

Paper Drop

Materials

- Two sheets of paper, the same size and shape.

Instructions

1. Hold two identical sheets of paper, flat on outstretched hands, and ask the children to guess which piece of paper will hit the ground first if they are dropped. Drop the sheets of paper at the same time and watch as they drift to the ground.
2. Repeat Step 1, but this time, scrunch up one of the sheets of paper into a ball. Drop the two pieces of paper at the same time and ask the children to describe what happens and why.
3. Ask the children to fan their cheeks with their hands, and discuss how air cannot be seen, but it can be felt. This may lead to a discussion about how air can make things move, such as leaves moving in the wind, a kite flying, or clouds moving across the sky.



What happens?

The force of gravity pulls objects towards the Earth and air resistance slows down falling objects. The shape of an object affects how much air it has to push through. Heavier objects push against air with more force than lighter objects, so heavier objects tend to fall faster than lighter objects of the same size and shape. On the Moon, or in a vacuum chamber, where there is no air, objects fall to the ground at the same rate, regardless of their size, shape or weight.

Related activity

Invite children to test how fast other objects fall, such as balls of various sizes and weights, feathers, and sheets of paper of various sizes and shapes.