

| 8L Earth & Space | Knowledge, Skills and Understanding |
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| Higher | <p>Compare different theories for the origin of the Moon</p> <p>Use a model to explain why we have partial and total solar eclipses</p> <p>Obtain information from secondary sources to investigate the relationships in astronomical data</p> <p>Analyse the rotations and axes of other planets to predict annual changes</p> <p>Describe the shape of the magnetic field between two bar magnets in different arrangements</p> <p>Use ideas about the Earth's magnetic field to explain variation, dip and deviation</p> <p>Explain why the speed of a planet changes as it moves around its orbit</p> <p>Describe the different shapes of galaxies and relate the view of the sky to a planet's position in a galaxy other than the Sun</p> <p>Describe some ways in which astronomers can detect planets orbiting stars other than the Sun</p> |
| Intermediate | <p>Use a model to explain why we see phases of the Moon</p> <p>Explain how technological developments have increased our knowledge of the Solar System</p> <p>Explain why the heliocentric model is our current model of the Solar System</p> <p>Use a model to explain the changes in the seasons</p> <p>Use a model to explain why the height of the Sun at noon and hours of daylight vary with latitude</p> <p>Use a model to explain the pattern of light and dark at the poles</p> <p>Explain the effect of the tilt of the Earth's axis on the energy received from the Sun</p> <p>Recall the direction of a magnet's magnetic field</p> <p>Explain how a compass can be used together with maps for navigation</p> <p>Explain how a plotting compass can be used to show the shape and direction of a magnetic field</p> <p>Describe the Earth's magnetic field and explain why a magnetic compass needle points north</p> <p>Describe how mass and distance affect the strength of gravity</p> <p>Describe how gravity affects bodies in space</p> <p>Use gravitational field strength to calculate weights</p> <p>Explain that stars in a constellation only appear to be close to each other</p> <p>Compare the relative sizes and distances of objects in space</p> |
| Foundation | <p>Explain how we see the Moon</p> <p>Describe how the Earth, Moon and planets move</p> <p>Describe the positions of the Earth and planets in the Solar System</p> <p>Describe some ways of investigating the planets</p> <p>Compare the geocentric and heliocentric models of the Solar System</p> <p>Describe differences in the seasons in terms of day length and the height of the Sun</p> <p>Explain the changes in day length and height of the Sun in terms of the tilt of the Earth's axis</p> <p>State what is meant by a magnetic field and recall the shape of the field of a bar magnet</p> <p>Describe the effect of the Earth's magnetic field on compass needles</p> <p>Explain how to arrange two magnets so that they attract or repel each other</p> <p>Recall the direction in which gravity acts</p> <p>Recall the factors that affect the strength of gravity</p> <p>State the meaning of gravitational field strength</p> <p>Explain why the weight of an object changes if taken to the Moon, but not its mass</p> <p>Recall that planets and natural satellites are kept in orbit by gravity</p> <p>State the meaning of: Sun, star, galaxy, Universe, constellation</p> <p>Describe the Milky Way</p> <p>State the meaning of: light year</p> |