## Important facts

Hot-air balloons were first used in Paris, France in 1783. They were invented by two French brothers, Joseph Michael and Jacques Etienne Montgolfier. They discovered that heated air, when collected inside a large lightweight paper or fabric bag, caused the bag to rise into the air.

At first, they sent up an empty balloon and basket. They filled their balloon with heated air by burning straw and wool under the opening at the bottom of the bag. The balloon rose into the air about 3,000 feet ( 1,000 metres), remained there some 10 minutes, and then settled to the ground more than a mile and a half from where it rose.

Then they put up a sheep. They then put up a sheep and a rooster. Then they put a sheep, a rooster and a duck in the basket. They flew for 8 minutes and landed safely about 2 miles (3.2 kilometres) from the launch site. It was watched by King Louis XVI and Queen Marie Antoinette. Next, two men travelled in the balloon. On Nov. 21, 1783, the first manned untethered flight took place in a Montgolfier balloon with two passengers. The balloon sailed over Paris for 5.5 miles ( 9 kilometres) in about 25 minutes.

## Key Vocabulary

| invent | to create or design something that <br> has not existed before |
| :--- | :--- |
| launch | to send something it into the air |
| manned | having a human crew. |
| tethered | tie with a rope or chain so <br> as to restrict its movement. |
| untethered | released or free from a tether. |
| passenger | a traveller |
| rise | to go up |
| heated | made warm or hot |



The first human flight in a hot air balloon designed by the Montgolfier Brothers in Paris.


Joseph Michael and Jacques Etienne Montgolfier were French brothers who invented the hot air balloon.


A hot air balloon must be filled with air and the air must be heated for the balloon to be able to lift off the ground. The air has to be kept warm of the balloon will fall.

|  |
| :---: | The Montgolfier brothers. unmanned hot air balloon in public.

Sept 1783
The Montgolfier brothers demonstrate the first hot air balloon flight with a sheep, duck and rooster

## Oct 1783

Montgolfier Brothers The first free hot air balloon made first tethered balloon flight with human passengers.

Nov 1983 flies in the air with human passengers. The flight lasted 25 minutes.

## 1785

The first flight across the English Channel in a hydrogen balloon.

## 1870

Hot air balloons were first used at war ( during the FrancoPrussian War).

