Curriculum drivers: The curriculum is underpinned by the school's Curriculum Drivers: Community, Communication and Consolidation. The spiritual, moral, social and cultural development of our pupils and their understanding of the core values of our society are woven through the curriculum and developed through 'The Heatherlands Way' values of independence, resilience, motivation, aspiration and respect.

Curriculum statement for Science

Intent **Purpose**	A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science including how this is used in their local community. Through building up a body of key foundational knowledge and concepts, the intent is that pupils are encouraged to recognize and communicate the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand and consolidate knowledge of how science can be used to explain what is occurring, predict how things will behave, and analyse causes.
Intent **Aims**	At Heatherlands, the intent is that all children: • Develop their **scientific knowledge and conceptual understanding** through the various aspects of science including: living things and their habitats, light, properties and changes of materials, earth and space and forces. • Consolidate and build up learning that they have previously learned and provide the children with the scientific vocabulary to effectively communicate their learning. • Develop an understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them. • Are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future. • Where possible, community links will be used to help raise the profile of the subject.
Implementation **What planning looks like**	In the Foundation Stage and Early Key Stage 1, lessons are planned in accordance with the 'understanding the world' strand of the Early Years Foundation Stage Curriculum, before moving on to cover the Year 1 National Curriculum objectives. From Years 1 to 6, all units and lessons are accessible on White Rose Science which is audited alongside the National Curriculum objectives to ensure continuity and progression throughout the school. All planning is available on the school server. Knowledge organisers are stuck in science books for each science topic to allow the children to learn and consolidate the taught technical vocabulary and definitions.

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	Science lessons generally contain some, or all, of the following elements (See WAGOL): • Technical vocabulary • Prior knowledge check • Key knowledge to be taught • Discussion • Direct teaching • Practical tasks or investigative work • Recording • Communicating • Reflecting and evaluating **SEND** At Heatherlands Primary School we teach science to all children whatever their ability. Science forms part of the school's curriculum policy to provide a broad and balanced education to all children. We provide learning opportunities matched to the needs of children with learning difficulties and we take into account the targets set for individual children in their Individual Education Plans (IEP's). Teachers take account of the three principles of inclusion that are set out in the National Curriculum: • Setting suitable learning challenges. • Responding to the diverse learning needs of pupils. • Overcoming potential barriers to learning and assessment for individuals and groups of pupils.
Implementation What teaching looks like	In the Foundation stage, science exploration is an integral part of the Early Years Curriculum and links are made to other subjects so that pupils can start to develop and apply their scientific skills. As part of the transition between Foundation and Year 1, in early Key Stage 1, science is usually taught through a thematic approach. The time spent on science, within this year group, may vary from term to term and in each topic that is taught. However, science is a core subject and is given priority within every theme. Science is a core subject and adequate time is spent delivering it. Some year groups block science into a series of lessons but on average there is a minimum average time of one hour per week.
Impact What learning looks like	**All children should have experience of:** - Reviewing and answering a key enquiry question. - Learning of tier 3 vocabulary - Learning of key knowledge linked to the enquiry question. - Hands on, practical investigative work that allows them to answer they key question End of unit assessments to ensure knowledge has been embedded

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Impact **What assessment looks like**	Assessment is an ongoing process which should demonstrate the impact on children's learning and inform teacher's planning. Assessment notes will be made, when necessary, in feedforward books and teachers will live mark, giving oral feedback as per the teaching & learning and marking and feedforward policies. Ongoing formative assessment will include observations, collecting evidence e.g., photographs or videos, watching the children work and collaborate, talking to them about what they are doing, questioning, completing retrieval tasks and quizzes or listening to them describe and discuss their work. These forms of evidence and task can generate useful assessment information and enable the teacher to identify any misconceptions or areas that require additional input or scaffold. It is vital that teachers acquire knowledge of their pupil's needs, their rate of progress and standard of attainment. In Key stage 1 and 2, the impact of Science is assessed throughout the academic year. Academic reports for core and foundation subjects will be sent home to the parents in the Spring term. Children will be assessed as 'B' (below) 'W' (working towards the expected standards), 'N' (age related expectation) meeting expected standards or 'A' (greater depth standard) exceeding expected standards. Children who are achieving above the national level for their age may be identified as more able and put onto the school's more able register where the children can be directed towards local clubs to continue and further their skill. Children also sit White Rose end of unit assessment tasks and these are used to help inform teacher assessments. Intervention is planned for those children who require further support to meet the national standard. In Early Years Foundation Stage (EYFS) observational assessments are completed at the end of the reception year. As discreet subjects are not taught Science comes under the 'The World' and 'Physical' areas of learning with a focus on exploring the world around them. Children are assessed against the early year's foundation stage profile. **Review** The curriculum will be kept under review and evaluated regularly. This will require discussion between the Head Teacher, Science leader and all teaching staff, to ensure appropriate coverage of the knowledge within the curriculum and that the teaching of key skills are being implemented.