

Bincombe Valley Primary School



Design & Technology Medium Term Plans: KS1

Years 1 and 2 Units		Golden Threads
Structures: Construct a windmill Textiles: Puppets Cooking and nutrition: Smoothies	Structures: Baby Bear's chair Mechanisms: Fairground Wheel Mechanisms: Making a moving Monster	Design Make Evaluate Technical knowledge

Composites	Enquiry Theme	Components	Golden Threads Links	Assessment. Pupils who are secure in their learning will be able to
Structures	Constructing a windmill	1. I can include individual preferences and requirements in my design 2. I know how to make a stable structure 3. I can assemble the components of my structure 4. I know how to evaluate my project and adapt my design Link to lesson prompts and vocabulary: https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-1/archived-unit-structures-constructing-a-windmill/		1. Understand the purpose and structure of a windmill and the importance of a clear design. 2. Understand what a net is. 3. Following instructions to cut and assemble

				structure of windmill. - Understand that axels are used in structures to make parts turn in circle. - Evaluate and Test windmill against criteria.
Textiles	Puppets	- I know how to join fabrics together using different methods. - I can use a template to create my design. - I can join two fabrics together accurately - I know how to embellish my design using joining methods - I can evaluate my puppet to see where I could improve the design. Link to lesson prompts and vocabulary: https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-1/textiles-puppets/	Design: Use a range of existing designs to look at how they are made. Design on the recording sheets, thinking about purpose, user and each stage of the process. Make: Using taught techniques, carefully	- Join fabric by pinning, stapling or gluing depending on the purpose of join. - Design a template and use it to cut out a puppet. - Align two pieces of fabric together with a join so I can fit my hand in it. - Use joining methods to decorate my puppet.

			construct each project	5. Evaluate the puppets against a criteria.
Cooking and Nutrition	Smoothies	1. I can identify fruits 2. I can describe where fruits and vegetables grow. 3. I can practise food preparation skills. 4. I know how to select ingredients for a recipe. 5. I know how to apply food preparation skills to a recipe. 6. I can valuate against the design brief. Link to lesson prompts and vocabulary: https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-1/cooking-and-nutrition-smoothies/	How could I improve on the design? Technical knowledge: Did I use my knowledge of techniques and design to the best effect? What new techniques, tools or vocabulary do I now know how to use?	1. Child can name fruits and vegetables and identify seeds. 2. Name places where they grow and make predictions about where edible parts are. 3. Use fork and knife to cut soft foods and juicer to get juice from fruits working safely and following instructions. 4. Describe food's taste and chose three ingredients to create a recipe.

Structures	Baby Bear's chair	1. I can explore the concept and features of structures and the stability of different shapes. 2. I understand that the shape of the structure affects its strength. 3. I can make a structure according to my own design criteria 4. I can produce a finished structure and evaluate its strength, stiffness and stability. Link to lesson prompts and vocabulary: https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-2/structures-baby-bears-chair/
Mechanisms	Fairground Wheel	1. I can explore wheel mechanisms and design a fairground wheel.

5. Compare smoothies in the class using design brief 6. Create a carton design.
1. Identify natural and man-made structures. 2. Understand stability and which shapes make an object more stable. 3. Understand how to fold paper to make it stronger and stiffer. 4. Create joints and structures from paper, card and tape. 5. Evaluate structure for strength, stiffness and stability.

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| | <ol style="list-style-type: none">2. I know how to select materials with appropriate qualities3. I know how to build and test a moving wheel.4. I can conduct a simple survey to gather opinions.5. I can construct and evaluate a mechanism with a spinning wheel. <p>Link to lesson prompts and vocabulary:
https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-2/new-mechanisms-fairground-wheel/</p> | <ol style="list-style-type: none">1. Describe how axles help wheels move a vehicle and design and label a working fairground wheel.2. Evaluate different designs.3. Describe the properties of different materials and select appropriate materials for the wheel.4. Build a stable structure, test elements of the design and adapt the design as necessary.5. Make the wheel rotate, evaluate a wheel |
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			mechanism and adapt it as necessary. 6. Recall that a survey is used to find out what people like, tally results and use the results to inform the design. 7. Add pods for the correct number of people and ensure that the pods stay upright when rotating around a fixed point. 8. Explain the decisions for the pod design.
Mechanisms	Making a moving monster	1. I can look at a range of objects and understand how they move. 2. I can explore different design options. 3. I can use my knowledge of moving parts to help to design my own moving monster.	1. Identify the correct terms for levers, linkages and pivots.

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| | <p>4. I can evaluate my design to see how to make suggestions on how to improve it</p> <p>Link to lesson prompts and vocabulary:
https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-2/mechanisms-making-a-moving-monster/</p> | <ol style="list-style-type: none">2. Analyse popular toys with the correct terminology.3. Create functional linkages that produce the desired input and output motions.4. Design monsters suitable for children, which satisfy most of the design criteria.5. Evaluate their two designs against the design criteria, using this information and the feedback of their peers to choose their best design.6. Select and assemble |
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			materials to create their planned monster features. 7. Assemble the monster to their linkages without affecting their functionality.
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