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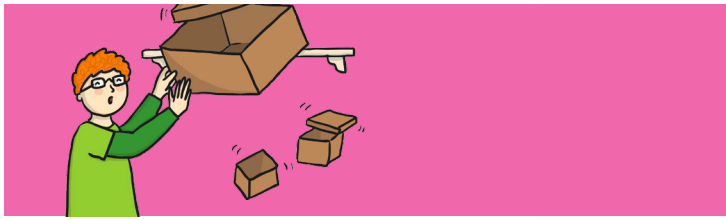
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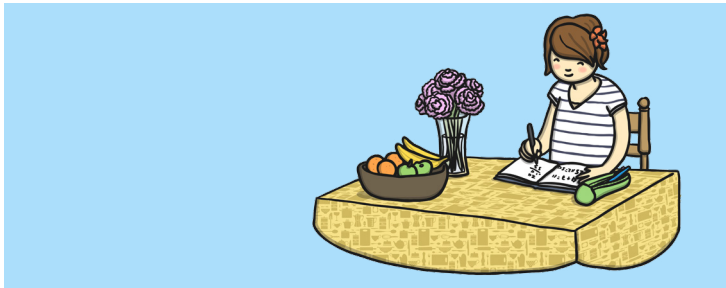
## Introduction

This Let's Go Fly a Kite unit gives children opportunities to develop their understanding of frame structures and how they can be strengthened and stiffened. Children will discover information about a key event involving a kite that helped shape the world. Children will gain knowledge and understanding about the parts and shapes of kites. This will help them when designing and making their own kites. Finally, children will test and evaluate their kites against design criteria they have created.



## Health & Safety

When carrying out a risk assessment for this unit, teachers will need to consider the materials, tools and equipment being used. Scissor safety rules should always be followed. Safety rules for using saws should also be followed. Teachers will need to consider safety implications when flying kites and follow the Adult Guidance Kite Flying Safety Rules.



## Home Learning

**Making a Recycled Kite Home Learning Activity:** Children are asked to collect materials such as newspapers, plastic bags, bin liners, plastic straws, string and lollipop sticks. Their task is to use the recycled materials to make a kite.

## How Kites Have helped Shape the World Home Learning Activity:

Children discover an example of how kites have helped shape the world. Children read the information to learn about Orville and Wilbur Wright and how they used kites to help design airplanes (also known as aeroplanes). After they have read the information children are given the option to do some further research to find out how kites helped Benjamin Franklin, Alexander Graham Bell and Leonardo da Vinci.



## Wider Learning

A visit to a kite festival would provide an excellent opportunity for the children to observe different kites in action. For information about events across the UK visit [Kite Calendar](#).

To look at all the resources in the Let's Go Fly a Kite unit [click here](#).

To find out more about PlanIt download our [free guide](#)

## Assessment Statements

By the end of this unit...

### ...all children should be able to:

- Explain how Homan Walsh used a kite to help build the Niagara Falls Bridge.
- Use research into the shape and parts of kites to develop simple design criteria.
- Build simple frame structures.

### ...most children will be able to:

- Explain how a small event led to a larger significant event in Design and Technology which helped shape the world.
- Use research to create ideas and refine them to develop design criteria.
- Build and join strong frame structures and stiffen materials.
- Apply their understanding of where and how kites need stiffening.

### ...some children will be able to:

- Explain how different events involving kites in design and technology have helped shape the world.
- Use research to help prioritise ideas to create detailed design criteria.
- Use a variety of materials and joining methods to strengthen and stiffen more complex structures.
- Apply a detailed understanding of how to strengthen and stiffen e.g. that the central area of a kite needs stronger strengthening and the outside edges need lighter stiffening.

## Books

'The Kite That Bridged Two Nations: Homan Walsh and the First Niagara Suspension Bridge' by Alexis O'Neill.

'Stuck' Delightful chaos ensues when a young boy gets his kite stuck in a tree in this laugh-out-loud picture book from award-winning, best-selling author-illustrator Oliver Jeffers.

# Lesson Breakdown

## 1. Key Events and Individuals

Understand how key events and individuals in design and technology have helped shape the world in the context of how kites have helped shape the world.

- I can explain how key events and individuals in design and technology have helped shape the world.

Understand how key events and individuals in design and technology have helped shape the world in the context of how kites have helped shape the world.

- I can explain how key events and individuals in design and technology have helped shape the world.

## 2. Parts of a Kite

Investigate and analyse a range of existing products in the context of investigating the different parts of a kite and their functions.

- I can name and explain the function of the different parts of a kite.

## 3. Kite Shapes

Investigate and analyse a range of existing products in the context of investigating the different shapes of kites.

- I can investigate kite shapes.

Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities in the context of selecting materials and components to make kite shapes out of.

- I can select from and use different materials and components.

## 4. Designing

Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups in the context of developing design criteria for a kite.

- I can develop design criteria.

Generate, develop, model and communicate their ideas through annotated sketches in the context of sketching a design for a kite.

- I can develop and communicate a design for my kite.

## 5. Making the Shape and Structure of the Kite

Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately in the context of measuring and cutting the body of the kite.

- I can accurately measure and cut the shape of the body of the kite and join it to the frame structure.

Apply their understanding of how to strengthen, stiffen and reinforce more complex structures in the context of strengthening a frame structure to support the kite.

- I can make a strong and stiff frame structure to support the kite.

## 6. Evaluating the Kite

Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work in the context of testing the kite and then using their own design criteria to evaluate it.

- I can evaluate my kite.

## Resources

- Whiteboard and pen per child



- If possible have a few different kites to look at



- Construction kits
- Newspaper, tissue paper, dustbin liners, plastic bags, wrapping paper, wallpaper and card
- Wooden skewers, ribbon, kite string, sticky tape, pencils, scissors, rulers and a hole punch



- Large rulers/tape measures, coloured pens and pencils
- Different materials such as newspaper, tissue paper, dustbin liners, plastic bags, wrapping paper, wallpaper and card



- Large rulers/tape measures
- Different materials for the body of the kite (e.g. newspaper, tissue paper, white dustbin liners, plastic bags, wrapping paper, wallpaper and card, coloured pens)
- Different materials for the frame structure (e.g. art straws, dowel, plastic straws and bamboo skewers)
- Junior hacksaws, bench hooks, sand paper, scissors
- String, elastic bands, masking tape, plastic tubing



- Masking tape, kite line, fishing line, string, cotton
- Ribbon, plastic bags, flagging tape, tissue paper, newspaper, old cloth
- Sticky notes, card, sticks

