SKILLS PROGRESSION DT

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Deconstruction and context	I can explore how things work. I can explore different materials freely, in order to develop ideas about how to use them and what to make.	I can explore the natural world around.	I can look at examples of designs and share my likes or dislikes. I can talk about existing products considering: use, materials, how they work, audience, where they might be used.	I can talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion. I can use knowledge of existing products to produce my own ideas.	I **understand how well products have been designed and made considering: materials, techniques and skills used.** I can learn about inventors, designers, engineers, chefs and manufacturers who have developed products throughout history.	I can research some of the designers relevant to areas of study to generate ideas for my designs. I can deconstruct existing designs/products, looking at design features and suitability for the intended audience.	I can research and deconstruct existing designs and identify features that have been used, suggesting reasons for these. I can begin to research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.	I can research and deconstruct existing designs and products to identify the technical elements that will be applied to my own design, giving reasons for these. I can research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.
Design, make and evaluate	I can use one-handed tools and equipment, for example, making snips in paper with scissors. I can explore collections of materials with similar and/or different properties. I can develop my own ideas and then decide which materials to use to express them. I can join different materials and explore different textures.	I can develop my fine motor skills so that I can use a range of tools competently, safely and confidently. I can explore, use and refine a variety of artistic effects to express my ideas and feelings. I can return to and build on my previous learning, refining ideas and developing my ability to represent them. I can create collaboratively, share ideas, resources and skills. ELG I can safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. I can share my creations, explaining the process they have used.	I can explain what my product if for and how it will work. I can use drawings, words or models to communicate my design. I can identify and name the tools/equipment to cut, shape, join, finish and explain my choices. I can measure, mark out, cut and shape, with support. I can identify what I like about a product and begin to talk about what could make it better in relation to the intended purpose.	I can design products that have a clear purpose and an intended user, following a design criteria. I can use pictures, annotations, diagrams and models to convey what they want to design and make. I can measure, mark out, cut and shape materials and components, with support. I can choose suitable materials and tools needed and explain my choices depending on characteristics or functions. I can use finishing techniques to make product look good. I can evaluate my work identifying strengths and ways to improve.	I can consider the views and needs of the intended audience in the design process. I can follow a given design criteria. I can create a plan which shows order, equipment and tools. I can communicate designs through annotated diagrams. I can measure, mark out, cut and shape materials/components with some accuracy. I can explain my choices and select suitable materials and components for the task. I can assemble, join and combine materials and components with some accuracy. I can apply a range of finishing techniques with some accuracy. I can evaluate my work in relation to the design criteria.	I can gather information on the requirements of suggested users and develop a design criteria. I can use annotated sketches and diagrams to communicate ideas. I can use model ideas using prototypes and pattern pieces. I can select suitable tools and equipment, explain my choices in relation to required techniques and use accurately. I can select appropriate materials, fit for purpose and explain my choices. I can measure, mark out, cut and shape materials/components with increasing accuracy. I can assemble, join and combine materials and components with increasing accuracy. I can apply a range of finishing techniques with increasing accuracy. I can use design criteria to evaluate strengths and areas for development in order to improve products throughout the design process.	I can generate, develop, model and communicate my ideas through discussion, cross-sectional diagrams or CAD. I can select materials carefully, considering intended use of product and appearance. I can cut materials with precision and refine the finish with appropriate tools. I can confidently assemble, join and combine a range of materials using different techniques including, temporary, fixed or moving joints. I can apply a range of finishing techniques accurately. I can evaluate quality of design during the designing and making process. I can evaluate ideas and finished products against a specification, taking into account the view of others.	I can generate, develop, model and communicate my ideas through discussion, cross-sectional/exploded diagrams or CAD. I can use selected tools and equipment precisely. I can select appropriate materials, fit for purpose, considering functionality and aesthetics and explain my choices. I can cut materials with precision and refine the finish with appropriate tools. I can confidently assemble, join and combine a range of materials using different techniques including, temporary, fixed or moving joints. I can evaluate quality of design during the designing and making process. I can evaluate ideas and finished products against a specification, taking into account the view of others

