**8P2 Space**

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| Year 8: Physics - Space | What’s out there | I can recall that our planet is part of a solar system. |  |
| I can use the positions of Earth, Sun and moon when describing phenomena such as eclipses. |  |
| I can identify comets, asteroids and dwarf planets as natural objects in our solar system |  |
| I can recall the conditions found on some planets in our solar system and relate them to distance from the Sun, composition and size |  |
| Days, nights, years & seasons | I can state that day and night are caused by rotation of Earth around its axis every 24 hours |  |
| I can describe a year as the time taken to orbit the Sun |  |
| I can explain how we could find out the length of day or year on another planet |  |
| Gravity, orbits & satellites | I can recall that gravity pulls objects down to the centre of the Earth. |  |
| I can list a variety of uses for artificial satellites (e.g. GPS, weather, communications, telescopes etc.) |  |
| I can describe polar and geostationary orbits and relate them to the purpose of the satellite. |  |
| Craters on the moon | I can carry out a practical task recording results carefully |  |
| I can identify independent, dependent and control variables. |  |
| I am able to explain why repeat results are necessary. |  |
| I can identify results as outliers (if present in their sample). |  |
| Light & reflection | I can draw ray diagrams to show the direction of light from a source. |  |
| I can carefully measure angles of light rays reflecting off a mirror from the normal. |  |
| I can describe the rule for reflection of light in a mirror. |  |
| Refraction & lenses | I can give examples where light changes direction through refraction. |  |
| I can draw a diagram showing refraction of light through a Perspex block. |  |
| I can refer to changes in speed of light causing a change in direction. |  |
| I can give examples of how refraction of light can be useful (e.g. in lenses). |  |