

Harvills' Curriculum June 2019- Science

Intent

The intention of the Science curriculum at Harvills Hawthorn Primary School mirrors the underpinning vision and mission shared by all at the school. Our vision intends for all pupils and staff to be the very best can be while our mission challenges us to prepare our pupils for their future lives and enable them to be able to contribute positively to society. At Harvills Hawthorn, this is done through the National Curriculum and the Early Years Foundation Stage Curriculum defining our science curriculum. As part of the Long Term Plan, year groups are allocated science topics to ensure that children cover all aspects of science as they progress through the school. Alongside this, we have devised our own skills based curriculum which teachers use as a basis for planning. Lessons are supplemented with resources and real life experiences to maximise opportunities for practical work and cross-curricular links. During their time at Harvills Hawthorn, within science, we aim for all children to develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. We intend for them to 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 develop knowledge and understanding of important scientific ideas, processes and skills and relate these to everyday experiences. We also equip children with the scientific knowledge required to understand the uses and implications of science, today and for the future. Within our school we aim to develop mini-scientists. We do this by encouraging attitudes of originality, co-operation, perseverance, open mindedness, self-criticism, responsibility and independence in thinking. We inspire children to retain and develop their natural curiosity about the world around them through the asking and answering of scientific questions. Finally, we aim to develop children's scientific skills through enjoyable and interesting experiences that are vocabulary rich and encompass a range of enquiries.

Implementation-

At Harvills Hawthorn Primary School we pride ourselves on the consistent approach to teaching and learning that can be observed across all phases of school. This is achieved through our commitment to cutting edge CPD and quality first teaching on a daily basis. Expectations of staff and pupils are high resulting in good or outstanding progress in all phases. There is a

universal understanding of what outstanding teaching, learning and assessment should entail. These strategies are consistently used throughout school and it is the expectation of leadership that all lessons will include a variety of these to enable all learners to reach their full potential. Active learning is essential in all aspects of the lesson. All staff use the same terminology so learners develop a knowledge and understanding of the different ways they learn.

At Harvills, we believe outstanding teaching, learning and assessment must include:

- Challenge for all
- Collaborative learning
- Assessment for learning
- Questioning
- Progression within lessons and books
- Learning behaviours

science, lessons will be delivered discretely on a weekly basis. Such lessons will be taught by the class teacher and where appropriate will be linked to practical experiences. Where possible, we implement visits or hooks, visitors or real life experiences to bring the subject to life. Our teachers use a variety of teaching methods to ensure children receive not only the best possible lesson but also to ensure all learning styles are catered for. As children progress through the school, topics will be re-visited but expanded and developed upon. Children and teachers are encouraged to make cross-curricular links where possible and to record scientific conversations as notes in science books as this is often where the real learning in science is captured. Every classroom will have a science display that contains key vocabulary for their current topic and investigative language relevant to the levels of the children within the class. The development and monitoring of science is managed by the subject leader, which includes termly monitoring of learning and yearly monitoring of teaching. Findings of monitoring are reported to Governors and the relevant members of SLT and areas for development form an action plan and are fed into the school improvement plan and subject evaluation form.

At termly intervals throughout the year, teachers are expected to assess the attainment of their year group's science objectives using a given assessment pro forma. These assessments will generate a particular stage, which will indicate where that child is emerging, developing or secure within the knowledge and skills within this year group.

Impact

We aim for the children of Harvills Hawthorn Primary School to leave our care with a love for the subject of science. We want them to not only have acquired the appropriate age related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points and within their everyday lives. Ultimately, we want our children to leave Year 6 with a richer scientific vocabulary that will enable them to articulate their understanding of taught concepts, a wider understanding of a variety of skills linked to both understand and enquiry and high aspirations which will see them through to further study, work and a successful adult life.