



St Leo's and Southmead  
Catholic Nursery and Primary  
School

Year  
Four

# DT Knowledge Organiser

Autumn  
Term

## Amazing Activities

Children to fly their kites  
outside

### Key Facts

Kites originated in China 3,000 years ago and have been used throughout History. The Niagra Bridge build began by flying a kite across the water.

As someone runs with a kite, the wind going head-on into the kite creates a **force** that pushes up on the kite.

This force is called **lift**

This lift force goes perpendicular to the wind and it pushes the kite up into the air. At the same time, another force pulls the kite back.

This force is called **drag**

Drag is caused by the wind catching on the kite itself, pushing the kite back in the direction that the wind is going.

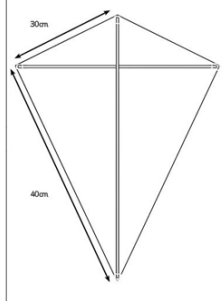
Altogether, these forces cause the kite to go back and up when you fly it.

Each part of the kite has a different name and job to do:

Bridle, line, tow point, keel, spars, tail

Kite flying is a balance between aerodynamic forces, the weight of the parts of the kite, and the spreading of these forces.

Shape, materials, decoration and measurements



Use the plans to create the kite.



Masking tape the dowel onto the sail.

## Fly a Kite

**Challenge:** To create a kite that the children can fly outside.

Did you know that one of the most famous kite flyers of all time was a 16-year-old boy? His name was Homan Walsh and without him the Niagara Falls Bridge would not have been built in 1847.



### Skills

- To look at **kite designs** to influence their own design
- To explain the strength of **different shaped kites**
- To select **different materials** to make a kite
- To use **equipment** to make a kite
- To **understand how a kite flies** - the force of the wind 'lift' - pushes the kite up.
- To **plan their design, evaluate** and suggest ways to **improve it**
- To **measure and cut the materials** to produce a kite
- To **evaluate the final creation and test it**

### Key Vocabulary

design	Plan or drawing to show the look and function of an object
evaluate	Decide how well the object looks and functions and how to improve
bridle	Keeps the kite at the correct angle to the wind
line	Prevents the kite from flying away, thicker lines are stronger
tow point	Connection point of line to bridle
keel	Similar to a bridle - helps to 'steer'
spars	Gives the kite the structure - the dowel or the straw

### Curriculum Links

- English Link:** Opportunities for the children to use books and websites to research kites
- Children to record ideas
- Maths link:** Measuring shapes and materials

Nurture, Inspire, Succeed