

EXPECTATIONS

In scientific enquiry pupils:

- consider how evidence about the Solar System has been collected and interpreted;
- use models to explain phenomena;
- present data as a line graph and interpret this;
- evaluate the strength of evidence obtained; and
- use data from secondary sources to answer questions about the Solar System and the stars.

Using ideas and evidence

- How astronomers obtain evidence of planets and other bodies in the Solar System by use of telescopes and probes.
- The importance of the size and positioning of the instrument and the work of William Herschel and his sister, Caroline.
- Using evidence to decide how strong the idea of life elsewhere in the Solar System is.
- Early ideas about what can be seen in the sky and how constellations got their names.

At the end of the unit: **in terms of scientific enquiry**

most pupils will: describe and explain a phenomenon of the Solar System, eg solar eclipse; describe ways in which evidence about the Solar System has been collected; interpret patterns in data with respect to a model of the Solar System, eg the tilt of the Earth causing seasonal variation; select information from secondary sources to present a report about a planet and evaluate the strength of evidence from data;

some pupils will have made less progress and will: describe a phenomenon of the Solar System using some scientific terms; describe patterns in seasonal variation, eg day length, climate; use simple secondary sources to collect information about a planet; and

some pupils will have progressed further and will: describe and explain a phenomenon of the Solar System, showing that explanations have changed over time; use a model of the Earth, Moon, Sun system to explain patterns in data, eg seasonal variations, and relate this to real observations; use a range of secondary sources in finding information to report on aspects of the Solar System.