



MEDIUM TERM PLANNING

Subject	Topic/Key Question	Year Group	Term	Time Allocation
Design and Technology	Flying Kites	2	Spring 1	6 hours
End of Key Stage 1 outcomes	<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</p> <p>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p> <p>Explore and evaluate a range of existing products.</p> <p>Evaluate their ideas and products against design criteria</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their Products</p>			
End of Units outcomes	<p>Mechanical systems</p> <p>I can make a mechanism for a kite.</p> <p>I can follow a design to make a kite based on original designs.</p> <p>I can investigate how materials can be used to make weather proof kites.</p> <p>I can create a design.</p> <p>I can follow a design to make a kite.</p>			

	I can evaluate a finished product.	
Vocabulary	Design	Design, Move, pictures,
	Make	Ideas, make, moves, choose, resources, tools, structure, construct.
	Evaluate	Describe, explain, working well, not working we..
	Technical Textiles, Mechanisms, Materials	Make, stronger, glue, cut, move, mechanisms, scissors, sliders.

Lesson Sequence	Time Allocation	Key Question/WALT	Teaching Activities	Resources
Technical knowledge Lesson 11	1 hours	To explore the history of different kites and what they look like.	<p>Do you know what a kite is? Have you flown one? What do they look like?</p> <ul style="list-style-type: none"> • Show an image of Sam flying a kite to remind children what kites are. • What do you think kites are used for? Explain to children that kites have been around for many years and for many different reasons. • Explain to children it is believed that China invented kites and explain why. • Go through the slides detailing the reasons other countries used kites and what those kites look like: Korea, Japan, India, Malaysia, America and Europe. • Discuss these kites with the children and look at the shapes, colours, and how it was made. 	<p>Plan Bee Lesson 1 Slides</p> <p>Resources</p> <p>Picture Cards</p> <p>Kite Template A and B</p> <p>Task Cards</p> <p>Guatemalan Kite Pictures (for FSD? activity only)</p> <p>Guatemalan Kite Task Card (for FSD? activity only)</p>

			<ul style="list-style-type: none"> • Show images of these kites: diamond, sleds, cellulars, rokkakus, deltas, para foils, inflatables, carp, stunt and novelty and discuss what children see. <p>Activity</p> <p>Provide children with Kite Template A and B. Children are to design their own traditional kites using the kite templates.</p> <p>Each kite template has a box below it for children to follow. They must try to include the requests in their designs. They could link their ideas to the kites they learnt about in the lesson.</p> <p>Alternative activity:</p> <p>Discuss with children that Guatemalan people use kites to send messages to spirits in the heavens on 'All Saints' day. NB type 'Guatemalan kites' into Google Images to see pictures of these kites.</p> <ul style="list-style-type: none"> • Provide children with Guatemalan Kite Pictures and ask them to discuss the kites. What can you see? • Provide children with the Guatemalan Kite Task Card and Guatemalan Kite Template. Children to use the template to design their own Guatemalan kite. NB adult support will be needed to explain the instructions. • Equip tables with coloured tissue paper, coloured paper, coloured felt-tipped pens, wooden skewers, scissors, glue and tape. • Children are to design their kite and create it using the materials provided. They then cut rectangular strips of tissue paper and tape them onto the edges of their kite, around the curve. • Children then attach the wooden skewer to the back of their kite to make the hand-held kite 	<p>Guatemalan Kite Template (for FSD? activity only)</p> <p>Tissue paper, coloured paper, wooden skewers and craft materials</p>
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			<p>Assessment Questions</p> <p>Can children explain what a kite is?</p> <ul style="list-style-type: none"> • Do children understand the history and uses for kites? • Can children design a kite for a particular use? 	
<p>Technical knowledge</p> <p>Lesson 2</p>	1 hour	To explore materials used to make simple kites	<p>NB: Adult support might be needed for this lesson to support children rotating around stations.</p> <ul style="list-style-type: none"> • Ask children if they know what materials are used to make kites. Give some options and show the images on the slides. Ask children to decide if these would be good materials to use for kites or not. • Explain to children the three materials that would be best for kites and the three materials that wouldn't be best for kites and why. • Explain to children that they will test some materials they could use to make simple kites. • Show pictures of the materials they will work with today and the tests they will do. • Ask children to predict the material they think will be the best. • Explain to children that kites fly in the sky and sometimes the weather can affect them. What types of weather might affect the flight of a kite? • Explain that heavy rain and strong wind affects the kite's material and can stop it from flying. • Discuss with the class the best conditions for flying a kite and why. • Explain that they will rotate around stations today to test materials we could use to make kite sails. • Read the Challenge Cards for each station and explain to the class what groups will do at each station. 	<p>Plan Bee lesson 2</p> <p>Slides</p> <p>Worksheet 2A/2B/2C</p> <p>Challenge Cards</p> <p>Cotton wool, coloured card, plastic bags, tissue paper and foil</p> <p>Assorted materials (for FSD? activity only)</p> <p>Experiment Cards (for FSD? activity only)</p> <p>Experiment Examples (for FSD? activity only)</p>

