

# **DT PROGRESSION**

# Subject Intent

All children will understand how technology impacts on their daily lives and be inspired to become engineers of the future.

Children will be able to produce a product from the early research and development stages through to the completion and evaluation. They will be solving real world problems through considered design of their projects and will use knowledge gained from other curriculum subjects such as mathematics, science, art, engineering and computing.

# 3 Key Concepts

# **Research and Design**

At each Key stage children should be able to apply a repertoire of knowledge and understanding in order to design and make high quality prototypes and products for a wide range of users. They will confidently apply their design skills to enable them to thrive in an increasingly technological world.

Within cooking children will be able to apply their knowledge of the principles of nutrition to meet their objective.

### Make

At each key stage children should be able to develop the creative, technical and practical skills needed to perform everyday tasks confidently and to participate successfully. They will learn how to take managed risks and become resourceful, innovative, enterprising and capable citizens. Children will make and create a wide variety of products using a range of materials and technical tools. Within cooking children will be able to apply their understanding to learn the skills required to prepare and cook a recipe.

### Evaluate

At each key stage children should be able to continually critique, evaluate and test their ideas, as well as their peers, to inform their next steps. They will learn to work both independently and collaboratively. Children will evaluate past and present design and technological creations and understand how their inventions and those of past designers effect the wider world and impact on their day to day lives.

Within cooking the children will look at the impact certain foods have on their bodies and also the environment in which they were produced.

# Milestones

# Children will learn to design purposeful, functional and appealing products based on design criteria. They will choose materials and explain why they are being used based on their characteristics. Children will understand where food comes from.

**Key Stage One** 

Children will join materials together as part of a moving structure. They will select from a range of tools and equipment and build structures exploring how they can be made stronger, stiffer and more stable. In cooking they will know about the basic principles of a healthy and varied diet in order to prepare dishes.

They will measure, weigh and cut food items.

**Key Stage One** 

In DT and Cooking children will explore and evaluate a range of existing products and dishes whilst evaluating their ideas and own creations against the design criteria.

**Key Stage One** 

# Lower Key Stage Two

Children will investigate and analyse a range of existing products and will plan and demonstrate that their own design meets the requirements of the brief. They will select appropriate equipment for the task. In cooking

Children will select from and use a wider range of tools and equipment to perform practical tasks. They will join, combine and strengthen materials and components accurately in temporary and permanent

In cooking and DT, children will explain and evaluate in order to make a good quality product. They will use the evaluation to improve and strengthen their product and ensure it meets the needs of the user.

children will understand how to be hygienic and safe and know about how nutritious different recipes and food can be and the different ways food can be grown, reared, caught and processed.	ways. In cooking they will read and follow recipes understanding key instructions such as boil, fry etc.	
Upper Key Stage Two	Upper Key Stage Two	Upper Key Stage Two
Children use research, including market, to develop design criteria to inform the plans of innovative, functional and appealing products that are fit for purpose and aimed at particular individuals / groups. They will generate, develop, model and communicate their ideas through a range of mediums and create prototypes.  In cooking, they will understand and apply the principles of a healthy and varied diet that includes appropriate portion sizes and regular meal times. They will taste a range of food items and ingredients to develop their vocabulary and planning process whilst showing an understanding of seasonality.	Children will be able to select and use a wider range of equipment and tools to perform practical tasks accurately to include cutting, shaping, joining and finishing to a high quality. They will select and use a wider range of materials and components to include construction materials, textiles, mechanical electrical systems and ingredients according to their functional properties and aesthetic qualities. Recognising modifications needed, the children will make adaptions to their original designs and they work applying their understanding of how to strengthen, stiffen and reinforce.	In DT and Cooking, Children will investigate and analyse a range of existing products. In all areas of DT they will evaluate a range of products and ideas against their own design criteria and consider the views of others to improve their work. Children will understand how key events and individuals have helped shaped the world.

End of EYFS	Key Stage One	Lower Key Stage Two	Upper Key Stage Two
Scissors Cut Made Make Ingredients Recipe Fold Mix	Axel Joining Lever Rolling Scissors Stitch Strong Turning Wheels Cut Design Join Measure Tools Work Bake Boil Pulley Slider Purpose Function Evaluate Test Research Savoury Sweet	Accuracy Folding Hygiene Measure prepare Mechanics Properties Scoring structure Designer Evaluate Healthy Product Purpose Utensil Bridging	Affordable, Appropriate, Commercial Connections, Desirable, Durable Embroidery, Influence Template Components Features Ingredients, Structural, Technique, Visual, Prototype, Authentic, Seasonality, Nutritional Value, Functional, Enterprising.