St Leo's and Southmead Catholic Nursery and Primary School

Design and Technology Progression of Skills

	Year 1 Paper toy Lighthouse Keeper's plate Playground equipment	Year 2 Puppets Moon buggy Sandwiches	Year 3 Cushion Jewellery box Moving monster	Year 4 Kite Alarmed lunchbox Pizza	Year 5 Bread Bridges Cams	Year 6 Lights Soft toy Shelter to storm
Design	Cut lines accurately Cut out shapes accurately Talk about how paper toys have been made Cut and fold paper accurately Think of some ideas on their own Explain what they want to do Talk with others about how they want to construct the product Make simple plans before making objects, e.g. drawings, arranging pieces	To observe closely and record from first hand observations To ask and answer questions as a starting point for their own work To use a template to mark out designs upon fabrics To design a moon buggy based upon a design criteria To choose appropriate materials and tools from a wide range available needed to construct a moon buggy	Generate ideas for products Use annotated sketches to show ideas Evaluate their design To design a monster including a moving pneumatic system	To look at kite designs to influence their own design To explain the strength of different shaped kites To plan their design.	Research products to inform the design of their own innovative product Produce step by step plans to guide the making of the product Draw up a specification for their design. Planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail.	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams,

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	of construction before building Decide which tools and equipment would be helpful for making their plate Investigate a range of actual items of playground equipment with pictures and labels Create a simple plan for a playground	To design a sandwich based upon a design criteria				prototypes, pattern pieces and computer-aided design
Make	To develop cutting skills Use scissors safely Use their designing and cutting skills to make a moving toy Challenge- make an illusion toy	To use sewing as a joining technique To mark out, cut and attach materials to construct a moon buggy To use wheels and axels within their moon buggy	Select appropriate tools and techniques Follow safety procedures Assemble/ join materials Use a range of techniques to shape and mould	To select different materials to make a kite To use equipment to make a kite To measure and cut the materials to produce a kite Apply techniques he/she has learnt to strengthen	Make careful and precise measurements Select appropriate materials, tools and techniques. Measure and mark out accurately. Use skills in	Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. Select from and

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	Select appropriate resources and tools for their building projects Carefully and correctly use different tools and equipment when working with clay Challenge- plate shapes that aren't round Join components together and combine them with other materials e.g. card, reclaimed materials, doweling and string Successfully construct a realistic model of an item of playground equipment and	To choose appropriate materials and tools from a wide range available needed to make a sandwich To use a wide range of cookery techniques to prepare food safely	To make a monster with a moving pneumatic part	structures and explore his/her own ideas To build a circuit to enable the alarm to work. To measure and cut the materials to produce a lunch box. To make their pizza using ingredients and utensils appropriately	different tools and equipment safely and accurately. Cut and join with accuracy to ensure a good quality finish to the product. Weigh and measure accurately.	use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

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	assemble their model with accuracy following instructions or plans Use a wide range of materials and construction techniques Challenge- have incorporated some type of movement into their model ie wheels or axles					
Evaluate	Evaluate what they have made Evaluate their own and other's work Identified what is and what is not working well with their model	To evaluate finished pieces To evaluate designs and moon buggies/sandwiches created, describing likes and dislikes and areas for improvement	Evaluate their design Evaluate a finished product	To plan their design, evaluate and suggest ways to improve it To evaluate the final creation and test it	Evaluate their product and how it could have been strengthened Evaluate the product against the original specification	Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to improve their

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						work Understand how key events and individuals in design and technology have helped shape the world.
Technical Knowledge				To understand how a kite flies- the force of the wind 'lift'- pushes the kite up	Understand how a cam mechanism creates movement and how the shape can alter this movement	Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors) Use accurate skills to problem solve during the making process