

St Anne's C of E Primary School Curriculum Plan

Subject: Design and Technology

Year: 1

Term: Autumn



Unit: Moving Story Book (Mechanisms)



Vocabulary	Knowledge	Understanding	Skills
	What children will know	What children will understand	What children will be able to do
<p>assemble – to fix all parts together.</p> <p>design – to make, draw or write plans for something.</p> <p>design criteria – a set of rules to help you with your ideas and test their success.</p> <p>evaluation – when you look at the good and bad points of something and how to improve it.</p> <p>mechanism – a system of parts all working together.</p> <p>model – a smaller practice version to let you test your idea and see how it will look and work.</p> <p>sliders – something that can move from side to side or up and down.</p>	<p>That a mechanism is the parts of an object that move together.</p> <p>That a slider mechanism has a slider, slots, guides and an object.</p> <p>That bridges and guides are bits of card that purposefully restrict the movement of the slider.</p>	<p>Technical</p> <p>That in Design and technology we call a plan a 'design'.</p> <p>That a slider mechanism moves an object from side to side.</p> <p>Why bridges and guides are important in slider mechanisms.</p> <p>Why design criteria are important to help evaluate a product.</p>	<p>Design</p> <p>Explain how to adapt mechanisms, using bridges or guides to control the movement.</p> <p>Design a moving story book for a given audience.</p> <p>Make</p> <p>Follow a design to create moving models that use levers and sliders.</p> <p>Evaluate</p> <p>Evaluate pre-existing products to inform their own design.</p> <p>Test a finished product, seeing whether it moves as planned and if not, explaining why and how it can be fixed.</p>

<p>stencil – a shape which you can draw around.</p> <p>target audience – a person or particular group of people who the product is aimed at.</p> <p>template – a stencil to help you draw a shape more easily onto different materials.</p> <p>test – to find out whether something works as it should.</p>			<p>Review the success of a product by testing it with its intended audience.</p>
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St Anne's C of E Primary School Curriculum Plan

Subject: Design and Technology

Year: 1

Term: Spring



Unit: Constructing a Windmill (Structures)



Vocabulary	Knowledge	Understanding	Skills
	What children will know	What children will understand	What children will be able to do
<p>design – to make, draw or write plans for something.</p> <p>client – the person you are designing something for.</p> <p>design criteria – a set of rules to help you with your ideas and test their success.</p> <p>evaluation – when you look at the good and bad points of something and how to improve it.</p> <p>net – a flat 2D shape that can become a 3D shape when assembled.</p> <p>stable – an object that doesn't easily topple over.</p> <p>strong – something that doesn't break easily.</p>	<p>That a structure is something that has been made and put together.</p> <p>That a client is the person I am designing for.</p> <p>That design criteria is a list of points to ensure the product meets the clients needs and wants.</p> <p>That a windmill harnesses the power of wind for a purpose like grinding grain, pumping water or generating electricity.</p> <p>That windmill turbines use wind to turn and make the machines inside work.</p> <p>That a windmill is a structure with sails that are moved by the wind.</p>	<p>Technical</p> <p>That the shape of materials can be changed to improve the strength and stiffness of structures.</p> <p>That cylinders are a strong type of structure (e.g. the main shape used for windmills and lighthouses).</p> <p>That axles are used in structures and mechanisms to make parts turn in a circle.</p> <p>That different structures are used for different purposes.</p> <p>That windmills use the power of wind to fulfil different purposes.</p> <p>That design criteria are used as goals when creating a finished product.</p>	<p>Design</p> <p>Show why a set of a clear design criteria are important.</p> <p>Include individual preferences and requirements in a design.</p> <p>Make</p> <p>Make stable structures from card, tape and glue.</p> <p>Learn how to turn 2D nets into 3D structures.</p> <p>Follow instructions to cut and assemble the supporting structure of a windmill.</p> <p>Make functioning turbines and axles which are assembled into a main supporting structure.</p>

<p>weak – something that breaks easily.</p> <p>structure – something that has been made and put together.</p> <p>test – to find out if something works the way it should.</p> <p>windmill – a structure with sails that are moved by the wind.</p> <p>windmill axle – the point from which the turbine or sails move.</p> <p>windmill structure – the part that makes the windmill stand up.</p> <p>windmill turbine – the parts that move in the wind.</p>	<p>The three main parts of a windmill are the turbine, axle and structure.</p>		<p>Evaluate</p> <p>Evaluate pre-existing products to inform their own design.</p> <p>Evaluate a windmill according to the design criteria, testing whether the structure is strong and stable and altering it if it isn't.</p> <p>Suggest points for improvements.</p>
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St Anne's C of E Primary School Curriculum Plan

Subject: Design and Technology

Year: 1

Term: Summer



Unit: Smoothies (Cooking and Nutrition)



Vocabulary	Knowledge	Understanding	Skills
	What children will know	What children will understand	What children will be able to do
<p>cut - To use a knife to make something smaller.</p> <p>fruit – the part of a plant that has seeds in it.</p> <p>ingredients – the foods needed to make a recipe.</p> <p>juice – to get the juice out of a fruit or vegetable.</p> <p>juicer – something used to get juice from a fruit.</p> <p>leaf – the flat green part of a plant that grows from a branch or stem.</p> <p>root – part of a plant that takes water and other things from the soil.</p> <p>seed – new plants grow from it.</p>	<p>That a blender is a machine which mixes ingredients together into a smooth liquid.</p> <p>That a fruit has seeds.</p> <p>That fruits grow on trees or vines.</p> <p>That vegetables can grow either above or below ground.</p> <p>That a vegetable is any edible part of a plant (e.g. roots: potatoes, leaves: lettuce, fruit: cucumber).</p>	<p>Technical How machines can be used in food preparation.</p> <p>The difference between fruits and vegetables.</p> <p>Where food comes from.</p> <p>The basic principles of a healthy and varied diet.</p> <p>Why fruits and vegetables are important to our health.</p> <p>The need for good hygiene when handling food.</p> <p>How to keep safe when chopping fruits and vegetables.</p>	<p>Design Design smoothie carton packaging by-hand.</p> <p>Make Chop fruit and vegetables safely to make a smoothie.</p> <p>Juice fruits safely to make a smoothie.</p> <p>Evaluate Evaluate pre-existing products to inform their own design.</p> <p>Taste and evaluate different food combinations.</p> <p>Describe appearance, smell and taste.</p>

<p>stem – the long, thin part of a plant that holds it up.</p> <p>table knife – a tool used for cutting.</p> <p>vegetable – any part of a plant that you can eat.</p>			<p>Suggest information to be included on packaging.</p> <p>Compare their own smoothie with someone else's.</p>
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