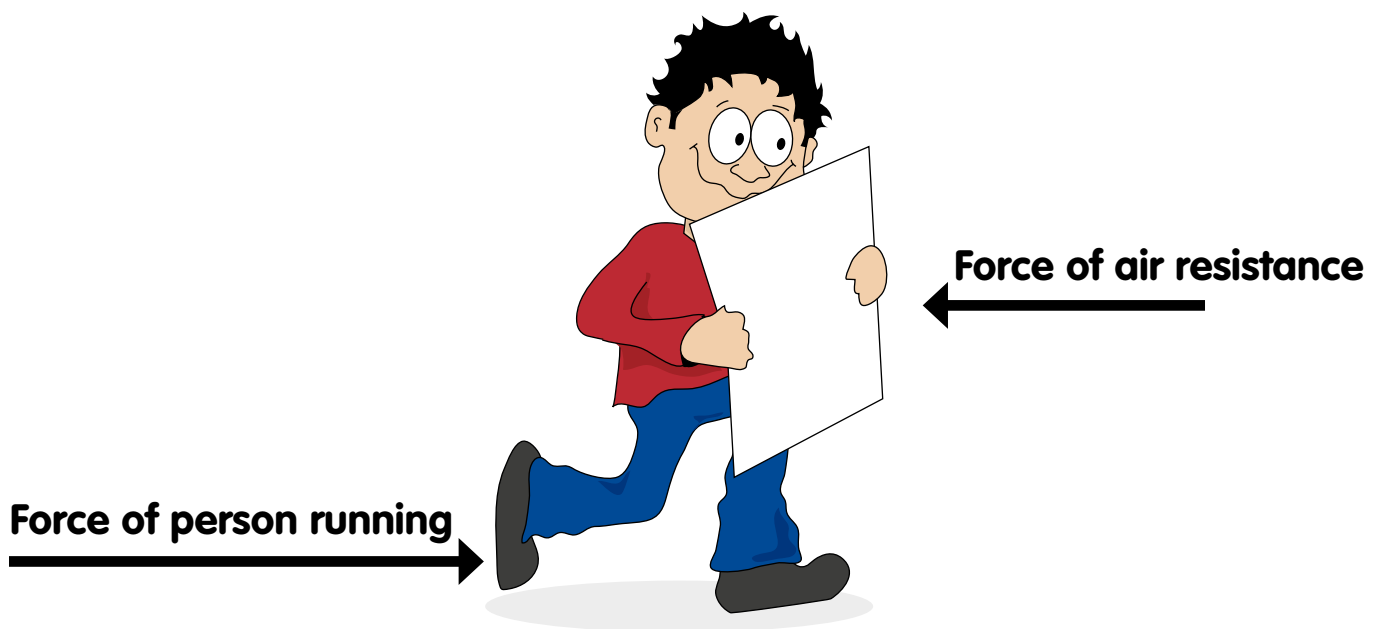


Air Resistance Investigation

For pupils aged 7-11

Teachers' notes



Air Resistance Investigation

Air Resistance Investigation

The range of ideas that pupils are likely to suggest as changes that will affect how much air resistance they feel as they run includes:

- How fast they run
- The size of the sheet they hold
- Whether the sheet is flat or curved
- The type of material the sheet is made of.

This investigation asks pupils to consider changes to either the sheet of material they hold in front of them to increase air resistance or a change to how fast they run. Pupils may find it easier to come up with a range of ideas if they are first asked to think about examples of how the shape of objects affects their air resistance. Although no direct measurement is involved pupils should be able to feel a difference in the force of air resistance during this investigation.

Practical tips

This investigation requires plenty of space, either outside or in a hall. Sheets of stiff card, corrugated plastic, hardboard etc, in various sizes will be needed.

Make sure the corners of each sheet are rounded off.

National Curriculum Links

This investigation links to attainment target Sc 4, Physical processes. At KS2:

Pupils should be taught:

Sc4 2c About friction including air resistance as a force that slows moving objects and may prevent objects from starting to move.

Sc4 2d That when objects are pushed or pulled an opposing push or pull can be felt.

Sc4 2e How to identify the direction in which forces act.