# What are we looking at today?

Identifying and Classifying Observation over time Research

#### rch STE

### Challenge:

What would make the best parachute?

### You will need:

Can you slow the fall

Aim:

- A parachute jumper (don't worry, we're not suggesting a real person!). A Lego figure, small doll or rubber duck would work well.
- Some string, ribbon, or cotton thread
- Different items to make a parachute.
- Something to measure the time

## Challenges

Week: 3



### Things to talk about.

Try discussing these questions together.

- what would happen if ...?
- How has that changed what happened?
- I wonder...?
- This reminds me of...

### Want to know the science?

### About this type of scientific enquiry

A fair test in when scientists look at all the different things (variables) that could affect the results. They then only change one thing and see if it affects the outcome. By only changing one variable (i.e. the parachute), scientists can say they are confident in the results.

### <u>How it works</u>

An object dropped from a height will fall to the ground because of gravity. When a parachute is unfolded, it effectively traps air and this is called 'air resistance'. The more air resistance the parachute has, the slower it will fall.

Have you ever seen a parachute in use? What's its job? Why do people use them? A parachute is an essential piece of equipment to safely fall from a great height.

Your challenge, is to make a parachute from a range of different materials to see which one would be the best. Don't worry, we're not asking your parents, brothers or sisters to try it out...instead, use a figurine you may have lying around, a doll or even a small soft toy.

You need to make this a fair test though. In changing the material or 'parachute', everything else must stay the same...to make it fair! Keeping the jumper and the height at which you drop it, will all keep this a fair test. Make sure to use a timer to see how fast the jumper falls. The slower the fall, the better the parachute! Record your results and answer this question– Which materials make the best parachute?