DT Curriculum Overview

Technical Knowledge: Cooking Structures Mechanisms
Textiles Gears and mechanical systems Electrical systems Program, monitor and control

CRADLEY CE PRIMARY SCHOOL	Class 1	Class 2	Class 3 and 4	Class 5
Autumn A	• ***Me & My Community*** ***Data & thinking*** - Technological toys need instructions to achieve an outcome. ***Structures****: Skill* - Construct simple structures and models using a range of materials. ***Paper, fabric, metal and plastic****: Skill* - Cut, tear, fold and stick a range of papers and fabrics. ***Mechanisms & movement*** – Vehicles and machines have wheels and axles to help them move. ***Malleable materials****: Skill* - Manipulate malleable materials into a variety of shapes and forms using their hands and other simple tools.	[Remarkable Recipes] - Sources of food; Kitchen tools; Reading recipes; Hygiene rules; Making a school meal	Through the ages [Cook Well, Eatwell] - Food groups; Eatwell guide; Methods of cooking; Cooking appliances; Hygiene rules; Making taco fillings	[Food for Life] - Whole foods; Processed foods; Making healthy meals; Hygiene and safety

	• ***Exploring Autumn*** ***Structures****: Skill* - Construct simple structures and models using a range of materials. ***Generation of ideas****: Skill* - Create collaboratively, share ideas and use a variety of resources to make products inspired by existing products, stories or their own ideas, interests or experiences. • ***Once Upon a Time*** ***Structures****: Skill* - Construct simple structures and models using a range of materials. A bridge is a structure that allows people and vehicles to cross over an open space. ***Generation of ideas****: Skill* - Create collaboratively, share ideas and use a variety of resources to make products inspired by existing products, stories or their own ideas, interests or experiences. ***Paper, fabric, metal and plastic****: Skill* - Cut,			

	tear, fold and stick a range of papers and fabrics. ***Mechanisms & movement**: Skill* - Explore, build and play with a range of resources and construction kits with wheels and axles. ***Malleable materials**: Skill* - Manipulate malleable materials into a variety of shapes and forms using their hands and other simple tools. ***Materials for purpose**: Skill* - Select appropriate materials when constructing and making.			
Spring A	• ***Starry Night*** ***Data & thinking –*** Floor robots will only move in the direction they are programmed to go in. Technological toys need instructions to achieve an outcome. ***Structures**: Skill* - Construct simple structures and models using a range of materials.	[Beach Hut] - Structures – strengthening and joining	Rocks relics and rumbles Making It Move] - Cam mechanisms; Designing and making automaton toys; Cutting, joining, strengthening and finishing	[Engineer] - Significant engineers and bridges; Features of bridges; Strengthening techniques; Iterative design; Building prototypes. [Electrical Circuits and Components] - Sensors and monitoring; Designing and making home devices; Incorporating programming and circuits in products

	Mechanisms & movement**: Skill -* Explore, build and play with a range of resources and construction kits with wheels and axles. • ***Dangerous Dinosaurs **Investigation –** There are different ways to join materials together. **Data and thinking –** Technological toys need instructions to achieve an outcome. ***Puddles and Rainbows*** **Evaluation**: Skill - Adapt and refine their work as they are constructing and making. Share their creations with others, explaining their intentions and the techniques and tools they used.			
Summer A		[Cut, Stitch and Join] - Everyday fabric products; Significant designer – Cath Kidston; Sewing patterns; Running stitch; Adding embellishments; Designing and making a bag tag. [Push and Pull] - Machines and mechanisms; Sliders,	Beautiful Botanicals] - Weaving on a loom. [Greenhouse] - Features of greenhouses; Significant designers – Sir Joseph Paxton and Sir Nicholas Grimshaw; Strengthening techniques; Using tools and safety rules;	[Make Do and Mend] - Investigating clothing; Sewing – running stitch, whip stitch and blanket stitch; Repairing clothes; Making products from recycled materials

		levers and linkages; Designing and making greetings cards with moving parts	Properties of materials; Constructing strong frameworks	
Autumn B		[Shade and Shelter] - Investigating existing products; Designing and making shelters and dens; Prototypes; Safety rules; Materials. [Funny Faces and Fabulous Features] - Stitching to join materials; Embellishing	Invasion - [Fresh Food, Good Food] - Food preservation techniques; Exploring food packaging; Prototypes; Designing, making and packaging healthy snacks	-
Spring B			Mountain climbing equipment. [Functional and Fancy Fabrics] - Fabrics; Design features; Significant designer – William Morris; Stitching a hem; Embellishment; Designing and making patterned and embellished fabrics	-
Summer B		TAXI! Mechanisms – wheels, axles and chassis	Ancient Civilisations - [Tomb Builders] - Simple and compound machines. [Electrical Circuits and Conductors] - Making switches; Programmable technologies; Programming a micro:bit; Designing and making a nightlight; Incorporating programming and circuits in products	-

Autumn C			Moving Mechanisms - Pneumatic systems; Joining and finishing; Iterative design process; Building pneumatic machine prototypes	-
Spring C			Seasonality. Eat the Seasons - Cooking; Nutrition	-
Summer C			Architecture - Architecture over time; Greek architecture; Structural support, stiffness and stability; Computer-aided design; Building design. Mixed Media - Fabric and mixed media collage; Stitching and embellishment	-