FARNSFIELD ST MICHAEL'S C OF E PRIMARY SCHOOL

D&T Knowledge and Skills Progression Document

Key Area	EYFS	Year 1 and 2	Year 3 and 4	Year 5 and 6
Designing	Know how to select appropriate resources when designing.	Know that there are similar existing products relating to what is being made. Know that products serve a purpose. Know how to model and plan own ideas and share these with others – talking, drawing, mock-ups, models, ICT Know how to state what they are making, who they are making it for and why they are making it. Know how their product will work and how it will impact their intended users. Know how to draw upon own experiences and knowledge to create drawings to aid ideas.	Know that a design must meet a range of requirements. Know that a design can be based upon research. Know how to describe the purpose of their products. Know how to indicate the design features of their products that will appeal to intended users. Know how to use computer-aided design, diagrams and annotated sketches to develop and communicate their ideas. Know how to make design decisions that take account of the availability of resources.	Know that design criteria can be developed. Know that a design specification is used to guide thinking. Know how to describe the purpose of their products and indicate the design features of their products that will appeal to intended users. Know how to explain how particular parts of their products work. Know how to carry out research, using surveys, interviews, questionnaires and web-based resources. Know how to identify the needs, wants, preferences and values of particular individuals and groups and develop a simple design specification to guide their thinking.
Making	Know that materials can be joined using tools and techniques.	Know how to select and use tools / equipment to cut, shape, join and finish. Know the purpose for what is being made. Know how to select from a range of materials and components according to characteristics.	Know how to select tools and equipment suitable for the task and explain their choice of tools and equipment in relation to the skills and techniques they will be using. Know how to select materials and components suitable for the task, explain their choice of materials and components according to functional properties and	Know how to use appropriate tools / materials with precision. Know how to select tools and equipment suitable for the task and explain their choice of tools and equipment in relation to the skills and techniques they will be using.

		Know how to measure and mark, cut assemble and join materials and components. Know how to make a final product that is linked to what has been asked.	aesthetic qualities and formulate step-by-step plans as a guide to making. Know how to measure, mark out, cut and shape materials and components and assemble, join and combine materials and components with some accuracy. Know how to use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components.	Know how to explain their choice of materials and components according to functional properties and aesthetic qualities. Know how to tack or attach wadding or stiffening and learn how to start and finish off a row of stitches.
Evaluating	Know how to adapt their work if necessary.	Know how to explore and evaluate a range of existing products. Know how to describe the strengths and weaknesses of products they have made. Know how to talk about ideas and how they could be improved. Know how to make simple judgements about their products and ideas against a design criteria.	Know that a design can be changed to improve it if the product were to be created again. Know how to evaluate existing products. Know how to identify the strengths and areas for development in their ideas and products and consider the views of others, including intended users, to improve their work. Know how to use their design criteria to evaluate their completed products. Know that key events and individuals in design and technology have helped shape the world.	Know how to critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make. Know how to evaluate their ideas and products against their original design specification. Know how to investigate how well products have been designed and made to a criteria. Know how to investigate what impact products have beyond their intended purpose. Know how to investigate how well products meet user needs and wants.
Technical Knowledge	Know that products need to be strong. Know that products move.	Know that using levers creates movement. Know that textiles can be cut and joined to make a product. Know that materials can be measured. Know that using wheels and axles creates movement.	Know how to make cuts and holes accurately. Know that simple linkages creates movement. Know that textiles can be joined in different ways. Know that mistakes can be avoided by measuring carefully. Know that pneumatics can be used to create movement.	Know that products need to be strong and fit for purpose by being precise. Know that we must consider user and aesthetics when choosing and joining textiles. Know that a 3D frame can be reinforced and strengthened. Know how to use cams, pulleys and gears to create movement.

		Know how to build a structure or mechanism using simple working characteristics, materials or components. Know how to make free standing structures and know how they can be made stronger, stiffer and more stable.	Know that there are ways to join textiles in order to make the product strong. Know that materials have both functional properties and aesthetic qualities Know how to use the correct technical vocabulary for the projects they are undertaking.	Know that materials can be combined and mixed to create more useful characteristics. Know that mechanical and electrical systems have an input, process and output and use them in their products. Know how to use the correct technical vocabulary for the projects they are undertaking.
Cooking and nutrition	Know that eating well contributes to good health. Know how to stir, mix and pour ingredients.	Know that food comes from plants or animals. Know that food has to be farmed, grown or caught. Know how to safely cut, peel, spread and grate food and display good hygiene. Know how to talk about the 'Eat well' plate and suggest healthy food swaps. Know how to evaluate existing food products and plan and make a similar food product using relevant tools and equipment.	Know that food is grown in the UK, Europe and wider world. Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens) or caught (fish). Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, and spreading. Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The Eatwell Plate. Know how to plan, prepare and make a savoury food/meal using a range of techniques learnt.	Know that the seasons affect the food available. Know that different preparation techniques are used depending on the food type. Know how to demonstrate a range of cooking techniques- chopping, kneading, grating, mixing, baking etc. (e.g. bread). Know that recipes can be adapted to change appearance, taste, texture and aroma. Know how to create, plan, prepare and cook a healthy and balanced savoury food/meal using a heat source.