



Design and Technology New Knowledge Progression Document

Working design and technologically (designing and evaluating)

	Reception	Y1	Y2	Y3	Y4	Y5	Y6
Designing	<p>Talk to an adult about what they want to make</p> <p>Choose from a range of materials and stick photos of the chosen materials to create a plan</p>	<p>Talk about what they are going to make with peers</p> <p>Draw a simple diagram</p>	<p>Draw a simple diagram with single word labels</p>	<p>Draw a diagram with annotations</p>	<p>Create an exploded diagram</p>	<p>Create a cross sectional diagram (including from differing angles)</p>	<p>Create computer aided designs</p>
Evaluating	<p>Give opinions on existing products and their own finished piece</p>	<p>Evaluate existing products against a given design criteria</p>	<p>Evaluate own products against given design criteria</p>	<p>Evaluate own and existing products against own design criteria</p>	<p>Evaluate specific component parts of their own products and existing products</p>	<p>Undertake product research and evaluate the results of group feedback</p>	<p>Evaluate how technological advances impact the effectiveness of products</p>

Component 1: Know how to make a product by cutting, joining and finishing (make)

		EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Cooking and Nutrition	Cut	Cut fruits (supervised by an adult), on a chopping board, using a given safety knife	Cut fruits independently Cut raw vegetables with adult support, using given safety knife	Cut fruits and vegetables, independently using bridge hold, choosing the appropriate safety knife			Cut any food using the appropriate safety knives	Cut using a serrated knife
	Join		Mix ingredients in a bowl without spilling	Mix ingredients without spilling, choosing the correct equipment	Cook ingredients for the correct time (from a given recipe) ensuring they do not burn	Adapt a given recipe, from a list of given ingredients e.g. swap blueberries for strawberries in muffin recipe	Choose an appropriate selection of ingredients (from a list of food groups) to create a healthy meal	Create their own balanced meal from a list of given ingredients
	Finish	Present fruits in an appetising way (on a skewer or in a bowl)	Present ingredients in the correct container	Present ingredients in an appropriate container	Remove from cooking tray and present on a plate	Choose correct tray size before baking so finished product is the correct size when baked (leaving space for spreading)	Choose plate or dish to present, arranging food in an appetising way	Decide how different elements will be presented alongside one another Decide if they will need more than one plate or dish

Mechanisms	Cut	Cut along a given straight line	Cut using a range of small snips and long cuts along given straight and zig zagged lines	Cut along given curved lines and lines they have drawn themselves Cut own tape to appropriate length		Cut along templates that they have drawn themselves		
	Join	Use a tape dispenser to join paper or card	Join paper to card using tape (various lengths provided) Use split pins to join moving parts	Use tape to join paper and card	Choose an adhesive to create a fixed or moving pivot (e.g. tape, glue, blue tac or split pins) to join in the linkage	Create linkage with at least 2 moving and 2 fixed pivots	Choose where adhesive should go to join the CAM and not disrupt the flow of the movement	Use a correct choice of glue to join the CAMS
	Finish	Secure all corners	Ensure the moving mechanism is not visible on finished piece	Cut edges neatly	Cover levers with attachments	Ensure multiple moving mechanisms are not visible on finished piece (attachments and decorations to cover levers)	CAM mechanism is hidden	Ensure all CAM joins are neat (no adhesive is visible)

Structures	Cut	Cut along a straight line (card, cardboard, plastic etc)	Cut lines to appropriate lengths and spacing	Choose appropriately from range of scissors to cut and make holes	Score or cut along given lines appropriately to create nets	Score or cut along chosen lines appropriately to create nets	Use a hand saw to cut wood of varying thicknesses	Use a hand saw to cut wood of varying thicknesses at different angles
	Join	Use a glue stick (join paper or card)	Join components of structure without adhesives		Apply PVA glue to selected sections	Select appropriate adhesive for task and outcome	Use a hot glue gun to join given elements of structure	Select appropriate adhesive for task and outcome
	Finish	All materials to be joined securely	Structure to stand without support	Structure to hold a weight without collapse	Hot glue to be neat Structure to withhold shaking movement without collapse	Strengthening corners to be lined up with the edges of the structure	No visible adhesive Electrical components secured	No visible wires and electrical components to be secured without visible adhesives

Textiles	Cut:	Cut paper/wool/ ribbon with scissors	Cut along a line using scissors		Use fabric scissors to cut fabrics		Cut thin fabric with fabric scissors	Cut any material using sharp fabric scissors
	Join		Join fabrics together using staples	Join fabrics together using glue	Use cross stitch to join two pieces of fabric together		Use Blanket stitch to join two edges of materials	
	Finish:	Clearly show the back and forth pattern when weaving with ribbon or wool	Decorate puppet to match design	Applied decorations to be accurately cut.	Use cross stitch and applique to decorate cushion face	Cross stitches to be consistent in shape	Blanket line: stitch lines to be similar length, raw edge to be clear	Embellish: beads, sequins or buttons to be securely attached

Component 2: Know how to use specific techniques (technical understanding)

	EYFS	Y1/Y2	Y3/4	Y5/6
Structures	Create a model using recycled boxes and recycled materials Boats	Use paper, card, modelling clay to make a stable structure Windmills	Use different thicknesses of paper and card to create nets and a structure Castles	Incorporate an electrical circuit into a wooden structure Bridges with lights
Textiles	Threading and weaving using wool/ribbons/paper Bookmarks	Secure fabrics using pins/glue/staples cut and attach decorations Puppets	Use cross stitch to join two pieces of fabric Use cross stitch and applique to decorate Cushions	Use blanket stitches to join two pieces of fabric Use applique or decorative stitching to decorate Stuffed toys
Mechanisms	Attach one piece of card to another to form one hinge movement Lift the flap pictures	Attach one piece of card to another to form a fixed pivot Attach one piece of card to another with two adhesive points to create a horizontal or vertical moving part Making a moving story book	Join one or more levers to produce a linkage Levers and linkages	Use premade CAMS to produce movements in different directions CAMS
Cooking and nutrition	Cut and taste a range of different fruits and vegetables Fruit kebabs	Cut, mix (without spilling) and taste ingredients to create a new smoothie Smoothies	Cut, mix, cook and taste ingredients to create one product Following a recipe	Combine ingredients to create a healthy, balanced meal Developing a recipe