

## DESIGN & TECHNOLOGY

**INTENT** – Luddenden CE School is committed to providing an environment which promotes creativity and innovation. We aim to inspire children through a broad range of practical experiences to create innovative designs based on real and relevant contexts. Each unit encourages children to identify problems, critically evaluate existing products and then take risks and innovate when designing their own products. Core values in Design and Technology are curiosity, endurance, compassion and courage.

**IMPLEMENTATION:** The [Kapow](#) scheme of work will for the core Design & Technology curriculum. Children are given the opportunity across every year group to design, plan, make & evaluate through practical lessons. They will practise skills, utilise prior knowledge and be introduced to new ideas as they move through school. Cooking skills and understanding of nutrition are also developed in every year group.

**IMPACT:** Children build on their wealth of skills and understanding, now and in the future. Children show competences in improving their resilience and perseverance by continually evaluating and improving their work. Children develop gross and fine motor skills impacting positively on muscle development and coordination.

	Autumn	Spring		Summer
Nursery	<b>Painting &amp; Drawing</b>	<b>Colour &amp; Texture</b>		<b>Cutting, joining &amp; assembling</b>
Reception	<b>Structures - Junk Modelling</b> Lesson 1- Exploring junk modelling Lesson 2- Cutting and scissor skills Lesson 3- Choosing resources Lesson 4- Making models	<b>Structures - Boats</b> Lesson 1- Waterproof materials Lesson 2- Floating and sinking Lesson 3- Comparing boats Lesson 4- Investigating boats Lesson 5- Designing boats Lesson 6- Creating and testing boats		<b>Making Smoothies</b> Lesson 1- Fruits Lesson 2- Growing Lesson 3- Cutting and Juicing Lesson 4- Testing Ingredients Lesson 5- Making smoothies Lesson 6- Evaluating
Year 1	<b>Design &amp; make a puppet</b> Lesson 1- Joining fabrics Lesson 2- Designing my puppet Lesson 3- Making and joining my puppet Lesson 4- Decorating my puppet	<b>Design a moving vehicle with wheels</b> Lesson 1- How do wheels move? Lesson 2- Fixing broken wheels Lesson 3- Designing a vehicle Lesson 4- Wacky races		<b>Making Smoothies</b> Lesson 1- Fruits Lesson 2- Growing Lesson 3- Cutting and Juicing Lesson 4- Testing Ingredients Lesson 5- Making smoothies Lesson 6- Evaluating
Year 2/3 Cycle A	<b>Design &amp; make a pouch</b> Lesson 1- Running Stitch Lesson 2- Using a template Lesson 3- Making a pouch Lesson 4- Decorating a pouch	<b>Mechanisms - Fairground wheel</b> Lesson 1- Design a fairground wheel Lesson 2- Planning the build Lesson 3- Building the frame and wheels Lesson 4- Surveying design options Lesson 5- Adding pods and decoration		<b>Making a wrap</b> Lesson 1- Food groups Lesson 2- Balanced meals Lesson 3- Preparing Ingredients Lesson 4- Taste testing ingredients Lesson 5- Planning recipes Lesson 6- Creating and evaluating wraps
Year 2/3 Cycle B	<b>Making a moving monster</b> Lesson 1- Pivots, levers and linkages Lesson 2- Making linkages Lesson 3- Designing my monster Lesson 4- Making my monster	<b>Eating Seasonally</b> Lesson 1- Food around the world Lesson 2- Seasonal food Lesson 3- Cutting and peeling Lesson 4- Tasting seasonal ingredients Lesson 5- Making a mock up Lesson 6- Evaluating seasonal tarts		<b>Making a castle</b> Lesson 1- Features of a castle Lesson 2- Designing a castle Lesson 3- Nets and structures Lesson 4- Building a castle
Year 4/5 Cycle A		<b>Mechanical Cars</b> Lesson 1- Prototype One: Inclined plane Lesson 2- Prototype Two: Slingshot car Lesson 3- Prototype Three: Wind up car Lesson 4- Mechanical toy car kit: Designing Lesson 5- Mechanical toy car kit: Making and Evaluating	<b>Adapting a Recipe</b> Lesson 1- Existing Biscuits Lesson 2- Basic Biscuits Lesson 3- Budgeting Lesson 4- Packaging Lesson 5- Market Research Lesson 6- Evaluating biscuits	<b>Electric Poster</b> Lesson 1- Information Design Lesson 2- Topic Research Lesson 3- Design Development Lesson 4- Electric poster assembly
Year 4/5 Cycle B		<b>Structures - Bridges</b> Lesson 1- Arch and Beam Bridges Lesson 2- Spaghetti Truss Bridges Lesson 3- Building Bridges Lesson 4- Finalising Bridges	<b>Developing a Recipe</b> Lesson 1- From farm to fork Lesson 2- Different Choices Lesson 3- Nutritional Value Lesson 4- Preparing Ingredients Lesson 5- Designing Labels Lesson 6- Making Bolognese	<b>Textiles - Fastenings</b> Lesson 1- Evaluating fastenings Lesson 2- Designing my book sleeve Lesson 3- Paper mock up and preparing fabric Lesson 4- Assembling my book sleeve
Year 6	<b>Textiles – Stuffed Toys</b> Lesson 1- Designing a stuffed toy Lesson 2- Blanket stitch Lesson 3- Details & appendages Lesson 4- Stuffed toy assembly	<b>Nutrition - Come Dine with me</b> Lesson 1- Complimentary Flavours Lesson 2- Three ingredients, three courses Lesson 3- Ingredients and Skills Lesson 4- To start.... Lesson 5- The main course Lesson 6- Dessert		<b>Steady hand game</b> Lesson 1- Developing through play Lesson 2- Game Plan Lesson 3- Base building Lesson 4- Electronics and Assembly