D.T LONG TERM PLAN

YEAR GROUP	AUTUMN	SPRING	SUMMER
1	**Cooking and Nutrition** – Smoothies (5 lessons) Omit L 3 & 4	**Textile** – Research and design a puppet (4 lessons)	**Structures** – Stable structures (5 lessons) **Mechanisms** – Moving book story
2	**Mechanism** – Fairground wheel	**Cooking and nutrition** – a balanced diet **Structure** – Baby Bear's chair	**Textiles** – Pouches (3 lessons) **Mechanisms:** Making a moving monster 4)
3	**Structure** – Constructing a castle (4 lessons, omit 1) **Textile** – Cross stitch and applique	**Mechanism** – Pneumatic toys (4 lessons, omit 1)	**Cooking and nutrition** – Seasonal cooking
4	**Cooking and nutrition** – adapting a recipe	– **Mechanical systems** – sling shot car (4 lessons) **Textiles** – Fastenings (3 lessons)	**Structures** – Pavilions (4 lessons) **Electrical systems** – torches (4 lessons)
5	**Cooking and nutrition:** Developing a recipe (4 lessons) **Mechanical systems:** Making pop-up book (4 lessons)	**Electrical systems:** Doodlers (4 lessons)	**Digital World:** Monitoring devices (4 lessons) **Structures:** bridges (4 lessons)
6	**Electrical Systems:** Steady hand game (4 lessons) **Structure:** Playgrounds (omit lesson 4)3	**Digital world:** navigating the world 5	**Cooking and nutrition:** Come dine with me (4 lessons)

KS1

YEAR GROUP	Autumn	Spring	SUMMER
1	**Skill focus:** Food and nutrition **Work produced:** Lesson 1 – Identifying food Lesson 2 – Identify where plants grow Lesson 3 – Taste and compare Lesson 4 – Make a smoothie	**Skill focus:** Textiles **Work produced:** Lesson 1 – Joining fabrics Lesson 2 – Designing a puppet Lesson 3 – Join fabrics accurately Lesson 4 – Decorating a puppet	**Skill focus:** Construction **Work produced:** Lesson 1 – Include preferences for design Lesson 2 – Make a stable structure Lesson 3 – Assemble comp **Skill focus:** Mechanisms **Work produced:** Lesson 1 – Exploring mechanisms Lesson 2 – Designing a moving storybook Lesson 3 – Constructing a moving picture Lesson 4 – Evaluation of finished product
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2	**Skill focus:** Mechanisms **Work produced:** Lesson 1 Design a fairground wheel Lesson 2 – Plan your structure Lesson 3 – Building frame and wheels Lesson 4 – Surveying design options Lesson 5 – Adding pods and decorations	**Skill focus:** Food and nutrition **Work produced:** Lesson 1 – Recognising food groups Lesson 2 – Identify a balanced diet Lesson 3 – Preparing ingredients Lesson 4 – Taste test Lesson 5 – Creating and evaluating wraps **Skill focus:** Structure **Work produced:** Lesson 1 – Exploring stability Lesson 2 – Strengthen materials Lesson 3 – Make a structure according to design criteria Lesson 4 – Fixing and testing a product	**Skill focus:** Mechanisms **Work produced:** Lesson 1 – Understand how objects move Lesson 2 – Make linkages Lesson 3 – Exploring design options Lesson 4 – Make a moving monster **Skill focus:** Textiles **Work produced** Lesson 1 – To sew a running stitch Lesson 2 – Using a template Lesson 3 – Joining fabrics Lesson 4 – Decorate a pouch

