



NC OBJECTIVES	KEY KNOWLEDGE AND VOCABULARY
<ul style="list-style-type: none"> describe the movement of the Earth, and other planets, relative to the Sun in the solar system describe the movement of the Moon relative to the Earth describe the Sun, Earth and Moon as approximately spherical bodies use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. Learn that the Sun is a star at the centre of our solar system and that it has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune Learn about the dangers of looking directly at the sun, even when wearing dark glasses Find out about the way that ideas about the solar system have developed Consider the work of scientists such as Ptolemy, Alhazen and Copernicus <p><u>Working Scientifically</u></p> <ul style="list-style-type: none"> planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Identifying scientific evidence that has been used to support or refute ideas or arguments. 	<ul style="list-style-type: none"> Know that the Earth, Sun and Moon are spherical Know that the Sun is a star at the centre of the Solar System Know that it is dangerous to look directly at the sun, even when wearing dark glasses Know the names of the 8 planets in the Solar System Know that the planets in order are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune Know the properties of the planets in the Solar System Know that Mercury, Venus, Earth and Mars are all rocky planets as they are mostly made up of metal and rock, they are heavy, do not have rings and have very few moons Know that Jupiter, Saturn, Uranus and Neptune are mostly made up of gases (helium and hydrogen) although they do have cores made up of rock and metal. They move more quickly, some have rings and all have a large number of moons Know that Pluto is not a planet anymore, it is known as a dwarf planet Know the movement of Earth and other planets in the Solar System relative to the Sun Know that people now believe the geocentric model rather than the heliocentric model to explain the movement of Earth and the other planets Know that the heliocentric model believed that the Sun and Moon were orbiting the Earth and the Earth stayed still Know that the geocentric model places the Sun at the centre of the Solar System and that the planets orbit the Sun Know that Ptolemy was an Ancient Greek and believed in the heliocentric model Know that Alhazen was an Islamic Scholar and questioned what Ptolemy thought Know that Copernicus challenged the thinking of others and moved towards the geocentric model Know that the Earth orbits the Sun and this takes 365 ¼ days Know that the Earth rotates on its axis and this takes 24 hours Know that the Earth's rotation on its axis causes day and night Know that although the Sun appears to be moving through the sky, it is actually the Earth that is rotating Know that the Earth rotating on its axis means that day and night happen at different times around the world Know that there are 24 different time zones around the world Know that the Moon orbits the Earth and this takes approximately 28 days