

Elsenham C. of E. Primary School

Progression of Skills – DT

	Design	Make	Technical Knowledge	Evaluation and Development	Cooking and Nutrition
Year 1	- Use pictures and words to convey what they want to design or make. - Explore ideas by rearranging materials. - Select pictures to help develop ideas. - Use prototypes e.g. recycled material trial models to test their ideas. - Make designs appealing to themselves and others.	- Select appropriate materials from a limited range to perform practical tasks, e.g. cutting and shaping. - Explain what they are making. - Name the tools they are using.	- Show how to stiffen some materials when building structures. - Understand how to make a simple structure more stable. - Explore how a range of mechanisms work. - Attach wheels to a chassis using an axle.	- Explore existing products and investigate how they have been made (including pre adult-made examples). - Talk about their design as it's developed and identify what is going well and what needs improvement. - Compare their products, and others, against design success criteria.	- Sort food into food groups e.g. fruit and vegetables. - Cut and chop a range of ingredients. - Begin to understand where food comes from and how it is grown or made. - Know about the need for a variety of foods in a diet. - Work safely and hygienically.
Year 2	- Generate, develop, model and communicate their ideas through: ICT, where appropriate. Drawings to record ideas as they are developed. Adding notes to drawings to help explanations. - Propose more than one design idea for their product. - Design functional and appealing products, for themselves and others, which follow success criteria.	- Select and use appropriate materials from a limited range to perform practical tasks, e.g. 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.	- Start to use technical vocabulary. - Understand how a range of mechanisms work. - Use linkages to make movement larger or more varied.	- Decide how existing products do/do not achieve their purpose. - Evaluate their own product against the design success criteria. - Comment on the work of others in the same way.	- Begin to name a wide range of foods. - Cut, peel, grate and chop a range of ingredients. - Refer to the 'Eatwell Plate' (NHS guidance) about a balanced diet. - Understand where food comes from and how it is grown or made. - Work safely and hygienically.
Year 3	- Start to research ideas to help plan designs. - Develop more than one design or adaptation of an initial design.	- Select from a range of tools for cutting, shaping, joining and finishing. - Start to use tools with growing accuracy.	- Use an increasingly appropriate technical vocabulary for tool materials and their properties.	- Investigate similar existing products to the one to be made, to give starting points for a design.	- Begin to understand all of the food groups on the 'Eatwell Plate'. - Begin to follow instructions/recipes.

	- Plan a sequence of actions to help make a product. - Think ahead about the order of their work and decide upon tools and materials. - Propose realistic suggestions as to how they can achieve their design ideas.	- Select from a range of materials according to their functional properties. - Use appropriate finishing techniques.	- Use ICT to control products. - Program, monitor and control their product using ICT. - Stiffen, strengthen and reinforce complex structures.	- Research the needs of user/s of the product. - Decide which design idea to develop based on design strengths. - Consider and explain how the finished product could be improved, and discuss how well the finished product meets the user's design criteria. - Investigate key events and individuals in design and technology.	- Join and combine a range of ingredients to make a dish (focusing on savoury predominantly). - Work safely and hygienically.
Year 4	- Record the planning stages by drawing, using annotated sketches. - Use prototypes to develop and share ideas. - Consider aesthetic qualities of the materials chosen. - Use CAD (computer aided design), where appropriate. - Start to consider who the audience is for the product and what would therefore make it more suitable.	- Prepare pattern pieces as templates for their design. - Select appropriate techniques for the different parts of the process. - Start to introduce a wider range of materials and components.	- Use an increasingly appropriate technical vocabulary for tool materials and their properties. - Use electrical systems such as switches, bulbs and buzzers. - Incorporate a series circuit into a model. - Start to use mechanisms in their products, e.g. levers, sliders, wheels and axles.	- Identify the strengths and weaknesses of their design ideas in relation to purpose or user. - Consider and explain how the finished product could be improved or what worked well. - Investigate key events and individuals in design and technology and the impact they have had in the world.	- Make healthy eating choices and explain why those choices are seen as healthy. - Understand seasonality (with regards to where and how a variety of ingredients are caught, reared, grown and processed). - Prepare and cook using different cooking techniques. - Work safely and hygienically.
Year 5	- Record ideas using annotated diagrams. - Use models, kits and drawings to help formulate design ideas. - Sketch and model alternative ideas. - Decide which design idea to	- Develop one idea in depth and explore the challenges. - Select from, and use, a wide range of tools. - Cut accurately and safely to a marked line. - Select from, and use, a wide range of materials.	- Use the correct vocabulary, appropriate to the project. - Use electrical systems such as motors and switches. - Sew on buttons and make loops.	- Research and evaluate existing products. - Consider the user and purpose of the design. - Consider and explain how the finished product could be improved, referring to the design criteria.	- Join and combine a widening range of ingredients. - Self-select and prepare foods for a particular purpose. - Seasonality: know where and how ingredients are

Subject Progression of Skills (DT)

	develop based on whether it is fit to purpose. - Consider how the product is designed to appeal to particular individuals or groups. - Use exploded diagrams and cross-sectional diagrams to communicate ideas.	- Start to introduce a wider range of materials and components, including construction materials, textiles and ingredients.		- Investigate key events and individuals in design and technology and how they have helped shape the world.	grown and processed, caught and reared. - Understand the best cutting technique dependent on the food. - Work safely and hygienically.
Year 6	- Use research to help develop design criteria. - Use the design criteria to help design innovative, functional and appealing products that are fit for purpose and aimed at a specific target group. - Plan the sequence of work in detail. - Devise step by step plans which can be read or followed by someone else.	- Make prototypes to help explore challenges and design flaws. - Use researched information to inform decisions. - Refine their product: review and rework/improve. - Start to introduce a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.	- Use the correct vocabulary, appropriate to the project. - Use mechanical systems such as cams, pulleys, levers, linkages and gears.	- Identify the strengths and weaknesses of theirs and others' design ideas. - Use correct technical vocabulary. - Discuss how well the finished product meets the design criteria having tested on/discussed outcomes with the user. - Understand how key people have influenced design in a variety of contexts. - Investigate key events and individuals in design and technology and their influence.	- Understand and apply the principles of a healthy and varied diet. - Choose ingredients to support healthy eating choices when designing their food products. - Prepare and cook a variety of mostly savoury dishes, using a range of cooking techniques. - Work safely and hygienically.