Food			I can identify where food comes from. I can identify healthy and unhealthy food. I can group familiar food products e.g. fruit and vegetables. I can cut ingredients safely. I can prepare simple dishes-safely and hygienically-without using a heat source.	I understand how food is farmed. I can group foods into the five groups in The Eatwell Plate. I can cut, grate or peel ingredients safely. I can prepare simple dishes-safely and hygienically-without using a heat source.	I know that a healthy diet is made up from a variety of different food and drink, as depicted in The Eatwell Plate. I know about food being grown, reared or caught in the UK or wider world. I can cut materials accurately and safely by selecting appropriate tools. I can prepare and cook some dishes safely and hygienically. I can use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.	I can identify what countries are key producers of different food types. I can use knowledge of The Eatwell Plate to design a balanced and healthy dish. I can prepare ingredients hygienically and using the appropriate utensils. I can refine some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading and baking	I understand ingredients can be fresh, pre-cooked or processed. I know about seasonality of foods. I know that there are different substances in food / drink needed for health. I understand the importance of correct storage and handling of ingredients. I can assemble or cook ingredients, using a heat source safely and hygienically.	I know about some food processing methods. I can describe some of the different substances in food and drink, and how they can affect health. I can create and refine recipes, including ingredients, methods, cooking times and temperatures. I can assemble or cook ingredients, using a heat source safely and hygienically.
Structures		I can make imaginative and complex 'small worlds' with blocks and construction kits.	I can explore how structures can be made stronger, stiffer and more stable.	I can use joining, rolling or folding to make it stronger. I can create a moving vehicle with an axle and wheeler. (Use a range of materials to create models with wheels and axels e.g. glue, tape, dowel and cotton reels.)	I can choose stronger shapes to strengthen my structure. I can strengthen strengthening triangles.	I can strengthen 3d structures with diagonal struts and strengthening triangles. I can use a glue gun with close one to one supervision.	I can strengthen 3d structures with diagonal struts and cross braces.	I can cut strip wood, dowel and square section wood accurately. I can select the most appropriate method to strength 3D structures and frames.
Textiles			I can mark and cut fabric with using given templates. I can use a running stitch.	I can measure and cut fabrics accurately using my own template. I can join fabrics by over sewing. I can decorate my product with buttons, beads, sequins, braids, ribbons.	I can create a simple pattern. I can use join fabric using over sewing or running stitch to fit the intended finish. I can decorate my product by sewing on details such as buttons, beads, sequins, braids, ribbons.	I can join textiles with appropriate stitching. I can select the most appropriate techniques to decorate textiles. I can add decoration to my design using applique. I can use a blanket stitch or over sewing to join two pieces of fabric.	I can create a pattern. I understand the need for a seam allowance. I can decorate textiles appropriately using applique or embroidery. I can use a ladder stitch. I can join fabrics confidently using appropriate stitches confidently.	I can create 3D products using pattern pieces and seam allowance. Join fabrics using over sewing, back stitch, blanket stitch, slip stitch or ladder stitch. Decorate textiles appropriately using applique or embroidery with accuracy.
Mechanisms			I can construct a simple slider with support. I can construct a simple lever with support and create a product with a lever.	I can create a product with wheel and axel mechanism.	I understand how a pulley system work. I can construct a simple pulley system.	I can deconstruct and reconstruct a range of levers and look at the relationship of the pivot point. I can construct a simple pneumatic system with one moving part	I can discuss the relationship between a cam and follower, an off-centre cam, a peg cam, a pear-shaped cam and a snail cam. I can choose and construct the most appropriate can for my product.	I can use my knowledge of mechanisms to create movement and suggest suitability for given product. I can use cams, pulleys and gears to create movement.