



## The Redeemer CEP Design Technology Policy



### **Intent:**

At The Redeemer, we teach Design Technology (DT) with the assumption that many of our pupils will want to pursue a career relevant to the subject in their adult life. Knowing this responsibility, our curriculum offers a variety of units and approaches to inspire every child, while also giving them the required knowledge and skills to flourish in the subject. By the end of their time at our school, we want our pupils to feel confident enough to carry on their DT education into their further education or eventually begin a real-life occupation, should they want to, but above all we aim to build a life-long love of the subject.

### **Implementation:**

In a DT unit, we introduce children to the theory of DT, the history, the appropriate vocabulary and also give them hands on experience of leading their own projects. The units are mapped out to ensure that pupils will encounter each unit once in every phase of school and to enable a broad and balanced curriculum. We have chosen to allocate more time to food preparation as we feel that our children will benefit from building confidence with preparing and handling food, which is a lifelong skill. By contextualising our projects, and referencing key innovators in the past, we strive to show the relevance of DT and the importance it has had and continues to have in our community and the wider world.

DT is taught using use explicit, instructive methods to ensure pupils possess the knowledge to make progress in the subject. Each unit is taught per term and lessons are blocked to create individual DT Weeks. We do this because it aids the development of children's progression in the lessons and is reflective of working on a project when applying DT in a working environment (e.g. building a car, creating a tapestry).

Each DT Week follows the sequence of research-practice–design–make-evaluate to ensure children have the necessary knowledge and confidence when taking part in their project. When carrying out Design and Technology, the children are taught to:

#### Research

- 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

#### Design

- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer-aided design

#### Practise

- practise the relevant skills needed to competently undertake the project – ie. cutting skills, stitches, chopping, peeling, etc.

#### Make

- 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

#### Evaluate

- 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



## Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products
- understand and use electrical systems in their products
- apply their understanding of computing to program, monitor and control their products

Children also complete a DT booklet, which is filled in throughout the week, to accompany their project and help reinforce the sequence of learning. At the end of each unit, children's progress and attainment is assessed by the child's finished product, DT booklets, teacher's formative assessment and Kahoot quizzes. Pictures of children's work will be stored on staff shared overflow for reference and assessment.

The staff team will plan for children to experience creative opportunities and develop key skills and techniques within the EYFS curriculum. Children will be taught to:

- construct with a purpose in mind, using a variety of resources
- use simple tools and techniques competently and appropriately
- build and construct with a wide range of objects, selecting appropriate resources and adapting their work when necessary
- select the tools and techniques they need to shape, assemble and join materials they are using.

In the EYFS, there will be a focus on developing fine motor skills and learning how to plan, design and produce the finished project. Reception classes will be, where appropriate, included in whole school projects, workshops, and events associated with DT.

Children with special educational needs will be differentiated for and supported appropriately, to ensure development of skills and equal access to the DT curriculum.

Each term, the subject leader will monitor the teaching and learning of DT across the school by undertaking learning walks, lesson observations and pupil conferencing to ensure that teaching within the subject is strong and promotes the acquisition of key knowledge, building on prior learning.

### **Impact:**

Our children enjoy and value DT and know why they are doing it, not just how. Progress will be shown through the outcomes and the children will be able to share their work with others and talk confidently about what they know.

We ensure that the children:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- 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 and critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook. Children will design and make a range of products. A good quality finish will be expected in all designs and activities will be made appropriate to the age and ability of the child.

Children learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.