Design and Technology Progression of Skills and Knowledge

ASHFIELD	Year 3	Year 4	Year 5	Year 6	
	Continuous Key Skills Research, design make and evaluate products. To safely use equipment with increasing skill and accuracy. Understand more about food, having a healthy diet and learning about where foods come from.				
Structures / Making	To open 'make code' online software To write a simple code for your microbit To download the code to your microbit To test out your microbit To design a name badge that incorporates a microbit electronic display To follow a design and produce an electronic name badge using a microbit electronic display.	To identify electrical products. To know what conductors and insulators are. To know that a battery contains stored electricity and can be used to power products. To identify the features of a torch. To say what is good and bad about different torches. To factor in who the product is for in the design criteria. To design a torch which satisfies both the design and success criteria. To make a working circuit with a switch. To use appropriate equipment to cut and attach materials. To assemble a torch according to the design criteria. To test a torch to evaluate its success.	Identify arch and beam bridges. To identify stronger and weaker structures. To identify suspension and truss bridges. To use triangles to create truss bridges and test them. To understand how triangles can be used to enforce bridges. To measure and mark wood accurately. To select appropriate tools and equipment for particular tasks. To use saws safely to create parts for a bridge. To identify points of weakness and reinforce them as necessary. To evaluate the overall success of a bridge and improve it if necessary.	Taking inspiration for their own interests, children design different faces of a cube (or another prism). Using A2 Paper then Card, children draw out their prism net, before cutting out the template. Using dowels, the children construct the frame of their prism net. Children construct their prism (using a glue gun) and stick on their net. Children are free to then add their designs to the Memory Box.	
Food Technology	To know the basic rules of food contamination. To consider hygiene when preparing food. To use cooking equipment safely.	To know how to cook food safely. To cook a recipe, adapting it to create a new biscuit prototype. To design a biscuit to sell for a given amount.	Learn how beef, the main ingredient of a Bolognese sauce, is farmed. Understand key welfare issues surrounding the rearing of cattle.	Research a recipe for the course that they will be making; either a pepper starter, salmon main or pineapple dessert.	

	To evaluate a product to consider, taste, smell, texture, appearance,	decide a healthier alternative.	Prepare and make a salmon main course. Prepare and make a pineapple dessert.
	packaging and target audience.		Produce recipe pages for the dishes they have created. Evaluate their food designs
To thread a needle. To sew cross stich. To use stiches to join fabrics. To learn applique technique. To reflect on techniques used. To design a cushions To use a paper template To cut fabric accurately To evaluate the end result.	To make a paper template. To use a blanket stitch to join two pieces of fabric. To create strong and secure stitches. To use applique to attach pieces of fabric decoration. To use stitches to decorate fabric. To cut neatly and accurately.	To create strong and secure stitches. (Blanket, running, cross stitch). To use applique to attach pieces of fabric decoration. To use stitches to decorate fabric. To use blanket stitch to join two pieces of fabric ensuring no holes or gaps.	Using a template, pupils mark the outline of their waistcoat panels on fabric before cutting and pinning it. Pupils sew the panels of their waistcoats together using a simple running stich. To evaluate the end result.
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