			<p>Alternatively you could set up one table for the water test, one table for the weight test, one table for the rip test and one table for the stretch test. This may help you supervise the weight and water tests.</p> <p>Activity</p> <p>Provide children with worksheet 2B. Children record their predictions for each material on this worksheet. They need to colour one of the boxes labelled not much, a little bit and a lot before testing the material. They must take their worksheet to each station.</p> <p>Assessment Questions:</p> <p>Can children recognise some materials used to make kites?</p> <ul style="list-style-type: none"> • Do children understand that different materials to make kites are better than others? • Can children make a prediction and test it? 	
<p>Technical knowledge</p> <p>Lesson 3</p>	1 hour	To be able to make a simple carp kite.	<p>Show images of Carp Kites and ask children if they have seen them before.</p> <ul style="list-style-type: none"> • Explain to children Carp Kites are a Japanese kite and are flown on the Children's Day festival. The name of the festival is 'Kodomo no hi'. The Carp Kite symbolises strength and courage. Carp fish swim upstream every year so the kite is modelled on this fish's strength. • What materials are needed to make a Carp Kite? Ask children to think about the materials we could use in the classroom to make one. • Discuss the design, shapes and colours of the Carp Kite and ask children to think about how they would make one. • Explain to children that they will make a Carp Kite today and fly them. Go through the instruction slides with your class to explain how to make a Carp Kite. 	<p>Plan Bee lesson 3</p> <p>Slides</p> <p>Resources</p> <p>Question Card 3A/3B/3C</p> <p>Instruction Card</p> <p>Tissue paper, coloured paper, glue, string</p> <p>Wooden sticks/skewers and string</p>

			<ul style="list-style-type: none"> • Equip tables with the materials and instructions for children to make the Carp Kite. <p>NB: make sure you keep the Carp Kites at school as you may need them in lesson six.</p> <p>Activity</p> <p>Provide children with the Instruction Card and Question Card 3B. Children are to follow the instructions to make the kite. Once the whole class is finished take the kites outside to fly them. After the children have flown their kite, they need to answer the questions on the question card.</p> <p>Assessment Questions</p> <p>Can children make a simple kite by following instructions?</p> <ul style="list-style-type: none"> • Can children evaluate a simple kite? • Do children know what kite shapes would fly better than others? 	<p>Carp Kite Picture Cards (for FSD? activity only)</p> <p>Carp Fish Template A/B/C (for FSD? activity only)</p>
<p>Technical</p> <p>Lesson 4</p>	1 hours	<p>To explore designs of diamond kites</p>	<p>What are diamond kites? Have you ever flown one?</p> <ul style="list-style-type: none"> • Explain to children that diamond kites are one of the easiest kites to make. • Show images of diamond kites and discuss what children can see on the kites and the materials needed to make a diamond kite. • Show images of diamond kites with extra attachments, such as tails, extra wings and bows etc. Why are these added to kites? How do they help/not help the kite? • Explain to children they will design their own diamond kite today. Show an example and discuss with children that they need to think about colours, shapes and patterns when designing their kite. • Brainstorm the materials they might need as a class. 	<p>Plan Bee</p> <p>Lesson 4</p> <p>Slides</p> <p>Resources</p> <p>Worksheet 4A/4B/4C</p> <p>Kite Template (for FSD? activity only)</p> <p>Scenario Cards (for FSD? activity only)</p>

