natural curiosity, children are encouraged to regularly observe, study, question, plan, investigate and experiment, developing their skills progressively from EYFS to Year 2.

Our primary curriculum helps children to step into their greatness through:

- 'Seizing the science wonder!'
- Enabling critical thinking and empowering questioning
- Developing knowledge alongside scientific skills
- Challenging misconceptions and demystifying truths
- Understanding and using a wide range of specialist, scientific vocabulary
- Carefully planned opportunities to re-visit knowledge and deepen understanding
- Understanding the influence of the science community from past and present

Progression of Knowledge and Skills for each unit, Nursery to Year 2

Knowledge

Plants

Nursery	Reception	Year 1	Year 2
Begin to know the basic parts of flowers. Begin to know the names of familiar flowering plants. Begin to know plants are alive; seeds need water to grow.	Know the basic plant parts (leaves, flowers, stem, roots). Know names of familiar flowering plants. Know plants are alive; seeds need water to grow.	Identify and name common plants. Know deciduous vs evergreen. Know basic plant structure.	Know seeds/bulbs grow into seedlings. Know plants need water, light & temperature. Recognise variation in plant needs.

Animals, including humans

Nursery	Reception	Year 1	Year 2
Know names of familiar animals. Begin to know animals use senses to explore.	Know names of familiar animals. Know animals use senses to explore.	Identify and group common animals. Know five senses. Know basic human body parts.	Know animals grow into adults. Importance of exercise, diet & hygiene. Know carnivores/herbivores/omnivores.

Living things and habitats

Nursery	Reception	Year 1	Year 2
Begin to know living vs non-living. Begin to know animals/plants move, grow & feed.	Know living vs non-living. Know animals/plants move, grow & feed.		Characteristics of living, dead, never alive.

			Know habitats and microhabitats. Understand food chains.

Materials

Nursery	Reception	Year 1	Year 2
Recognise materials some objects are made from. Describe some materials using some senses.	Recognise materials objects are made from. Describe materials using senses.	Identify everyday materials. Describe physical properties.	Suitability/uses of materials. Know materials change shape.

Forces, Earth & Space

Nursery	Reception	Year 1	Year 2
Begin to know some trees change through seasons. Begin to recognise seasonal signs.	Know trees change through seasons. Recognise seasonal signs.	Know four seasons and weather. Understand changes in day length.	

Skills

Working scientifically

Nursery	Reception	Year 1	Year 2
Ask simple questions. Begin to comment on observations. Group some objects with support.	Ask simple questions. Comment on observations. Group objects with support.	Raise simple questions. Use senses to observe. Record with simple tables.	Identify testable questions. Use simple measurements. Draw labelled diagrams. Identify patterns; write conclusions.