

Year 1-Design and Technology-Let's go Fly a Kite

In this unit of work children will look at different types of kites, consider the materials they are made from and their designs. Children will then go on to design, make and evaluate their own kites.

In this unit children will:

- Spend time exploring and evaluating different types of existing kites, thinking especially about the best shapes.
- Consider the materials they are made from and their properties/characteristics, including whether they are waterproof and their strength.
- Have an opportunity to test kite materials.
- Research kites using books and ICT.
- Design and create a kite from a design criteria.
- Create a prototype.
- Consider how they can make kite structures stronger and more stable.
- Make their own kites.
- Select from a range of tools and equipment to cut, shape, join and finish their kites.
- Test their finished kite.
- Evaluate their end product and say what they could do to improve it.

Prior Learning

EYFS Exploration with textures and combination of different media to create a new effect, exploring tools and techniques. Use what they have learnt about media and materials in original ways, thinking about uses and purposes. Represent their own ideas, thoughts and feelings through design and technology.

Cross Curricular Links

Geography: Seasons and Weather Changes

Art: Weather

Science: Seasons

Key Vocabulary

- **Flat kite:** the most common type of kites in the world.
- **Delta Kite:** are single winged, keeled kites that mimic the look of stunt kites but do not require dual control strings or special flying instructions.
- **Box kite:** a tailless kite in the form of a long box open at each end.
- **Sled Kite:** invented and patented by the American, William Allison in the 1950s. This kite helped pave the way for a class of kites known as "semi-rigid." Allison's kite has only vertical spars.
- **Prototype:** an early sample, model.
- **Waterproof:** something that keeps out water.
- **Absorbent:** to soak up liquid easily.
- **Sail:** front part of the kite that is decorated.
- **Spars:** the skeleton of a kite that gives it support and shape.
- **Tails:** the streamer hanging from the kite. It is used to add weight.
- **Keels/flaps:** the 3 or four sided shapes attached to the kite cover.
- **Towing Point/ring:** where the bridle lines are connected.
- **Bridle lines:** these are tied to a hole in the keel. Usually connected to a kite in pairs for balance. The length depends on how big a kite is.
- **Vents:** holes in the kite cover that allows wind to pass through the kite to help it balance as the wind speed changes.

Key Questions

- What shapes are used in kites?
- Can you name some different types of kites?
- What materials are most kites made from and why?
- What are some different parts of the kite called?

Key Knowledge

- To know that a diamond is a popular kite shape.
- A flat kite, box kite, sled kite and a delta kite are some of the different types of kites you can get.
- Most kites are made from some of the following materials: lightweight paper, nylon, bamboo/wood and plastic.
- The main parts of a kite include sail, spars, tail, bridle lines, vents and keel.

