



GET LEARNING



20 MINUTES



PREPARATION
NEEDED

GRAVITY EXPERIMENT

PART OF THE SPACE THEMED PROGRAMME

▶▶ GETTING INTO THE ACTIVITY

Explore and experiment with gravity.

Start by asking the group to share what they know about gravity. Gravity is what helps us to stay on earth and not float away. It's also what keeps the earth and the other planets orbiting the sun.

Have a selection of items. They all need to be things which you can drop from a height (balls, paper, carrier bags, books, feathers, leaves etc). Grab two items and each time, before dropping them, ask the group to predict which item will hit the ground first. Sometimes use two similar weight items (book / ball) and other times two different weight items (wallet / feather). Now drop an empty water bottle and a full one. Which should land first?

You should find that weight doesn't impact gravity, instead it is their size and more importantly the air resistance of the object. This resistance helps to counter the force of gravity.

Give each group an object and some resources (paper, string, tape, carrier bag etc). Task them with trying to increase the air resistance on the object, so it falls slower. After a while let each group test their invention to see how successful they have been.



WHAT YOU'LL NEED

- Items to drop (balls, paper, books, feathers etc)
- 2 Water Bottles
- Paper, String, Tape, Carrier Bag etc



KEEPING EVERYONE SAFE

Please maintain social distancing where required. Where using shared equipment, children should wash their hands before and after doing so.