			<p>Activity:</p> <p>Provide children with worksheet 4B. On this worksheet is some space for children to draw their kite and questions for them to answer about their design.</p> <p>Alternative activity</p> <p>Explain to children that they are going to work in a kite factory today and become kite designers.</p> <ul style="list-style-type: none"> • Provide Scenario Cards that have requests sent in by customers. • Children can work in groups, in pairs or individually to design the kite requests. • Provide lined paper, Scenario Cards, Kite Template and Word Bank A and B to small groups or individual children. • Children then choose a scenario to design a kite. • Remind them to include information about the materials and equipment they would need to design the kites. The word bank will help them with this. You could also use sentence starters like: I will use... I will cut... I will tape... I will draw... <p>Assessment questions:</p> <p>Can children design a kite?</p> <ul style="list-style-type: none"> • Can children describe the materials and equipment needed to make a kite? • Do children know how to make a kite look aesthetically pleasing? 	Word Bank A and B (for FSD? activity only)
Design Lesson 5	1 hour	To be able to construct a kite by following a design.	<ul style="list-style-type: none"> • Ask children to look at their kite designs from last lesson. Ask them to discuss their designs with a partner to refresh their memories about their ideas. 	Plan Bee lesson 5 Slides Resources

			<ul style="list-style-type: none"> • Go through slides explaining the steps on how to construct the diamond kite. • Ask them to refer to their plans and think about what they will need to construct their kite. • Remind children to follow their plans and remember to check the Instruction Card if they get stuck. <p>NB the kite in the slides is made out of a white plastic bag, however, you can use wrapping paper which is a little stronger and easier to cut. You may wish to cut out a few templates and give them to tables for children to trace instead of them making their own.</p> <p>Activity:</p> <p>Provide children with the Kite Template (preferably enlarged to A3 size) and materials. Children are to use their design to construct their kite.</p> <p>They can use the template to help shape their kite.</p> <p>Assessment Questions:</p> <p>Can children construct a kite by following a plan?</p> <ul style="list-style-type: none"> • Can children choose appropriate materials to construct a kite? • Can children use colours and patterns to make a kite look attractive? 	<p>Kite Template enlarged to A3/A2</p> <p>Instruction Card</p> <p>Craft materials- plastic bag, wrapping paper, crepe paper, tissue paper and cellophane</p> <p>Wooden sticks/skewers</p> <p>Scissors, glue and tape</p>
<p>Evaluate Lesson 6</p>	1 hour	To be able to evaluate a finished kite.	<p>Ask children to recap and discuss with a partner how they made their diamond kite.</p> <ul style="list-style-type: none"> • Ask children what they think evaluation means and explain the word to your class. • Explain to children that designers always evaluate their work so they can make sure they don't make the same mistakes in the future and to improve their creations. 	<p>Plan Bee lesson 6</p> <p>Slides</p> <p>Resources</p> <p>Worksheet 6A/6B/6C</p> <p>Constructed diamond kites</p>

		<ul style="list-style-type: none"> • Ask children questions about the designing and construction process, such as: What was the easiest step when making your diamond kite? What was the hardest? What do you like and dislike? What would you change? • Ask children to discuss with a partner how they could make their diamond kite fly better. • Children are to then complete the evaluation worksheet <p>Activity</p> <p>Children are to evaluate their diamond kites using worksheet 6B. Here they have to colour the smiley face to reflect their thoughts on the kite-making process.</p> <p>Alternative activity:</p> <p>Children can now have a kite flying contest using their Carp Kites and diamond kites.</p> <ul style="list-style-type: none"> • Ask children to collect their Carp Kites and diamond kites and take your class outside to the playground. • Children can test both their kites to see which kite flies the best and why they think this happened. • Children can then test their kites with other friends to see whose works better. • Once children are back in the classroom ask them to put their two kites on their table spot. • Provide children with a set of Evaluation Cards. Children can pick a card and read it. They then walk around the room and find a kite that answers the evaluation question. • The Evaluation Cards refer to both the Carp Kite and the diamond kite. 	<p>Constructed Carp Kites (for FSD? activity only)</p> <p>Evaluation Cards (for FSD? activity only)</p>
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