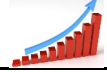



<p>CONTENT & SEQUENCING</p> <p>Our Science curriculum fully meets statutory requirements and includes study of the living world, forces, materials, beyond our planet and opportunities to develop scientific skills and fieldwork.</p> <p>In EYFS there is a focus in enquiry, exploring and questioning, facilitating children's natural curiosity and providing opportunities for children to learn and discover the world around them.</p> <p>At Key Stage 1, topics are age-appropriate with children drawing on their own experiences, for example: Blue planet (food chains, habitats, floating & sinking, materials). There is a balance between subject knowledge and investigative skills.</p> <p>At Key Stage 2, topics are again age-appropriate and have been developed over a number of years so that they engage and interest the children. Again there is a balance between subject knowledge and practical scientific skills. Investigative skills can include planning and completing an investigation in a lesson, up to planning an investigation that continues for several weeks (e.g. Bug Hunt). Where possible, science is linked to the overall topic, however science is taught as an individual subject, so it may have links with other subject areas but not the larger topic.</p>	<p>LINKS WITH OTHER SUBJECTS</p> <p>Science units at Little Melton are delivered within cross-curricular topics where possible, but in order to retain individual subject skills and disciplines links are not forced, but rather developed with other subjects when appropriate. This ensures the Science objectives are valued and taught robustly, and allows real and useful links to be made to related knowledge.</p> <p>In Science, a key link is the use of good quality children's non-fiction to match the topic in English. Examples of this would be 'Animalium' during All Living Things topics in UKS2, which reinforces the Science context through a non-chronological report, as well as supporting progress in writing for a audience and art (watercolours) to create a class book. In KS1, studying the life cycle of a penguin through 'The Emperor's Egg' by Martin Jenkins in their 'Frozen!' topic. In EYFS, nearly all Science is cross-curricular, with a few exceptions such as: Antarctica topic, making changes with temperatures and Farm animals & their young.</p> <p>Science also offers us a good vehicle to introduce DT and Maths, in STEM activities such as the Bridge Building topic in UKS2, which also allows the opportunity to practise investigative skills. A number of our thematic studies also have strong links to the Science curriculum– for example 'Technology through the Ages' (UKS2) & 'Weather' recording the weather e.g. use of thermometers, creating rain gauges, days of the week and times of day (KS1). Links are also drawn to Geographical skills in the coastal visit to West Runton, where children investigate how a coastal environment is formed and what lives there (habitat).</p>	<p>RETRIEVAL PRACTICE</p> <p>Each child is given a 'Knowledge Organiser' at the beginning of each topic. This contains key facts and vocabulary linked to the geography topic. It also includes a nudge towards further learning, eg linked texts to read, or websites to explore because we are keen to emphasise that the 'Knowledge Organiser' does not represent the totality of learning in a subject, but is just a starting point. A range of teaching strategies are used in each class to utilise the knowledge organiser, ranging from low stakes retrieval testing to using them as a reference material. Children are also given a copy to take home to explore with an adult to supplement learning in school.</p> <p>In addition to this, teachers routinely revisit taught content during lessons, both during introductions, recaps and consolidation sessions in plenaries. Use is made of questioning strategies such as 'no hands up', to test retrieval. Due to the clear mapping of the subject narratives; teachers are also able to look back on prior taught subjects and refer to them when teaching their related year group content. Teachers also use the first lesson of each teaching sequence to do an informal pre-assessment of existing knowledge, to help shape the teaching that will follow. See Teaching and Learning policy (knowledge retrieval)- Dec'2020.</p>
 <p>PROGRESS</p> <p>Each subject, including Science, has a 'skills progression' table, with key thematic skills to be taught progressively at each stage of the learning journey in each discipline. These subject skills are drawn from a recognised national subject authority eg The Historical Association.</p> <p>Progress at the end of each of the stages is recorded simply as 'below', 'at' or 'above' for each child.</p> <p>Subject leaders, as part of the '20 minute monitoring' process, also conduct book scrutinies and have conversations with teachers about progress against the key skill themes for children in each class.</p>	 <p>ENRICHMENT</p> <p>EYFS: Scientists for Antarctica topic, trips to local farms / zoos, use of the outside area for many activities such as: growing, temperature, forces, balance, small world.</p> <p>KS1: TSN kits e.g. healthy eating, mini beasts. Links and visits with UEA Scientists for Antarctica topic, use of 64 School Lane garden, growing bulbs and flowers in school grounds, cooking activities, STEM visits e.g. Mission to Mars buggy building,, recycling construction build day.</p> <p>KS2: TSN kits e.g. rocks & soil, skeleton, sound, microscopes, electricity, forces, habitats etc..</p> <p>EO: Seaside visit: coastal habitats, Bug Hunt (group project on living things and habitats), stargazing evening (telescopes, planetarium, phases of the moon), Norfolk show events (Jelly competition).</p> <p>STEM: Bridge building, F1 Jaguar Challenge, light-up Christmas cards, STEM activity days (whole school).</p>	 <p>VISION FOR CHILDREN</p> <p>Each subject, including Science, has a clear statement of intent for children. These are recorded on both the 'subject narratives' and the 'skills progression' documents for each subject. They were developed through discussion with staff and Governors (including parents) at Little Melton. They are driven by a consideration of being 'skills for life', to equip children with the tools for the next stage in their academic journey, and also for their future lives. We try also, through all of our curriculum offer– including the 'hidden curriculum' of daily informal interactions with children and modelling of attitudes and behaviour, to instill the core values identified as valuable for children growing up in our locality and local context.</p>