

Andover CE Primary – DT Progression of Knowledge and Skills



EYFS	KS1	KS2			
Children at the expected level of development will: • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • Share their creations, explaining the process they have used • Use a range of small tools, including scissors, paint brushes and cutlery.	 When designing and making, pupils should be taught to: Design: 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 Make: 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 Evaluate: explore and evaluate a range of existing products evaluate their ideas and products against design criteria Technical knowledge: 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 Cooking and Nutrition: use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from. 	When designing and making, pupils should be taught to: Design: 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 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 [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 Cooking and nutrition: understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.			

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	learnt about media and materials in original ways, thinking	To develop their own ideas. Explain what they would like to do. To use a combination of pictures and words to plan. To explain what they are making. To know that in Design and technology we call a plan a 'design'.	planning next steps. To describe their design and ideas by using pictures, diagrams and words in the correct order. To design products which meet one design criteria.	To design products which are purposeful, functional and appealing for themselves and others based on design criteria. To generate, develop, model and communicate ideas through drawing, writing and templates.	,	To suggest alternative plans and say what good points and drawbacks are	To use the skills learned previous and a range of information gathered to inform designs. To use research to inform plans which are detailed and follow a clear step-bystep. To follow their own and others plans, refining ideas if necessary. To justify their plan to someone else.
Make	To show good control and coordination in large and small movements. To handle equipment and tools effectively. To select and use technology for particular purposes. To safely use and explore a variety of materials, tools and techniques. To chop and cut play dough safely.		and materials using ideas developed in designing. To join things (materials/components) together in different ways.	To select from and use a range of tools/equipment to perform practical tasks [for example, cutting, shaping, joining and finishing.] To select from and use a wider range of materials and components including construction materials, textiles and ingredients, according to characteristics. To thread needles with greater independence. To tie knots with greater independence. To know that when two edges of fabric have been joined together it is called a seam.	combine materials and processes to design and make products (including in 3D form)	To use a range of tools and equipment with control and care. To keep checking that their design meets the design criteria they have developed.	precisely with control and care.

		To know that drawing a design idea is useful to see how an idea will look.					
Evaluate	To say what they like or dislike about a product given to them or something they have made.	To talk about their own work and things that other people have made. To say what they like or dislike.	To explain what went well with their work. To explain what they would improve, if they were to do it again.	range of existing products similar to those they will design and make	discussing the appearance and functionality. To take time to consider how they could have	To check products for Improvements independently before finishing. To evaluate the appearance and function against design criteria they originally generated.	To test and evaluate final products to determine whether they are fit for purpose. To consider improvements which can be made to products.
Technical	To recognise that a range of technology is used in places such as homes and schools. To know there are a range to different materials that can be used to make a model and that they are all slightly different. To make simple suggestions to fix their junk model. To know that some objects float and others sink.	To make a model stronger if it needs to be. To know and explain which tools they are using.	Use joining, folding or rolling to make products stronger. Incorporate movements into models. To know that different materials have different properties and are therefore suitable for different uses.	techniques to shape and mould. To strengthen products following design and evaluation if needed.	techniques to shape and mould. To attempt to make products stronger following	To use motors and moving parts in models.	To use circuits in products. To understand and use mechanical systems in products (e.g. gears and pulleys.) To use templates to cut shapes from fabrics. To embellish designs using previously learned skills, making effective decisions about the best way to join materials.

To begin to develop food vocabulary using taste, texture and feel. To explore familiar food products (e.g. fruit and vegetables, baking.) To stir, spread, knead or shape a range of food and ingredients. To begin to work hygienically and safely with guidance. To think about the needs for a variety of food in diet. To know that vegetables are grown	a variety of food in a diet. To demonstrate how to prepare simple dishes safely and hygienically, without using a heat source. To demonstrate how to prepare simple dishes safely and hygienically, without using a heat source. To demonstrate how to use techniques such as cutting, peeling and grating. To understand that food comes from plants and animals.	To begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. To know how a healthy diet is made up from a variety and balance of different foods and drinks.	To measure and weigh ingredients appropriately. To understand what to do to be hygienic and safe. To know how to use a range of techniques such as peeling, chopping, slicing, grating and mixing. To know that food is grown, reared and caught in the UK, Europe and the wider world.	spreading, kneading and baking. To explain what times of year particular foods are eaten in. To use appropriate tools and equipment, weighing	To use appropriate tools and equipment, weighing and measuring with scales. To know how to prepare and cook a dish, safely and hygienically, including the use of a heat source. To understand how to use a range of techniques such as peeling, slicing, chopping, grating, mixing, spreading and baking.
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