KS2

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3	**Skill focus:** Structure **Work produced:** Lesson 1 - Recognising features of a castle Lesson 2 - Designing a castle Lesson 3 - To construct 3D nets Lesson 4 - Building a castle **Skill focus:** Textile **Work produced:** Lesson 1 - Learn how to cross stitch Lesson 2 - Develop and use a template Lesson 3 - Assemble fabric parts Lesson 4 - Decorate fabric	**Skill focus:** Mechanisms **Work produced:** Lesson 1 - Understanding pneumatics Lesson 2 - Design a toy Lesson 3 - Create a pneumatic system Lesson 4 - Decorate and assemble a toy	**Skill focus:** Food and nutrition **Work produced:** Lesson 1 - Knowing how climate affects food growth Lesson 2 - Advantages of eating local food Lesson 3 - Creating a seasonal recipe Lesson 4 - Making tarts
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4	**Skill focus:** Food and nutrition **Work produced:** Lesson 1 - Tasting biscuits Lesson 2 - Prepare and cook biscuits Lesson 3 - Selecting ingredients following a budget Lesson 4 - Take inspiration from existing products Lesson 5 - Make and test a prototype biscuit Lesson 6 - Evaluate biscuits	**Skill focus:** Textiles **Work produced:** Lesson 1 - **Skill focus:** Mechanical systems **Work produced:** Lesson 1 - To build a car chassis Lesson 2 - Design a shape that reduces air resistance Lesson 3 - Making the car body Lesson 4 - Assemble and test car	**Skill focus:** Structures **Work produced:** Lesson 1 - Exploring frame structures Lesson 2 - Designing a pavilion Lesson 3 - Build a frame Lesson 4 - Adding cladding **Skill focus:** Electrical systems **Work produced:** Lesson 1 - Learning about electrical items Lesson 2 - Analyse and evaluate electrical products

			Lesson 3 – Design a torch Lesson 4 – Assemble and design a torch
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5	**Skill focus:** Food and nutrition **Work produced:** Lesson 1 – Understand how ingredients are reared Lesson 2 – Making adaptions to a recipe Lesson 3 – To evaluate nutritional content Lesson 4 – Practice food preparation Lesson 5 – Design product label Lesson 6 – Make Bolognese **Skill focus:** Mechanical systems **Work produced:** Lesson 1 – Design a pop-up book Lesson 2 – Follow a design brief Lesson 3 – Using layers and spacers Lesson 4 Writing and illustrating	**Skill focus:** Electrical systems **Work produced:** Lesson 1 – Understanding how motors are used Lesson 2 – Investigating existing products Lesson 3 – Develop a unique product based from research Lesson 4 – Develop a DIY kit	**Skill focus:** Structure **Work produced:** Lesson 1 – To learn how to reinforce a beam Lesson 2 – To build a spaghetti truss bridge Lesson 3 – Build a wooden truss bridge Lesson 4 – To complete, reinforce and evaluate a bridge **Skill focus:** Digital world **Work produced:** Lesson 1 – Carry out research Lesson 2 – Write a programme Lesson 3 – To generate new and unique micro bits Lesson 4 – To learn about and practice 3D CAD
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6	**Skill focus:** Structure **Work produced:** Lesson 1 – Design a new playground Lesson 2 – To build a range of structures Lesson 3 – To improve and add detail Lesson 4 – To create a surrounding landscape **Skill focus:** Electrical systems	**Skill focus:** Mechanical systems **Work produced:** Lesson 1 – To create design criteria to meet users' needs Lesson 2 – To use an exploded diagram Lesson 3 – To explore mechanisms Lesson 4 – To evaluate a completed design **Skill focus:** Digital world	**Skill focus:** Food and nutrition **Work produced:** Lesson 1 – To explain the use of complementary flavours Lesson 2 – To research and design a three-course meal Lesson 3 – To explain three recipe choices Lesson 4/5/6 – To apply culinary skills and knowledge

	Work produced: Lesson 1 – Research and analyse a range of children's toys. Lesson 2 – Design a steady hand game Lesson 3 – To construct a stable base Lesson 4 – To assemble electronics and complete an electric game	Work produced: Lesson 1 – Write a design brief Lesson 2 – Write a programme Lesson 3 – To develop a sustainable product design Lesson 4 – To develop 3D CAD skills Lesson 5 – To develop a pitch to sell	