

Design Technology Year 4 Spring: Let's go fly a kite!

Key Knowledge to know and use

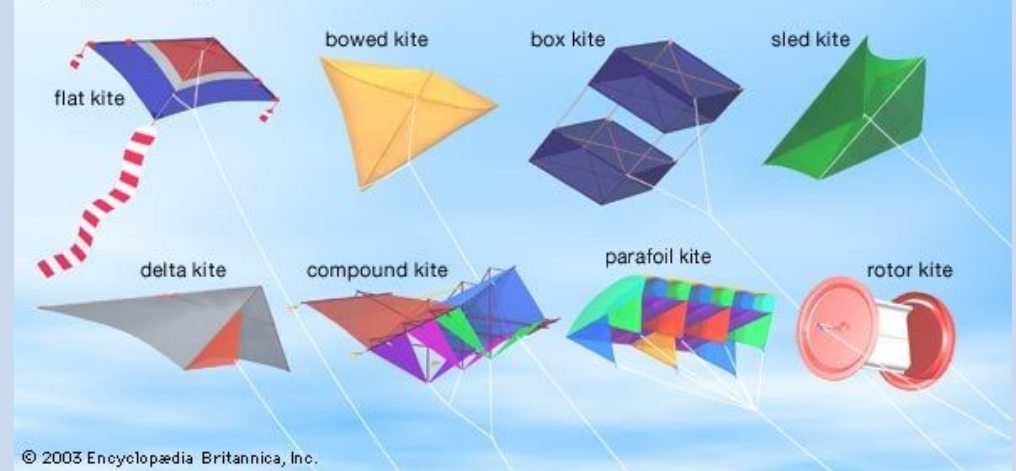
- Homan Walsh was a 16 year old boy who helped to build a bridge between Canada and America, across Niagara Falls. He flew his kite from the Canadian side over to the American to take advantage of the easterly winds. When the string was grabbed, engineers then attached a rope to the string, and a larger rope to the previous, until they got the wire cable across the gorge.
- People flew the first kites about 3,000 years ago, probably in China. These kites were strips of bamboo covered with silk.
- A kite is a light frame covered with paper, cloth, or plastic, often provided with a stabilizing tail, and designed to be flown in the air at the end of a long string
- The wind blows on your kite – some of it hits the kite directly, some goes over the kite, and some goes under it. The wind that goes underneath helps lift the kite off the ground, just like the wind beneath an airplane's wings helps lift it off the ground.



Kite Festival!

People show and fly all kinds of different designs. Kites come in all kinds of shapes and sizes, with the largest being hundreds of metres long! Kite flying is a great hobby, as all you need is a kite and some open space (you don't even need it to be windy!) Plus, you can make your own kite if you want to!

Eight generic types of kites



Key Vocabulary to learn and use in your learning

Word	Definition
aerodynamics	The study of how air moves around a solid object.
bridle	The bridle is the loop that goes from one side of the horizontal spar to the other.
drag	Drag is the force that slows an object down.
keel	the keel stops the kite losing it's shape in the air.
lift	To lift is to bring something upwards.
line	Prevents the kite from flying away. Thicker lines are stronger.
sail	The sail is the material that covers the frame and allows the kite to lift when wind is deflected downwards.
spar	Spars are the rods or sticks used to make the frame of a kite
tail	Adds drag to keep the kite pointed into the wind.