



Gravity

1 Which of these statements about the gravitational force from one object acting on another is correct? Tick **1** correct answer

- It is a non-contact force.
- It causes attraction and repulsion.
- It stops acting when an object is falling.
- It does not act on objects in space.

2 Why does the person shown on the southern hemisphere of Earth not fall off? Tick **1** correct answer



- Earth's gravitational force acts towards the centre of the planet.
- Earth's gravitational force on the person acts downwards.
- The Moon's gravitational force pushes the person toward Earth's surface.
- Other forces, such as magnetic forces, hold them in place.

3 Put these objects in order of increasing gravitational field strength, starting with the smallest. Use numbers to show the correct order

1	Earth's Moon
3	Jupiter
4	the Sun
2	Earth



- 4 The photo shows an astronaut on the Moon with a flag. Why does the flag not droop towards the surface of the Moon? Tick **1** correct answer



- The gravitational force on the Moon's surface is much less than it is on Earth.
- There is no gravity on the Moon's surface to pull the flag down.
- There is a breeze on the Moon which is blowing the flag to the left.
- On the Moon, gravitational forces are repulsive, not attractive.

- 5 Where would you feel the strongest gravitational force of attraction from Earth? Tick **1** correct answer

- On the surface of Earth.
- At the top of a mountain.
- At the altitude that communications satellites orbit Earth.
- At the mid-point between the Moon and Earth.

- 6 Which of these statements about gravitational forces is correct? Tick **1** correct answer

- A gravitational force acts between all object with mass.
- A gravitational force can only attract metals and only repel non-metals.
- A gravitational force only exists between solid objects.
- The gravitational force of a spinning planet causes it to become flat.

