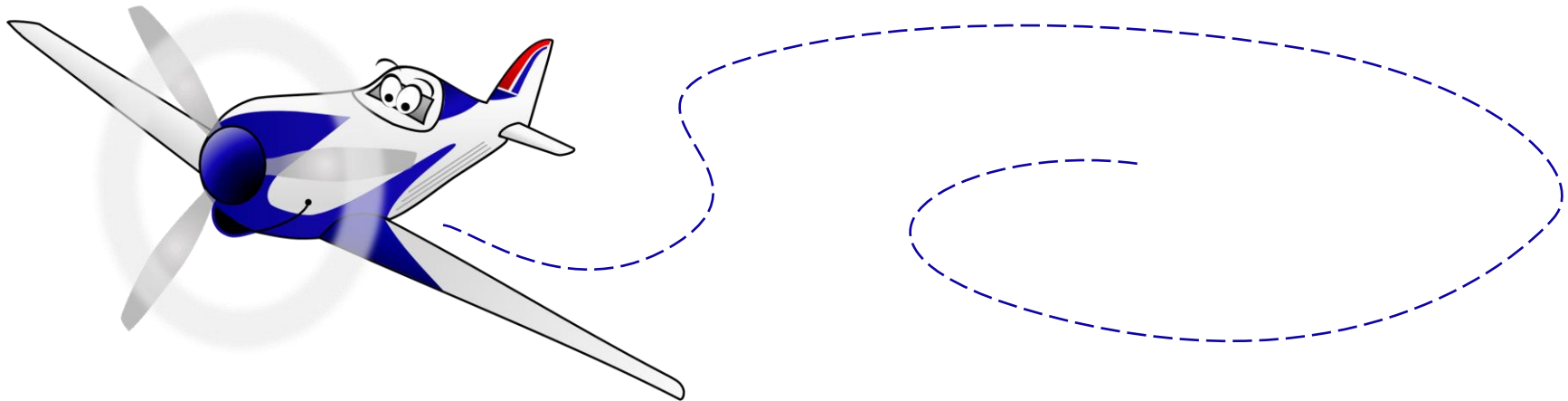


# Centre of Gravity

The centre of gravity of an aircraft is the point over which the aircraft would balance. Its position is calculated after supporting the aircraft on at least two sets of weighing scales and noting the weight shown on each set of scales.

The centre of gravity affects the stability of the aircraft. To ensure the aircraft is safe to fly, the centre of gravity must fall within specified limits.

**Ballast** is removable or permanently installed weight in an aircraft, used to bring the centre of gravity into the allowable range.



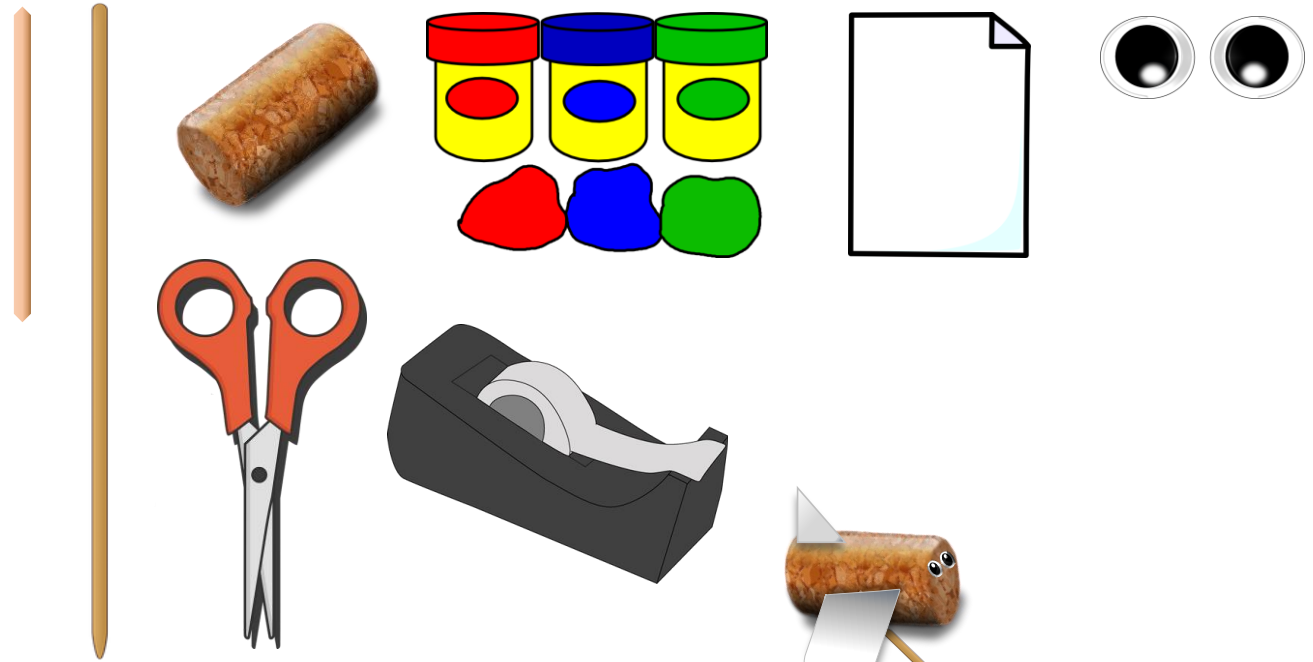
PIONEERS OF POWER



# How to make your own balancing plane

## Materials:

- 1 cocktail stick
- 2 Wooden/Bamboo skewers
- 1 cork
- Plasticine
- Paper
- Googly eyes (optional)
- Scissors
- Sticky tape



## Method:

1. Push the cocktail stick into the centre of the cork.
2. Add the two longer skewers either side of the short skewer.  
The length can be decided by the designer.
3. Add symmetrical wings and a tail fin onto the cork.
4. Add a face or a pilot to the cork; if so wished.
5. Use plasticine or blue tack to the end of both long
6. skewers, to achieve a balancing plane.
7. Finally, balance the plane on the end of your finger or even your nose!

