

D&T Essential Skills Y1 to Y6

Strand: Making, using and understanding

Aspect	Key stage 1 - Essential Skills		Lower key stage 2 - Essential Skills		Upper key stage 2 - Essential Skills	
	End of Year 1 expectations Average age 6 years 6 months	End of Year 2 expectations Average age 7 years 6 months	End of Year 3 expectations Average age 8 years 6 months	End of Year 4 expectations Average age 9 years 6 months	End of Year 5 expectations Average age 10 years 6 months	End of Year 6 expectations Average age 11 years 6 months
Tools	Select and explain why they have chosen a particular tool for a task.	Use tools safely for cutting and joining materials and components.	Select the appropriate tools and explain choices.	Analyse the potential of a range of tools and use them with accuracy.	Name and select appropriate tools for a task and use them with precision.	Use more complex tools with increasing accuracy.
Materials	Select and explain their choice of materials, sometimes with help.	Choose appropriate materials and suggest ways of manipulating them to achieve a desired effect.	Plan which materials will be needed for a task and explain why.	Choose from a range of materials, showing an understanding of their different characteristics.	Select and combine materials with precision.	Choose the best materials for a task, showing an understanding of their working characteristics.
Health and safety	Explain how to keep safe during a practical task.	Work safely and hygienically in construction and cooking activities.	Follow health and safety rules for cooking and baking activities.	Follow health and safety rules when working with materials and substances.	Select and name appropriate tools for specific jobs and demonstrate how to use them safely.	Demonstrate how their products take into account the safety of the user.
Repair and maintenance	Explain how they would fix simple products.	Cut, measure, form and shape materials to fix or repair something, explaining objectives.	Try an alternative way of fixing something, if their first attempt isn't successful.	Describe how a product could be made better, stronger or more sustainable.	Recycle, repair and mend old clothes/foods and explain why this is a good idea.	Paint, glue, nail and sand to rejuvenate a damaged, faulty or old object.
Textiles	Cut out shapes from a range of fabrics and papers.	Join fabrics using running stitch, glue, staples, oversewing and tape.	Create a simple pattern for a design.	Use a simple pattern to create a life-sized item of clothing.	Create a 3-D product using a range of materials and sewing techniques.	Combine fabrics to create more useful properties and make a product of high quality, checking for snags and glitches.
Card making	Fold, tear, roll and cut paper and card.	Create simple hinges and pop-ups using card.	Cut slots in card and create nets.	Use more complex pop-ups.	Combine materials with temporary or fixed joints.	Combine materials with moving joints.
Cutting	Cut accurately and safely with scissors.	Cut wood/dowel using a bench hook and hacksaw.	Measure and mark wood/dowel.	Cut internal shapes.	Cut safely and accurately to a marked line.	Use a craft knife, cutting mat and safety ruler with one to one supervision if needed.
Joining	Join appropriately, using glue or tape.	Attach features to a vehicle (e.g. an axle and wheels or a sail and rudder). Join appropriately, with glue and/or tape, for different materials and situations.	Join fabrics using a running stitch.	Use a glue gun with close supervision (one to one).	Use a glue gun with close supervision.	Join materials, using the most appropriate method for the materials or purpose.
Structures	Build simple structures.	Improve structures by making them stronger, stiffer and more stable.	Create a shell or frame structure using diagonal struts to strengthen.	Prototype and build frame and shell structures, showing awareness of how to strengthen, stiffen and reinforce.	Build a framework using a range of materials (e.g. wood, card and corrugated plastic) to support mechanisms.	Select the most appropriate materials and frameworks for different structures, explaining what makes them strong.
Mechanisms	Use wheels, axles, levers and sliders.	Create and use wheels and axles, levers and sliders.	Create and use simple gears, pulleys, cams, levers and linkages.	Use pulleys, levers and linkages in their products.	Use cams or gears in their products.	Select the most appropriate mechanical system for a particular purpose.
Electricity	Identify and talk about products that use electricity to make them work.	Create working circuits to light a bulb or work a buzzer.	Build models, incorporating circuits, with buzzers and bulbs.	Build models incorporating motors.	Build models, incorporating switches to turn on and off.	Design products incorporating the most appropriate electrical systems.
ICT	Input random control instructions to simple devices for an unplanned outcome (e.g. making Robamer move).	Input a sequence of instructions to a device for a planned outcome.	Evaluate their own programme, refine and improve it.	Create a solution to a problem using a control output device that has a sequence of events that activate it.	Monitor and control more than one output, in response to changes.	Develop, try out and refine sequences of instructions to effectively monitor, measure and control events.
Preparing and cooking food	Measure and weigh food items using non-standard measures (e.g. spoons and cups).	Cut, peel, grate and chop a range of ingredients to make dishes from other countries.	Combine a variety of ingredients using a range of cooking techniques.	Measure and weigh ingredients appropriately to prepare and cook a range of savoury dishes.	Combine food ingredients appropriately (e.g. kneading, rubbing in and mixing).	Use appropriate tools and equipment, weighing and measuring with scales.
Nutrition	Identify the main food groups, including fruit and vegetables.	Recognise the need for a variety of foods in a diet.	Describe what a balanced diet is.	Make healthy eating choices and explain why.	Evaluate meals and consider if they contribute towards a balanced diet.	Plan how they can have a healthy/affordable diet.
Origins of food	Identify the source for common foods	Explain where the food they eat comes from (e.g. by referring to countries, counties, animals and plants).	Identify food which comes from the UK and other countries in the world.	Explain some of the processes that foods go through to preserve/make them more appealing.	Explain what times of year particular foods are in season.	Explain how ingredients were grown, reared, caught and processed.