

## Curriculum Overview High Ham Church of England Primary School

### Curriculum Area: D&T

Our curriculum approach to design and technology reflects our ethos statement:

**'Discovering, Learning, Believing Together'.**

In particular, we are keen for pupils to discover their own passion for design and technology learning.

The name of the current curriculum lead is on the school website on the curriculum page.

#### Intent

All pupils will develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. They will build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. They will critique, evaluate and test their ideas and products and the work of others. All children will understand and apply the principles of nutrition and learn how to cook. All classes will take part in a cooking session once every half term and DT will be involved in our STEM activities that link to the science curriculum.

#### Implementation

All children study DT regularly throughout each term. All children are supported in their understanding through the use of resources and technology. In addition to subject-specific learning, both KS1 and KS2 take part in a specialised cooking session during each half term. Pupils also use a range of craft materials to create an ongoing product in class relating to the termly topic theme.

#### Impact

Children will learn how to plan, make and evaluate a range of different products and recipes. In addition, the children will gain a deeper understanding of the health and safety skills that are needed when working with crafting tools, as well as with food and cooking equipment. They will be able to work safely in a kitchen environment and use tools to create a product.

#### Planning

The school website has links to our yearly overview planning which shows the D&T coverage for each class in KS2 throughout each term. This has been separated into year groups: Year 1, Year 2, Year 3, Year 4, Year 5, Year 6. This helps us to plan and to ensure the lessons are increasing the depth of understanding and range of knowledge throughout the primary years.

#### Knowledge and skills progression through the school

In KS1, DT skills and knowledge will be developed through each phase of learning by building on previous levels of understanding.

#### **In KS1 this will involve pupils:**

- Design purposeful, functional, appealing products for themselves and other users based on design criteria
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics
- Explore and evaluate a range of existing products

- Evaluate their ideas and products against design criteria
- Build structures, exploring how they can be made stronger, stiffer and more stable
- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products

**In KS2 knowledge and skills will be further developed to involve:**

- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities
- Investigate and analyse a range of existing products
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- Understand how key events and individuals in design and technology have helped shape the world
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- Apply their understanding of computing to program, monitor and control their products.

**Recording**

Some DT lessons will be recorded in individual topic books when planning or evaluating is needed. In addition to this, photos will be taken and used as evidence of learning and shared on the class twitter page.

**Assessment**

Ongoing teacher assessment will take place using 'Educater' (our whole school assessment system).

**Reporting**

On our annual reports, which are given to parents at the end of the year, a judgment will be made regarding their child's attainment in Design & Technology relating to the national curriculum for their year group. For example, HNM (Has Not Met), ARE (Are Related Expectations), GD (Greater Depth).

**Monitoring**

#HighHamDT Twitter feed shows some of the children's DT creations along with the learning objectives being taught. The curriculum leader will work alongside their curriculum partner to collate evidence including analysing how planning matches the evidence in books, learning walks, speaking to pupils about their learning and discussing with colleagues what has gone well as well as any lessons learnt. Where relevant the implementation of school policies (such as marking) will be reviewed in light of the well-being school's agenda (aspect of the School Development Plan) to ensure the workload for DT is both manageable and is making an impact on the children's learning.

**Review**

April 2023