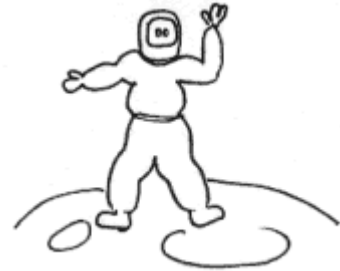


Suzy's World

Gravity - Why do astronauts bounce on the moon?

Fact

- The pull of gravity on the Earth's moon is less than it is on Earth.
- The gravity on Earth is stronger than the moon so you don't bounce as high and you come down more quickly.
- Gravity is the force that pulls objects towards the Earth's centre.
- It's the reason that things fall to the ground when they are dropped and why air stays around the earth and doesn't just float away.



Do you know

- The moon has no air, no atmosphere so things can't grow or live there.
- The moon has no weather - no wind or rain so the footprints that the astronauts put on the moon 30 years ago are still there – and will probably be there forever.
- An Astronaut's suit is silver to reflect the sun and deflect the cold.
- Moon surface looks very volcanic - it's covered with craters.
- Gravity is the reason that a pebble and a stone fall at the same rate.
- When you go to the moon you have the same mass (you are the same size and shape) but the pull on your body is less on the moon so you don't weigh as much.

Experiments you can do

Here's one for your classroom.

What you need:

Blackboard

Chalk

String

A weight (a stapler would work)

A small tack and a hammer

What you do:

Try drawing a straight vertical line on a black board.

(That's a line that goes up and down) Is it going directly up and down or is it on a slant? Use a plumb bob to find out. Tie a weight like a stapler to the end of a piece of strong string and make a knot in the

other end of the string. Nail a small tack through the knot and into the wooden surround of

the black board as close to your line as possible. Gravity pulls the weight straight towards the centre of the Earth, so use this string as a guide for your chalk line.



Other Investigations

Who would use a plumb bob as a tool of their job? Find out then put your plumb bob to the test around your classroom – is everything plumb – straight up and down?

Test posters, doors, even playground equipment.

Jokes

How many balls of string would it take to reach the moon? One if it was long enough!