

Y1 Kites	
<b>Links made with other subjects</b>	English – stories with familiar settings Maths –geometry Science – seasonal change Art – Collage printing and sculpture
<b>The BIG Question</b>	Can you make a kite that flies in windy weather?
<b>The BIG Outcome</b>	To use a range of materials to create a kite.
<b>DT objectives</b> (link to NC)	Design <ul style="list-style-type: none"> <li>Design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> Make <ul style="list-style-type: none"> <li>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> Evaluate <ul style="list-style-type: none"> <li>Explore and evaluate a range of existing products</li> <li>Evaluate their ideas and products against design criteria</li> </ul> Technical knowledge <ul style="list-style-type: none"> <li>Build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</li> </ul>
<b>Prior knowledge</b> What prior knowledge is needed for children to be successful in this unit?	<ul style="list-style-type: none"> <li>drawn around a template</li> <li>joined sheet materials using glue</li> <li>discussed ideas with others</li> <li>drawn products</li> </ul>
<b>Future learning</b> Consider the conceptual knowledge within a subject that pupils need for future learning not just the recall of facts but the importance of concepts	This unit gives prior knowledge to: Y2 – Textiles - puppets Y3 – Textiles - bookmarks Y4 – Textiles – pencil case Y5 – Textiles – drawstring bag Y6 - Textiles – slippers
<b>DT strands</b>	Design <ul style="list-style-type: none"> <li>Design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> Make <ul style="list-style-type: none"> <li>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> </ul>

## DT Scheme of Work

	<ul style="list-style-type: none"> <li>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <p>Evaluate</p> <ul style="list-style-type: none"> <li>Explore and evaluate a range of existing products</li> <li>Evaluate their ideas and products against design criteria</li> </ul> <p>Technical knowledge</p> <ul style="list-style-type: none"> <li>Build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</li> </ul>
<b>Vocabulary/ Glossary</b>	Plastic bag, tissue paper, foil, materials, test, rip, stretch, weigh, weather, wind, sail, model, shape, colour, cut, layer, shape, glue, thread, string, knot, pattern, streamers, bows, design, idea, skewer, tie, edge, design, creation, product, diamond, sleds, cellulars, rokkakus, deltas, para foils, inflatables, carp, stunt and novelty.
<b>Knowledge</b> (see italics for knowledge to remember)  Numbers used are the LO for the lesson.	<p>The knowledge that children will learn and remember:</p> <p><i>1. Investigate and analyse a range of existing products.</i></p> <ul style="list-style-type: none"> <li>Do you know what a kite is? Have you flown one? What do they look like?</li> <li>Show an image of a flying kite to remind children what kites are.</li> <li>What do you think kites are used for? Explain to children that kites have been around for many years and for many different reasons.</li> <li>Explain to children where kites originate from and detail the reasons other countries used kites and what those kites look like.</li> <li>Discuss these kites with the children and look at the shapes, colours, and how it was made.</li> <li>Show images of these kites: diamond, sleds, cellulars, rokkakus, deltas, para foils, inflatables, carp, stunt and novelty and discuss what children see.</li> </ul> <p><i>2. Generate, develop, model and communicate their ideas through discussion and annotated sketches.</i></p> <ul style="list-style-type: none"> <li>What are diamond kites? Have you ever flown one?</li> <li>Explain to children that diamond kites are one of the easiest kites to make.</li> <li>Show images of diamond kites and discuss what children can see on the kites and the materials needed to make a diamond kite.</li> <li>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?</li> <li>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.</li> <li>Brainstorm the materials they might need as a class.</li> <li>Children to use a simple diamond template to design their kite.</li> </ul> <p><i>3. Use a range of tools and equipment to perform practical tasks accurately.</i></p> <p>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</p> <ul style="list-style-type: none"> <li>Ask children if they know what materials are used to make kites – share ideas with children.</li> <li>Ask children to decide if these would be good materials to use for kites or not.</li> <li>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.</li> </ul>

