CRST Primary Curriculum

Design and Technology Long - Term Sequence			
EYFS Foundational Knowledge: • **Range of materials** • **Tools and fixings** • **Discussion and evaluation**		**Substantive Concepts and Disciplinary Knowledge:** • **Generating design ideas.** • **Developing knowledge of materials and techniques of working with them.** • **Evaluating products and processes.**	
	Autumn	**Spring**	**Summer**
Nursery	**Explore and Make** Children explore different materials and begin to build, join and create using simple tools and fixings safely.	**Choose and Create** Children choose from different materials and tools to make models and structures. They begin to explain what they have used and why, including chairs and musical instruments.	**Make and Talk About It** Children use what they have learned to make their own creations. They talk about what they have made, how they made it and what they like about it.
Reception	**Explore, Design and Make** Children develop their own ideas through drawing, experimenting and making, including making houses and bridges. They choose suitable materials, tools and fixings with increasing independence.	**Choose and Make for a Purpose** Children make for a purpose, choosing appropriate materials, tools and ways of joining, including simple sewing. They explain their choices and as they work. They design and make vehicles that move.	**Evaluate and Improve** Children with increasing independence, explain the materials and processes they have used to make a toy from 'junk'. They reflect on what worked well, returning to their ideas and make improvements.
Year 1	**Mechanisms** Sliders and levers How can you make a picture move? **Freestanding structures** How can you stop a tower from toppling over?	**Food and Nutrition** Exploring food senses. How does food affect your senses? **Understanding Materials** Selecting materials - Can you build with bread?	**Textiles** Joining techniques - How can two squares of fabric keep you warm? **Food and Nutrition** Vitamins in food - Why are vegetables the best?
Year 2	**Textiles**	**Mechanisms**	**Food and Nutrition**

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	Exploring shape using a template How can you repurpose an item of clothing? **Food and Nutrition** Nutrients and the body. What does healthy mean?	Axles and wheels - Are bigger wheels always better? **Understanding Materials** Manipulating materials How can you waterproof a hat?	Processed food - How healthy is your food? **Textiles** How can two squares of fabric keep you warm?
Year 3	**Textiles** Stiffening and strengthening fabric How can you make a box out of cloth? **Food and Nutrition** Individual diets - What do we mean by a balanced diet?	**Mechanisms** Levers and linkages – mechanical advantage How can you do a lot of work with little effort? **Food and Nutrition** Food as medicine - How does food affect your body and mind?	**Systems** How things are powered. **Structures** Spanning gaps - What makes a bridge strong?
Year 4	**Food and Nutrition** Ultra-processed food. What's really in your food? **Mechanisms** Hinges – How many ways are there to open a door?	**Textiles** Fixings and fastenings - How do you keep a tea towel from slipping off a hook? **Structures** Designing structures using a frame to make them stronger and sturdier. Which shapes will give a structure stability?	**Electrical Systems** Switches and circuits revisited How useful are switches? **Food and Nutrition** Benefits of fresh food. Is cheap food always worse for you?