Campton Academy

Progression of Skills in DT

Key Skills	EYFS	Year 1	Year 2	Year 3	Year 4
Developing, planning and communicating ideas EYFS 22-36 months 30-50 months 40-60 months	Explain what they are making and which materials they are using. Select materials from a limited range that will meet a simple design criterion. E.g shiny Beginning to be interested in and describe the texture of things. Select and name the tools needed to work the materials e.g. using scissors, glue, string and a hole punch. Realises tools can be used for a purpose. Describe simple models or drawings of ideas and intentions. Discuss their work as it progresses.	Begin to draw on their own experience to help generate ideas and research conducted on criteria. Begin to understand the development of existing products: what they are for, how they work, materials used. Start to suggest ideas and explain what they are going to do. Understand how to identify a target group for what they intend to design and make based on design criteria. Begin to develop their ideas through talk and drawings. Make templates and mock ups of their ideas in card and paper or using ICT.	Start to generate ideas by drawing on their own and others people's experiences. Begin to develop their design ideas through discussion, observation, drawing and modelling. Identify a purpose for what they intend to design and make. Understand how to identify a target group for what they intend to design and make based on design criteria. Develop their ideas through talk and drawings and label parts. Make templates and mock ups of their ideas in card and paper or using ICT.	With growing confidence generate ideas for an item, considering its purpose and the user/s. Start to order the main stages of making a product. Identify a purpose and establish criteria for a successful product. Understand how well products have been designed, made what materials have been used and the construction technique. Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products. Start to understand whether products can be recycled or reused. Know to make drawings with labels when designing. When planning explain their choice of materials and components including functions and aesthetics.	Start to generate ideas, considering the purposes for which they are designing – link with Mathematics and Science. Confidently make labelled drawings from different views showing specific features. Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempt fails. Identify the strengths and areas for development in their ideas and products. When planning consider the views of others, including intended users, to improve their work. Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products. When planning explain their choice of materials and components including functions and aesthetics.

Working with tools, equipment, materials and components to make quality products	Start to build structures, joining components together. Joins construction pieces together to build and balance. Uses various construction materials. Beginning to construct, stacking blocks vertically and horizontally Constructs with a purpose in mind, using a variety of resources. Begin to use scissors to cut straight and curved edges and hole punches to punch holes. Realises tools can be used for a purpose. Uses simple tools and techniques competently and appropriately. Explore using basic tools such as a saw or hammer. Explore different joining techniques e.g. tape, masking	Begin to make their design using appropriate techniques. Begin to build structures, exploring how they can be made stronger, stiffer and more stable. With help measure, mark out, cut and shape a range of materials. Explore using scissors and a hole punch safely. Begin to assemble, join and combine materials and components together using a variety of temporary methods e.g glues or masking tape. Begin to use simple finishing techniques to improve the appearance of their product.	Begin to select tools and materials: use correct vocabulary to name and describe them. Build structures, exploring how they can be made stronger, stiffer and more stable. With help, measure cut and score with some accuracy. Learn to use hand tools safely and appropriately. Start to assemble join and combine materials in order to make a product. Start to choose and use appropriate finishing techniques based on own ideas.	Select a wider range of tools and techniques for making their product i.e construction materials and kits, textiles, food ingredients, mechanical components and electrical components. Explain their choice of tools and equipment in relation to the skills and techniques they will be using. Start to understand that mechanical and electrical systems have an input, process and output. Know how simple electrical circuits and components can be used to create functional products. Measure, mark out, cut and score and assemble components with more accuracy. Start to work safely and accurately with a range of simple tools. Start to think about their ideas as they make progress and be willing to change things if this helps them to improve their work.	Select a wider range of tools and techniques for making their product safely. Know how to measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques. Start to join and combine materials and components accurately in temporary and permanent ways. Understand how more complex electrical circuits and components can be used to create functional products. Continue to learn how to program a computer to monitor changes in the environment and control their products. Understand how to reinforce and strengthen a 3D framework. Begin to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.
				to improve their work.	a range of equipment including ICT.

