

# Design Technology at Holdbrook



## *Intent*

The Design and technology scheme of work aims to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others. Through our scheme of work, we aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements.

Our Design and technology scheme of work enables pupils to meet the end of key stage attainment targets in the National curriculum and the aims also align with those in the National curriculum. EYFS (Reception) units provide opportunities for pupils' to work towards the Development matters statements and the Early Learning Goals.

We aim to inspire children and young people to create, experience, and participate in great arts and culture.

## *Implementation*

The Design and technology National curriculum outlines the three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical, and technical understanding required for each strand. Cooking and nutrition\* has a separate section, with a focus on specific principles, skills and techniques in food, including where

## *Impact*

The impact of our scheme can be constantly monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives. Furthermore, each unit has a unit quiz and knowledge catcher which can be used at the start and/ or end of the unit.

After the implementation of our Primary Design and technology

<p>food comes from, diet and seasonality.</p> <p>The National curriculum organises the Design and technology attainment targets under four subheadings: Design, Make, Evaluate, and Technical knowledge. We have taken these subheadings to be our strands:</p> <ul style="list-style-type: none"> <li>● Design</li> <li>● Make</li> <li>● Evaluate</li> <li>● Technical knowledge</li> </ul> <p>Cooking and nutrition is given a particular focus in the National curriculum and we have made this one of our six key areas that pupils revisit throughout their time in primary school:</p> <ul style="list-style-type: none"> <li>● Cooking and nutrition</li> <li>● Mechanisms/ Mechanical systems</li> <li>● Structures</li> <li>● Textiles</li> <li>● Electrical systems (KS2 only)</li> <li>● Digital world (KS2 only)</li> </ul> <p>Each of our key areas follows the design process (design, make and evaluate) and has a particular theme and focus from the technical knowledge or cooking and nutrition section of the curriculum. The Kapow Primary scheme is a spiral curriculum, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build on their previous learning.</p> <p>Lessons incorporate a range of teaching strategies from</p>	<p>scheme, pupils should leave school equipped with a range of skills to enable them to succeed in their secondary education and be innovative and resourceful members of society.</p> <p>The expected impact of following the Design and technology scheme of work is that children will:</p> <ul style="list-style-type: none"> <li>→ Understand the functional and aesthetic properties of a range of materials and resources.</li> <li>→ Understand how to use and combine tools to carry out different processes for shaping, decorating, and manufacturing products.</li> <li>→ Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes, including models, prototypes, CAD, and products to fulfil the needs of users, clients, and scenarios.</li> <li>→ Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.</li> <li>→ Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.</li> <li>→ Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.</li> </ul>
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independent tasks, paired and group work including practical hands-on, computer-based and inventive tasks. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Meet the end of key stage expectations outlined in the National curriculum for Design and technology.
- Meet the end of key stage expectations outlined in the National curriculum for Computing.

### *Assessment*

The impact of our scheme can be constantly monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives. An assessment spreadsheet including the learning outcomes for children with secure understanding and those working at greater depth enables teachers to keep records of summative assessments for each child.

### *Monitoring*

- To oversee curriculum planning and progression within Design and Technology.
- To observe teaching of lessons and where necessary teach example lessons.
- Book looks
- Pupil voice

### *Marking & Feedback*

Physical marking of books is not expected but verbal feedback must be delivered throughout lessons to allow children to develop their skills.

- To support colleagues with the planning, implementation and assessment of Design and Technology.
- To liaise with colleagues about ideas for best practice and areas for improvement.
- To ensure that all resources required for the teaching of Design and Technology are available.
- To monitor and evaluate the progress in Design and Technology.
- To consistently take action to drive improvement in Design and Technology
- To ensure a range of enrichment opportunities are provided to inspire children's learning.

### EYFS

At Holdbrook Primary School we value Art and Design as an important part of the children's entitlement to a broad and balanced curriculum. Art and Design provides the children with the opportunities to develop and extend skills and an opportunity to express their individual interests, thoughts and ideas. Teaching in the Early Years Foundation Stage is underpinned by the Characteristics of Effective Learning. Design and Technology is an inspiring, rigorous and practical subject, requiring creativity, resourcefulness, and imagination. Children learn to take risks, be reflective, innovative, enterprising and resilient. Art, craft and design embody some of the highest forms of human creativity. A high-quality art and design education should engage, inspire and challenge pupils, equipping them with the knowledge and skills to experiment, invent and create their own works of art, craft and design. As pupils progress, they should be able to think critically and

develop a more rigorous understanding of art and design. They should also know how art and design both reflect and shape our history, and contribute to the culture, creativity and wealth of our nation. Pupils explore and use a variety of media, materials and tools readily within the environment. We call this our 'continuous provision'. Staff plan the learning environment carefully to enable children to apply and extend their understanding in a wide variety of meaningful contexts. We call this our 'enhanced provision'. A combination of child initiated and adult directed activities give pupils the opportunities to learn to:

- Use different media and materials to express their own ideas
- Use what they have learnt about media and materials in original ways, thinking about form, function and purpose
- Make plans and construct with a purpose in mind using a variety of resources
- Develop skills to use simple tools and techniques appropriately, effectively and safely
- Select appropriate resources for a product and adapt their work where necessary
- Cook and prepare food adhering to good health and hygiene routines