

9Ja – Satellites and space/Gravity and weight

Word	Pronunciation	Meaning
artificial satellite		A satellite made by humans.
communications satellite		A satellite used to transmit TV programmes or telephone calls.
Earth observation satellite		A satellite used to take pictures of the Earth – for instance to help forecast the weather.
geostationary orbit		An orbit where a satellite is over the equator and takes exactly 24 hours to circle the Earth, so it always stays over the same part of the Earth.
gravity		The force of attraction between any two objects.
mass		The amount of matter that something is made of. Mass is measured in grams (g) and kilograms (kg). Your mass does not change if you go into space or to another planet.
newton (N)		The unit of force.
orbit		The path that a planet takes around a star, or the path that a moon or satellite takes around a planet.
planet		A large object orbiting a star. The Earth is a planet.
polar orbit		An orbit where a satellite passes over the North and South Poles. It will pass over all parts of the Earth during several orbits.
satellite		Anything that orbits a planet or a moon.
Solar System		A star with planets and other objects orbiting it.
weight		The amount of force with which gravity pulls something towards the Earth. It is measured in newtons (N).

9Jb – Gravity in space

Word	Pronunciation	Meaning
elliptical	<i>e-lip-tick-al</i>	Oval shaped. The shape of a planet's orbit around the Sun.
galaxy		Millions of stars grouped together.
natural satellite		A satellite that has not been made by humans. The Moon is a natural satellite of the Earth.
star		A huge ball of gas that gives out heat and light energy.
universe		All the galaxies and the space between them.

9Jc – Getting the data

Word	Pronunciation	Meaning
lander		A space probe that lands on a planet or moon.
orbiter		A space probe that goes into orbit around a planet or moon.
space probe		An unmanned spacecraft that has cameras and other equipment to find out about other planets.

9Jc – Focus on: The EM spectrum

Word	Pronunciation	Meaning
electromagnetic spectrum		The family of waves that includes light, infrared, microwaves and radio waves.
infrared radiation		Another name for heat energy that travels by radiation. It can travel through transparent things and a vacuum (empty space).
visible light		The part of the electromagnetic spectrum that we can detect with our eyes.

9Jd – Working it all out/Who owns space?

No new words.