

D&T ESSENTIAL SKILLS YEAR 1 – YEAR 6

	Key stage 1 – Essential Skills		Lower key stage 2 – Essential Skills		Upper key stage 2 – Essential skills	
	Expectations		Expectations		Expectations	
Aspect	End of Year 1	End of Year 2	End of Year 3	End of Year 4	End of Year 5	End of Year 6
Planning, Knowledge and evaluation						
Designing	I can draw pictures with labels	I can create detailed drawings of products with labels	I can share ideas explain how designs of products have a purpose	I can collect information from a number of different sources to create designs, sketches, diagrams and labels	I can use various sources to create designs, sketches, cross-sections, diagrams and models	I can develop a criteria for a design aiming at a particular group, creating diagrams, sketches and prototypes
Using ICT to aid design	I can use ICT programs to design- Scratch drawing	I can use ICT programs to design products, including labels	I can use ICT programs to help me produce detailed designs	I can use ICT programs to create alternative designs	I can use CAD and CAM packages to design and explain my ideas	I can use CAD/CAM to design products with moving parts
Working from plans	I can, with my teacher's help, put my ideas into practice.	I can think of ideas and plan out steps	I can make realistic plans, and note down steps, materials and equipment	I can make realistic, step by step plans for products	I can work from my own detailed plans adapting when necessary	I can adapt my work as it progresses
Opinion and influence	I can describe other children's work and say what they like or dislike	I can describe how my work is similar and different to people who design products	I can compare bridge designs and explain why they are similar and different	I can describe the work of a favorite fashion designer	I can research the work of textile artists discussing their aesthetic value	I can research cultural traditions and show their influence on their work
Existing products evaluation	I can describe how a product works, for example, a toy Old and new toys	I can investigate different products	I can identify the parts that make up a modern product	I can explain how a product is useful	I can investigate designs identifying their components and commenting on their cultural impact	I can explain the function of existing products
Evaluation	I can explain strengths and weaknesses in my own work	I can explain how I can improve my design	I can suggest improvements to products	I can identify what worked in my design and what did not	I can test and evaluate products and make adaptations to improve them	I can make changes to a product after I have evaluated it
History and culture	I can put products in the order that they were invented, for example, telephone, car and washing machine	I can describe why it is important to design a product	I can explain how designs have changed over time and their impact on history	I can explain how fashion and fabrics have changed over time and how this has changed products	I can create a timeline of a design and how technology has influenced it	I can describe how an individual has helped shape the world
Making, using and understanding						
Tools	I can choose a tool and explain why I have chosen it	I can use tools safely for cutting and joining	I can select appropriate tools and explain why I have chosen them	I can analyse a range of tools and use them accurately	I can name and select appropriate tools and use them with precision	I can use complex tools with accuracy
Materials	I can, with my teacher's help, choose materials	I can choose the right materials	I can plan the materials I need for a task	I can choose from a range of materials using my	I can select and combine materials with precision	I can choose the correct materials for a task using my

				knowledge of their features		knowledge of their characteristics
Health and safety	I can explain how to keep safe when I am doing a practical activity	I can work safely and make sure that all my equipment is clean	I can follow health and safety rules when I am cooking	I can follow health and safety rules working with materials	I can select appropriate tools for a job and use them safely	I can show how my products consider the user's safety
Repair and maintenance	I can explain how to fix a product	I can cut, measure and shape materials in order to fix my product	I can try different ways to repair objects	I can describe how a product could be improved or made more better for the environment	I can recycle and repair old clothes and tools	I can repair a damaged or faulty object
Textiles	I can cut out shapes from fabrics	I can join fabrics using stitching, glue or tape Arts Weeks	I can create simple patterns with textiles	I can use patterns to create life size clothes	I can create a 3D product	I can combine fabric to create more useful products
Card making	I can fold, tear, roll and cut paper and card	I can create hinges and pop-ups using card Christmas Pop-cards	I can cut slots and create nets using card	I can use more complex pop-ups	I can combine materials with temporary and fixed joints	I can combine materials with moving joints
Cutting	I can cut accurately using scissors	I can cut wood using a saw	I can measure and mark wood (catapults?)	I can cut internal shapes	I can cut a marked line accurately	I can use craft knife, cutting mat and ruler(one to one supervision)
Joining	I can join materials using glue or tape	I can attach features to a vehicle	I can join fabrics using a stitch	I can use glue guns (with my teacher's supervision)	I can use glue guns (with my teacher's supervision)	I can join materials using appropriate methods
Structures	I can build simple structures	I can improve objects I have made, making them stronger	I can create a structure using diagonal struts	I can build prototypes showing that I understand how they could be made stronger	I can build a frame using a range of materials to support a mechanism	I can select the most appropriate materials to support a structure
Mechanisms	I can use wheels, axles, levers and sliders	I can make wheels and axles, levers and sliders	I can create simple gears and pulleys	I can use pulleys and levers	I can use cams or gears on their product	I can select appropriate mechanical materials for specific purpose
Electricity	I can talk about electricity	I can make circuits using lights and buzzers	I can build models using circuits and buzzers	I can build models using a motor	I can build models using switches	I can design products incorporating electrical systems
ICT	I can put in instructions on an iPad	I can put instructions into a chromebook	I can evaluate my own program and improve it	I can create solutions to a problem in a sequenced program	I can control one or more output	I can try out sequence programs and measure the control events
Preparing and cooking food	I can weigh foods using measurements	I can cut , chop and peel ingredients to make dishes from a variety of countries	I can combine ingredients and different cooking techniques	I can measure and weigh ingredients	I can combine ingredients appropriately (for example by kneading and mixing)	I can use appropriate equipment for weighing and measuring

Nutrition	I can talk about the main food groups	I can understand why I need to eat different foods	I can describe what a balanced diet is	I can make healthy choices and explain the reasons for my choices	I can evaluate meals and how they support a healthy diet	I can plan how I can have a healthy diet
Origins of food	I can talk about where some foods come from, for example, oranges and apples	I can explain where the food I eat comes from	I can identify food that comes from the UK and other countries	I can explain how processes preserve food	I can explain what times of the year certain food is in season	I can explain how ingredients were grown and processed