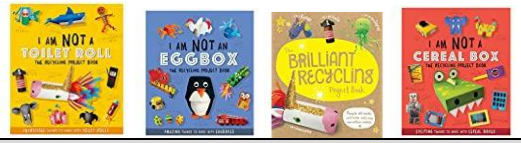
DT overview of units

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS						
EYFS	**Food**		**Structures**		**Textiles**	
	Preparing fruit and vegetables		**Freestanding structures**		**Templates and joining**	
	Making Vegetable Soup Skills: peeling, chopping. (Linked to harvest time)		STEM-Creating our own houses and structures. Testing out everyday materials. Skills: assemble, join (Linked to Once upon a time topic)		Creating a rainbow fish: using different joining techniques including sewing. **Skills:** glue, staple, running stitch, hole punch, thread. (Linked to under the sea topic)	
	Other Relating activities **Summer 1- Electrical Systems** Bee-Bot Programming and algorithm- tinkering (Stem link- All things big and small topic) **Spring 1- Mechanical Systems: STEM-** (Family session Making a balloon powered boat			**EYFS children have access to junk modelling and creative station all year round.** **These books are to support and enhance learning in this area:** 			
Key Stage 1						
Year 1	**Food**		**Textiles**		**Mechanisms**	
	Preparing fruit and vegetables		**Templates and joining**		**Wheels and axles**	
	Creating a seasonal fruit salad*(what is available at this time of the year e.g plums, apples, pears, blackberries etc)* for a teddy bears picnic **Skills:** slicing, juicing, peeling.		Puppets *(Link in with text for English/science topic on animals and humans)* **Skills:** running stitch, pin		Creating a vehicle for Mrs Armitage. *(link to English text)* (Use TinkerCAD for 3D design and prototyping the body/chase) Introduce Microbit so that each of the vehicles has a design come on at the front? **Skills:** assemble, cut, join, shape	
Year 2	**Structures**		**Mechanisms**		**Food**	
	Freestanding structures		**Sliders and levers**		**Preparing fruits and vegetables**	
	Creating a cathedral (Use TinkerCAD for 3D design and prototyping different structures) **Skills:** join, cut, fix		Easter themed card with sliders		Healthy salad (vegetables and fruits) e.g Tomatoes, beetroot (grated). Carrots (grated), cucumber, lettuce, rocket etc. (children to grow from seed ingredients to put into their salad.- Different lettuce types, cherry tomatoes, herbs, rocket etc)	

		Skills: slider, lever, fixed and loose pivot, bridge/guide, slot simple mechanisms (straight line, backwards , forwards , round and round, in a curve)	**Skills:** cutting, slicing, grating, using the oven hob, measuring (liquid).
Key Stage 2			
Year 3 *(Art unit on textiles will recap running stitch in preparation for textiles stitching next year in DT)*	**Mechanical systems**	**Food**	**Structures**
	Pneumatics	**Healthy and varied diet**	**CAD Shell Structures**
	Moving Monsters **Skills:** pneumatics using syringes. Input and output, 2 or 3 way connector.\	Sandwiches/ Wraps **Skills:** cutting grating, spreading	Pyramids (Use TechSoft to create 2D shell and add design onto it) **Skills:** create a CAD net, cut, score, attach/join/assemble
Year 4 *Control & CAD*	**Textiles**	**Electrical Systems**	**Food**
	2D shape to 3D product	**Simple circuits and switches** **Simple programming and control.(crumble taught in Computing)**	**Healthy and varied diet**
	Pencil cases **Skills:** Back stitch, backwards running stitch. Over sew stitch, blanket stitch, running stitch. **Added Fastening: button**	Nightlight/lighthouse - Introduce crumble to the children. Red fern. https://redfernelectronics.co.uk/projects/sparkle-nightlight-project/ **Skills:** series circuit, switch, fault connection, simple programming and control: input, output, loop control: input, output, loop	Healthy muffin/snack bar **Skills:** grating, spreading, cutting, mixing, baking, weighing, pouring, mashing, using an oven
	Food	**Electrical Systems**	**Textiles**
	Celebrating culture and seasonality	**More complex switches** **And Monitoring and Control**	**CAD- Combining different fabric shapes**

<table>
<tr><td rowspan="2">Year 5
Control and CAD</td><td>Breads from around the world-Making bread

Skills: shaping(braiding, French stick shape etc), mix, weigh, prove(dough), using an oven,</td><td>Scanner bot- Use crumble kits for this.
https://redfernelectronics.co.uk/projects/scanner-bot-project/

Skills: series circuit, parallel circuit more complex programming: input, output, loops</td><td>Gadget case/ holder
(xbox/ps controller, tablet, holder for an item on a bike etc)
(Use TechSoft to create the templates that the children will use to create and cut there material)
Skills: French knot, running stitch, blanket stitch, stem stitch, back stitch.</td></tr>
<tr><td colspan="3"></td></tr>
<tr><td rowspan="3">Year 6
CAD and Control</td><td>Food</td><td colspan="2">Structures and Mechanical systems
Electrical Systems</td></tr>
<tr><td>Celebrating culture and seasonality</td><td colspan="2">Frame structures Pulleys and gears Monitoring and Control</td></tr>
<tr><td>Pizza (toppings to represent other cultures/ different diets [vegan, vegetarian, pescatarian])

(bring in a slice for your buddy)
Skills: press, cut, mix, slice, dice, weigh, mix, prove(dough), shape, blend (using a blender), using an oven.</td><td colspan="2">Fairground rides- Include crumble for lighting into this.

Use tinker CAD to design fair ground rides.
Add in crumble elements to the fair ground rides- Sparkle lights which flash as it moves around.

Skills: measure, saw, join, reinforce, shape, understanding triangulation, mechanical system- gears and pulleys</td></tr>
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