Textiles	Begin to look at joining different fabrics using glue. Experiments to create different textures.	Begin to understand basic sewing skills e.g running stitch. Know how to join a fabric to make a simple product.	Demonstrate how to cut, shape and join a fabric to make a simple product. Use basic sewing skills e.g running stitch and over sewing.	Start to measure, tape or pin, cut and join fabric with some accuracy. Decorate using a range of items (buttons, sequins beads etc)	Understand how to sew using a range of different stitches e.g – running stitch, over sewing, back stitch or fastenings. Demonstrate how to measure, tape or pin, cut and join fabric with some accuracy. Understand and create simple patterns and appropriate decoration techniques e.g applique.
Mechanisms	Look at simple hinges, wheels and axles. Use technical vocabulary when appropriate.	Explore and know about the movement of simple mechanisms (e.g levers, sliders) in their product.	Explore and use mechanisms (e.g wheels and axles) in their product.	Start to understand that mechanical systems such as levers and linkages or pneumatic systems create movement.	Know how mechanical systems such as cams or pulleys or gears create movement.
Evaluating processes and products	Say what they like and do not like about the items they have made and attempt to say why. Begin to talk about their designs as they develop and identify good and bad points. Start to talk about changes made during the making process. Selects appropriate resources and adapts work where necessary. Discuss how their finished products meet their design criteria. (Support given where needed)	Start to evaluate their product by discussing how well it works in relation to the purpose (design criteria) When looking at existing products explain what they like and dislike about the products and why. Begin to evaluate their products as they are developed, identifying strengths and possible changes they might make.	Evaluate their work against their design criteria. Look at a range of existing products explain what they like and dislike about the products and why. Start to evaluate their products as they are developed, identifying strengths and possible changes they might make. With confidence talk about their ideas, saying what they like and dislike about them.	Start to evaluate their product against original design criteria e.g how well it meets its intended purpose. Begin to disassemble and evaluate familiar products and consider the views of others to improve them. Begin to evaluate the key designs of individuals in design and technology and how it has shaped the world.	Evaluate their products by carrying out appropriate tests. Start to evaluate their work both during and at the end of the assignment. Be able to disassemble and evaluate familiar products and consider the views of others to improve them. Evaluate the key designs of individuals in design and technology and how it has shaped the world.

Food and Nutrition Knowledge and Understanding	Understand that some foods are healthy and some foods are unhealthy, and to name some. Understand the importance of washing hands before touching food. Can usually manage washing and drying hands Explore familiar food products e.g fruit and vegetables. Begin to develop food vocabulary using taste, smell, texture and feel. Eats a healthy range of foodstuffs and understands need for variety in food. Shows some understanding that good practices with regard to exercise, eating, sleeping and hygiene can contribute to good health	Begin to understand that all food comes from plants or animals. Explore the understanding that food has to be farmed, grown elsewhere (e.g home) or caught. Start to understand how to name and sort foods into five groups in 'The Eat well plate' Begin to understand that everyone should eat at least five portions of fruit and vegetables every day.	Understand that all food comes from plants or animals. Know that food has to be farmed, grown elsewhere (e.g home) or caught. Understand how to name and sort foods into the five groups in 'The Eatwell Plate' Know that everyone should eat at least five portions of fruit and vegetables every day.	Start to know that food is grown (such as tomatoes, wheat and potatoes) reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world) Start to understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eatwell Plate' Begin to know that to be active a healthy, food and drink are needed to provide energy for the body.	Understand that food is grown (such as tomatoes, wheat and potatoes) reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world) 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 that to be active a healthy, food and drink are needed to provide energy for the body.
Food and Nutrition Practical	Understand some of the tools, techniques and processes involved in food preparation. Practise stirring, mixing, pouring, kneading and blending ingredients during cooking activities. Practices some appropriate safety measures without direct supervision. Measure and weigh food items using no statutory measures e.g cups and spoons	Know how to prepare simple dishes safely and hygienically, without using a heat source. Know how to use techniques such as cutting, peeling and grating (with close supervision) Begin to measure or weigh using measuring cups or electronic scales (where required)	Demonstrate how to prepare simple dishes safely and hygienically, without using a heat source. Demonstrate how to use techniques such as cutting, peeling and grating (with supervision) Measure or weigh using measuring cups or electronic scales (where required)	Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate the use of a heat source (with close supervision) Begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Begin to measure ingredients accurately (where required)	Demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate the use of a heat source (with supervision) Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Follow a recipe. Measure ingredients accurately.