



Westgate Primary School

Design Technology key knowledge Overview

YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
<p><u>Design and evaluate</u></p> <ul style="list-style-type: none"> -Generate ideas based on a simple criteria. -Know the names of different materials e.g. fabric, wood, card, paper. -Use drawings to record ideas. -Say how own products meet the design criteria. 	<p><u>Design and evaluate</u></p> <ul style="list-style-type: none"> -Say how existing products are made. -select own materials from a limited range. -Add notes to drawings to help explain. -say how existing products do or do not achieve their purpose. -Say how you will make something using simple terms e.g. first, next, then. 	<p><u>Design and evaluate</u></p> <ul style="list-style-type: none"> -Develop more than one design or adaptation. -Plan a sequence of actions to make a product. -Consider aesthetic qualities when choosing materials. -record plan using annotated sketches. -select from a range of tools. -create design criteria. 	<p><u>Design and evaluate</u></p> <ul style="list-style-type: none"> -Begin to use cross sectional exploded diagrams. -Use CAD where appropriate. -Develop prototypes to share and test ideas. -research the needs of the user. 	<p><u>Design and evaluate</u></p> <ul style="list-style-type: none"> -Research existing products using internet, books etc. Use this to influence decisions. -Plan sequence of work. E.g. Using a story board. 	<p><u>Design and evaluate</u></p> <ul style="list-style-type: none"> -Use a computer to model ideas. -Understand how key people have influenced design. -Develop an idea in depth.
<p><u>Textiles</u></p> <ul style="list-style-type: none"> -Know how to cut, shape and join paper, card and fabric, using tape, glue and pins. -Cut out shapes created with a template. -decorate fabric with detail such as ribbons, sequins beads etc. -colour fabric using techniques such as fabric pens, paints and printing. 		<p><u>Textiles</u></p> <ul style="list-style-type: none"> -Know how to strengthen and stiffen fabric. -Use a paper template for pattern. -Use running stitch and over sewing techniques. - Know how to attach buttons etc. 		<p><u>Textiles</u></p> <ul style="list-style-type: none"> -Know how to pin and tac fabric together. -Create 3d project using pattern pieces and seam allowance. -Use over sew, back stitch and blanket stitch. -Understand a pattern layout. -Know that components should be decorated before assembly. 	

<p><u>Mechanisms</u></p> <ul style="list-style-type: none"> -Understand that different mechanisms produce different types of movement. -Know how to make simple mechanisms including flaps, sliders and levers. -insert paper fasteners to card. -Use a hole punch. -Fold, tear and cut paper and card. -Cut along lines, straight and curved. 	<p><u>Mechanisms</u></p> <ul style="list-style-type: none"> -Know different axel fittings and their strengths and weaknesses. -How to attach wheels to a chassis using an axle. -Cut dowell using a hacksaw and bench hook. 		<p><u>Mechanisms</u></p> <ul style="list-style-type: none"> -Know different ways of making levers and linkages and how they can change movement or make then bigger. -Use card or lolly sticks etc to make levers and linkages. 	<p><u>Mechanisms</u></p> <ul style="list-style-type: none"> -A pulley can be used with a motor to power a vehicle. -How a pulley works. 	
	<p><u>Structures</u></p> <ul style="list-style-type: none"> -Know that a structure can be made stronger and know some ways to strengthen a material. -Use a template to cut materials 	<p><u>Structures</u></p> <ul style="list-style-type: none"> Strengthen frames using a diagonal strut. Strengthen frame by making base wider. 			<p><u>Structures</u></p> <ul style="list-style-type: none"> -stiffen and reinforce complex structures. -drill loose and tight holes using hand drill. -cut dowel using a hacksaw to the nearest mm.
			<p><u>Electrical systems</u></p> <ul style="list-style-type: none"> -Know how to incorporate buzzers, bulbs, switches etc into a system. -Know how to use ICT to control a product. 		<p><u>Electrical systems</u></p> <ul style="list-style-type: none"> -Programme, monitor and control using ICT.
<p><u>Food</u></p> <ul style="list-style-type: none"> -Know that they should wash hands, tie hair back, wear an apron and wipe down work surface before preparing food. -Understand the idea of healthy and not healthy foods. 	<p><u>Food</u></p> <ul style="list-style-type: none"> -Know the different sections of the Eat Well plate and start to understand the idea of a balanced meal. -Know that food should be stored appropriately and put away e.g. in the 	<p><u>Food</u></p> <ul style="list-style-type: none"> -Make healthy choices using the Eat Well plate. -Develop sensory vocabulary for a range of foods. -Join and combine a range of food ingredients. 	<p><u>Food</u></p> <ul style="list-style-type: none"> -Start to understand seasonality of fruit and vegetables. -Say which countries/ continents fruits and vegetables are grown. -Develop understanding of how meat and fish are 	<p><u>Food</u></p> <ul style="list-style-type: none"> -Select and prepare food for a particular purpose. Select foods based on seasonality. -Understand the importance of cross contamination and how to avoid this e.g. Washing 	<p><u>Food</u></p> <ul style="list-style-type: none"> -Use a range of cooking techniques including -Consider the influence of chefs e.g. Jamie Oliver, Gordon Ramsey. -Know the nutritional value of foods.

<p>-Know how to use a bridge hold for chopping hard ingredients using a knife.</p>	<p>fridge. -Know to clean equipment in warm soapy water and to throw away food that has been dropped on the floor. -Explain where food comes from e.g. plants, animals.</p>	<p>-Follow instructions/ recipes.</p>	<p>reared and caught. -Know that some foods have use by dates and life depends on the type of product.</p>	<p>hands after using raw meat, using different chopping boards etc. -weigh and measure using scales. Know where and how ingredients are grown and processed.</p>	
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