



# Year 6 Design Technology Subject Map



## DRIVER WORDS

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Explore   Create   Make	Design   Generate   Develop	Model   Select   Build	Investigate   Evaluate	Apply our understanding	Deepen our understanding	innovate

		Electrical Systems-Steady Hand Game	Textiles-Waist Coats	Mechanisms-Automata Toys	DESIGN TECHNOLOGY VOCABULARY
SKILLS	<i>Design</i>	1.Designing a steady hand game identifying and naming the components required. 2.Drawing a design from three different perspectives. 3.Generating ideas through sketching and discussion. 4.Modelling ideas through prototypes. 5.Understanding the purpose of products (toys), including what is meant by 'fit for purpose' and 'form over function'.	22.Designing a waistcoat in accordance to a specification linked to set of design criteria. 23.Annotating designs, to explain their decisions.	37.Experimenting with a range of cams, creating a design for an automata toy based on a choice of cam to create a desired movement. 38.Understanding how linkages change the direction of a force. 39.Making things move at the same time. 40.Understanding and drawing cross-sectional diagrams to show the inner-workings of my design.	evaluating, design brief, design criteria, innovative, prototype, user, purpose, function, functional, prototype, <b>design specification</b> ,investigate, innovative, appealing, design brief, planning, annotated sketch, <b>sensory evaluations</b> , user, model, make, <b>mock up</b> , product
	<i>Make</i>	6.Constructing a stable base for a game. 7.Accurately cutting, folding and assembling a net. 8.Decorating the base of the game to a high quality finish. 9.Making and testing a circuit. 10.Incorporating a circuit into a base.	24.Using a template when cutting fabric to ensure they achieve the correct shape. 25.Using pins effectively to secure a template to fabric without creases or bulges. 26.Marking and cutting fabric accurately, in accordance with their design. 27.Sewing a strong running stitch, making small, neat stitches and following the edge. 28.Tying strong knots. 29.Decorating a waistcoat, attaching features (such as appliqué) using thread. 30.Finishing the waistcoat with a secure fastening (such as buttons). 31.Learning different decorative stitches. 32.Sewing accurately with evenly spaced, neat stitches.	41.Measuring, marking and checking the accuracy of the jelutong and dowel pieces required. 42.Measuring, marking and cutting components accurately using a ruler and scissors. 43.Assembling components accurately to make a stable frame. 44.Understanding that for the frame to function effectively the components must be cut accurately and the joints of the frame secured at right angles 45.Selecting appropriate materials based on the materials being joined and the speed at which the glue needs to dry/set.	
	<i>Evaluate</i>	11.Testing own and others finished games, identifying what went well and making suggestions for improvement. 12.Gathering images and information about existing children's toys. 13.Analysing a selection of existing children's toys.	33.Reflecting on their work continually throughout the design, make and evaluate process.	46.Evaluating the work of others and receiving feedback on own work. 47.Applying points of improvement to their toys. 48.Describing changes they would make/do if they were to do the project again.	
KNOWLEDGE	<i>Technical</i>	14.To know that batteries contain acid, which can be dangerous if they leak. 15.To know the names of the components in a basic series circuit, including a buzzer.	34.To understand that it is important to design clothing with the client/ target customer in mind. 35.To know that using a template (or clothing pattern) helps to accurately mark out a design on fabric.	50.To understand that the mechanism in an automata uses a system of cams, axles and followers. 51.To understand that different shaped cams produce different outputs.	
	<i>Additional</i>	16.To know that 'form' means the shape and appearance of an object. 17.To know the difference between 'form' and 'function'. 18.To understand that 'fit for purpose' means that a product works how it should and is easy to use. 19.To know that form over purpose means that a product looks good but does not work very well. 20.To know the importance of 'form follows function' when designing: the product must be designed primarily with the function in mind. 21.To understand the diagram perspectives 'top view', 'side view' and 'back'.	36.To understand the importance of consistently sized stitches.	52.To know that an automata is a hand powered mechanical toy. 53.To know that a cross-sectional diagram shows the inner workings of a product. 54.To understand how to use a bench hook and saw safely. 55.To know that a set square can be used to help mark 90° angles.	