## DT Scheme of Work

	<ul style="list-style-type: none"> <li>• Explain to children that they will test some materials they could use to make simple kites.</li> <li>• Show pictures of the materials they will work with today and the tests they will do.</li> <li>• Ask children to predict the material they think will be the best.</li> <li>• 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?</li> <li>• Explain that heavy rain and strong wind affects the kite's material and can stop it from flying.</li> <li>• Discuss with the class the best conditions for flying a kite and why.</li> <li>• Explain that they will rotate around stations today to test materials we could use to make kite sails.</li> </ul> <p>4. Select and use tools suitable for the task, explaining their choices, to cut, shape and join paper and card.</p> <ul style="list-style-type: none"> <li>• Gather all of the equipment and materials that they will need.</li> </ul> <p>Use simple finishing techniques suitable for the product they are creating.</p> <p>6. <i>Know and explain how to create a kite</i> (children to think and talk through how their product is used and what holds it together.)</p> <ul style="list-style-type: none"> <li>• Ask children to take out the designs for their kites. Give children a few minutes to look through their plan to remind themselves of what they need to do.</li> <li>• Explain that today they will be following their designs to make their kites. What is the first thing you are going to do when you get to your tables? Children to think, pair, share their ideas.</li> <li>• Show children some of the different steps they will be taking when they make their kite. As a class, discuss which order these steps should be taken in.</li> <li>• Write notes for children's responses: What will you do if you have a problem while you are making your kite? How can you make sure you stay safe while you are making your kite? How can you make sure your kite ends up looking like your design?</li> </ul> <p>7. <i>Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets the design criteria.</i></p> <ul style="list-style-type: none"> <li>• Ask children to recap and discuss with a partner how they made their diamond kite.</li> <li>• Ask children what they think evaluation means and explain the word to your class.</li> <li>• 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.</li> <li>• 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?</li> <li>• Ask children to discuss with a partner how they could make their diamond kite fly better.</li> </ul>
<p><b>SEND expectations</b> Adult support where possible. Success to be determined by outcome.</p>	<p>The knowledge that children will learn and remember:</p> <p>1. <i>Investigate and analyse a range of existing products.</i></p> <ul style="list-style-type: none"> <li>• Do you know what a kite is? Have you flown one? What do they look like?</li> <li>• Show an image of a flying kite to remind children what kites are.</li> <li>• What do you think kites are used for? Explain to children that kites have been around for many years and for many different reasons.</li> <li>• Explain to children where kites originate from and detail the reasons other countries used kites and what those kites look like.</li> </ul>

## DT Scheme of Work

	<ul style="list-style-type: none"> <li>• Discuss these kites with the children and look at the shapes, colours, and how it was made.</li> <li>• Show images of these kites: diamond, sleds, cellulars, rokkakus, deltas, para foils, inflatables, carp, stunt and novelty and discuss what children see.</li> </ul> <p><i>2. Generate, develop, model and communicate their ideas through discussion and annotated sketches.</i></p> <ul style="list-style-type: none"> <li>• What are diamond kites? Have you ever flown one?</li> <li>• Explain to children that diamond kites are one of the easiest kites to make.</li> <li>• Show images of diamond kites and discuss what children can see on the kites and the materials needed to make a diamond kite.</li> <li>• 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?</li> <li>• 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.</li> <li>• Brainstorm the materials they might need as a class.</li> <li>• Children to use a simple diamond template to design their kite.</li> </ul> <p><i>3. Use a range of tools and equipment to perform practical tasks accurately.</i></p> <p>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</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Explain to children that they will test some materials they could use to make simple kites.</li> <li>• Show pictures of the materials they will work with today and the tests they will do.</li> <li>• 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?</li> <li>• Explain that heavy rain and strong wind affects the kite's material and can stop it from flying.</li> <li>• Discuss with the class the best conditions for flying a kite and why.</li> <li>• Explain that they will rotate around stations today to test materials we could use to make kite sails.</li> </ul> <p><i>4. Select and use tools suitable for the task, explaining their choices, to cut, shape and join paper and card.</i></p> <ul style="list-style-type: none"> <li>• Gather all of the equipment and materials that they will need.</li> </ul> <p>Use simple finishing techniques suitable for the product they are creating.</p> <p><i>6. Know and explain how to create a kite (children to think and talk through how their product is used and what holds it together.)</i></p> <ul style="list-style-type: none"> <li>• Ask children to take out the designs for their kites. Give children a few minutes to look through their plan to remind themselves of what they need to do.</li> <li>• Explain that today they will be following their designs to make their kites. What is the first thing you are going to do when you get to your tables? Children to think, pair, share their ideas.</li> <li>• Show children some of the different steps they will be taking when they make their kite. As a class, discuss which order these steps should be taken in.</li> <li>• Write notes for children's responses: What will you do if you have a problem while you are making your kite? How can you make sure you stay safe while you are making your kite? How can you make sure your kite ends up looking like your design?</li> </ul>
--	--

## DT Scheme of Work

	<p><i>7. Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets the design criteria.</i></p> <ul style="list-style-type: none"> <li>• Ask children to recap and discuss with a partner how they made their diamond kite.</li> <li>• 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?</li> <li>• Ask children to discuss with a partner/adult how they could make their diamond kite fly better.</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>• A collection of kites</li> <li>• Tissue paper</li> <li>• Coloured paper</li> <li>• Glue</li> <li>• Scissors</li> <li>• Crepe paper</li> <li>• String</li> <li>• Hole punch</li> </ul>