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.	**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.	**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 threading. They explain their choices and as they work, they design and make own models.	**Evaluate and Improve** Children with increasing independence, explain the materials and processes they have used to make an object 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?

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Year 2	**Textiles** Exploring shape using a template How can you repurpose an item of clothing? **Food and Nutrition** Nutrients and the body. What does healthy mean?	**Mechanisms** Axles and wheels - Are bigger wheels always better? **Understanding Materials** Manipulating materials How can you waterproof a hat?	**Food and Nutrition** Processed food - How healthy is your food? **Structures** How strong is a piece of paper?
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	**Textiles** Fixings and fastenings - How do you keep a tea towel from slipping off a hook? **Food and Nutrition** Ultra-processed food. What's really in your food?	**Structures** Designing structures using a frame to make them stronger and sturdier. Which shapes will give a structure stability? **Food and Nutrition** Benefits of fresh food. Is cheap food always worse for you?	**Electrical Systems** Switches and circuits revisited How useful are switches? **Mechanisms** Hinges – How many ways are there to open a door?