

Key Stage 3 Precise Learning Points



Unit Number	P1
Unit Title	Forces & Space
Chapter	Space

Key Scientific Points

1. Mass is the amount of matter (stuff) in an object.
2. Gravity is the force of attraction between objects.
3. All objects experience gravity.
4. The larger the mass of an object, the greater the force of gravity acting on it.
5. Weight is the effect of gravity on a mass.
6. Weight = mass x gravitational field strength
7. Gravitational field strength on Earth is 10N/kg.
8. The Earth rotates around a central line called an axis.
9. Day time is caused when the surface of the Earth faces the Sun. Night time is caused when it faces away.
10. One rotation takes 24 hours. This is one day.
11. The Earth orbits around the Sun.
12. One orbit takes 365.24 days. This is one year.
13. Leap years happen every 4 years because each year is 365 and a $\frac{1}{4}$.
14. The tilt (23.4°) of the Earth's axis affects spread of the sun's radiation over the surface.
15. The seasons are caused by the spread of the sun's radiation changing as the Earth orbits the sun
16. The Sun is a star; there are billions of other stars in our galaxy and billions of galaxies.
17. Interstellar distances are measured in light years
18. The Solar System is a collection of bodies that orbit the Sun.