

Introduction

This game is a revision activity to a lesson or series of lessons on gravity and space.

Running the activity

Give each pupil three small pieces of coloured card about 10 cm square (one red, one yellow or orange, one green). These are used to signal their answers.

Red means FALSE.

Green means TRUE.

Yellow or orange means I'M NOT SURE.

The game follows this sequence:

- Read the question.
- Allow a short period of time for pupils to consider their answer.
- Count "1,2,3 Show your cards!"
- Pupils all hold up one of their card at the same time.

Safety

Not applicable.

More ideas

Use the red, yellow and orange cards to denote solid, liquid and gas. Ask straightforward questions such as 'What state is water?', and more stretching questions like 'What state is toothpaste?' (solid & liquid), 'What state is sponge cake?' (solid & gas). Pupils hold up two cards when appropriate.

Learning outcomes

- Recap gravity and space.

Where the activity fits in

Revising and consolidating
QCA SoW 9J

Skills

Recall.

1. Gravity only happens on Earth.
False. There is a gravity force between all objects.
2. Gravity attracts things towards the surface of the Earth.
False. Gravity attracts towards the centre of the Earth.
3. Far away from Earth objects have no weight.
True. Weight is a downward force due to gravity.
4. Weight is measured in kilograms.
False. Weight is a force. Forces are measured in newtons.
5. Far away from Earth objects have no mass.
False. Mass is a measure of how much of an object there is.
6. Mass is measured in kilograms.
True.
7. When the Space Shuttle is orbiting the Earth the occupants mass is zero.
False.
8. Gravity decreases when objects are farther apart.
True.
9. People used to think the Sun moved round the Earth.
True.
10. Orbiting the Sun causes day and night.
False. Day and night are caused by the Earth spinning on its axis.
11. There are four inner planets and five outer planets in the Solar System.
True.
12. There are four gas giant planets in the Solar System.
True.
13. Gravity keeps the planets orbiting the Sun.
True.
14. Slower moving planets orbit further from the Sun.
False.

15. The Moon is a lump of matter that was broken off the Earth.
Not sure. The origin of the Moon is not yet understood.
16. People from Earth have only visited the Moon.
True. Robot probes have visited Mars and Venus and flown past other planets.
17. TV satellites are travelling rapidly through space.
True. They orbit the Earth once every 24 hours, and are therefore geostationary.
18. TV satellites are used for spying.
False. There are many satellites at different distances from the Earth. The spy satellites are in a much lower orbit than TV satellites.
19. Weather satellites stay in the same orbit.
True. All satellites stay in the same orbit once they are up there. The Earth spins round under the weather satellites and they photograph the weather patterns.
20. Our Universe came into existence with an event called the Big Bang.
Not sure. The Big Bang is the best theory so far, but there are many others.