

Design and Technology

Subject Information

September 2022

<p>Our Vision (Intent)</p>	<p>We believe that our children should have the aspiration and opportunity to 'Live life in all its fullness' John 10:10 and 'Shine like stars in the sky' Philippians 2:15.</p> <p>Our curriculum is based on a consideration of the contextual needs of our cohorts and families, our local context and government requirements, in addition to curriculum research; this has helped shape our vision and intent.</p> <p>Our curriculum is a journey and never a finished article. It is reviewed at least annually to ensure it is still meeting the needs of our children in an ever changing world.</p> <p>Our aspiration for our children has been framed into our 6 golden threads which we feel our children need to be able to do to 'shine like stars' and 'live life in all its fullness'. This ensures the opportunities for these are always a focus within school, and throughout a child's journey in school. We want our children to:</p> <ul style="list-style-type: none">• Become life-long readers• Be confident communicators• Be spiritually, mentally and physically healthy• Be creative• Be curious• Understand and embrace the wider world
<p>Curriculum Design (Intent)</p>	<ol style="list-style-type: none">1. We always start with the child and their experiences: what they know and is familiar to them. We then move outwards until we reach the wider world and wider world views.2. We always work from knowledge acquisition to application, in carefully sequenced learning journeys which build systematically on previous learning. This ensures both an inclusive and ambitious approach for all our learners.3. We work to a four-year plan in KS2 for Science, Geography, History, Art and DT with concepts in these running over a year, rather than a terms over a series of years: This ensures that our curriculum is systematically, cohesively and robustly planned and delivered to our children in a manner in which helps them to immerse themselves in a subject for deeper learning. (This also negates the effect of the impact of changing class structures). It also allows us to make pertinent links between

	<p>interdisciplinary knowledge across our long term plan to allow the children to frame their learning within a larger concept in order to help them to retain this.</p> <p>4. We work to a two-year plan for PSHE, RE, Computing, French and Music as these disciplines contain more age specific knowledge and skills. Computing, French and PSHE are all delivered across the federation in two-year group structures</p> <p>So that our children know more, remember more and therefore can do more.</p>
Subject specific design	<p>Key principles for our Design and Technology curriculum:</p> <ul style="list-style-type: none"> • Delivered through 6 key areas in KS2 – Cooking and Nutrition, Mechanisms/Mechanical systems, Electrical systems, Digital world, Structures and Textiles. Delivered through 4 key areas in KS1 – Cooking and Nutrition, Mechanisms/mechanical systems, Structures and Textiles. These strands rotate and repeat over a 4-year plan in KS2 and KS1. • The curriculum is designed around the 5 key strands of Design and Technology: Design, Make, Evaluate, Technical Knowledge and Cooking and Nutrition. • The 6 key areas are revisited over a 4 year cycle, with Electrical systems and Digital world beginning in KS2. • Cooking and nutrition covers where food comes from, balanced diet, preparation and cooking skills, Kitchen hygiene and safety and following recipes. • Mechanisms/ Mechanical systems covers then mimic of natural movements using mechanisms such as cams, followers, levers and sliders. • Structures covers the material function and aesthetic properties, strength and stability, stiffening and the reinforcement of structures. • Textiles includes fastening, sewing, decorative and functional fabric techniques including cross stitch, blanket stitch and applique. • Electrical systems (KS2 only) includes operational series circuits, circuit components, circuit diagrams and symbols, combined to create various electrical products. • Digital world (KS2 only) includes programming products to monitor and control, develop designs and virtual models using 2D and 3D CAD software.

<p>Implementation Key Principles</p>	<ul style="list-style-type: none"> • Has clear rationale for mixed age classes • Focuses on the key knowledge – teaching less but better. • Is concept driven not content driven: Prioritises thinking rather than task • Uses high quality materials – fit for purpose • Employs techniques which will deliberately help children transfer learning to long term memory • Is responsive • Puts a high value on the acquisition and understanding of vocabulary • The Kos will be in books and have explicit vocabulary outlined <p>For the detailed breakdown of the above please see CIP.pdf The nine principles of cognitive science – Daniel Willingham</p>
<p>How/When do we assess our children and their progress and attainment?</p>	<p>Unit assessment Pre essential learning assessment. Ongoing AFL Post essential learning assessment at the end of unit (Recorded and reported to SL)</p> <p>Annual assessment End of year assessment of the post essential learning assessment (Recorded and reported to SL)</p>
<p>How do we ensure our children have retained this knowledge? When/how do we revisit?</p>	<p>Sheep tracking x 1 formal revisit at the start of the next term (no recording needed) Informal/incidental sheep tracking/link making at the start of lessons, lining up, etc. (no recording needed)</p>