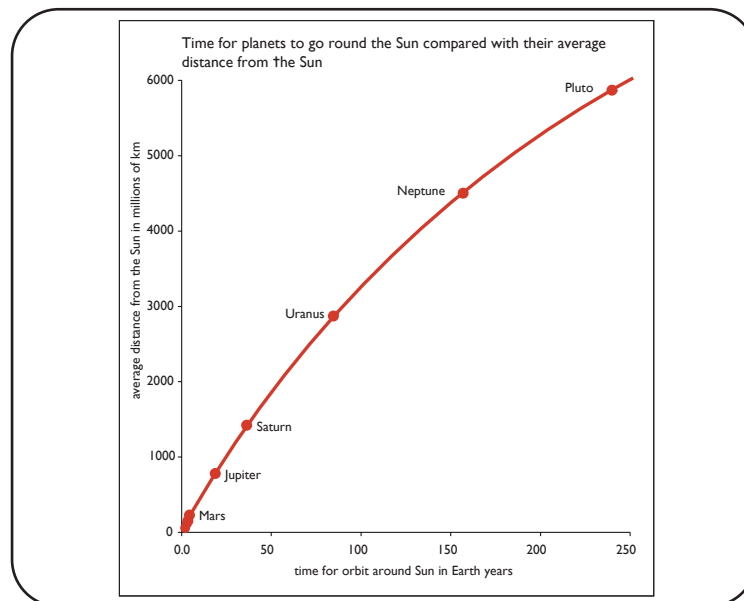
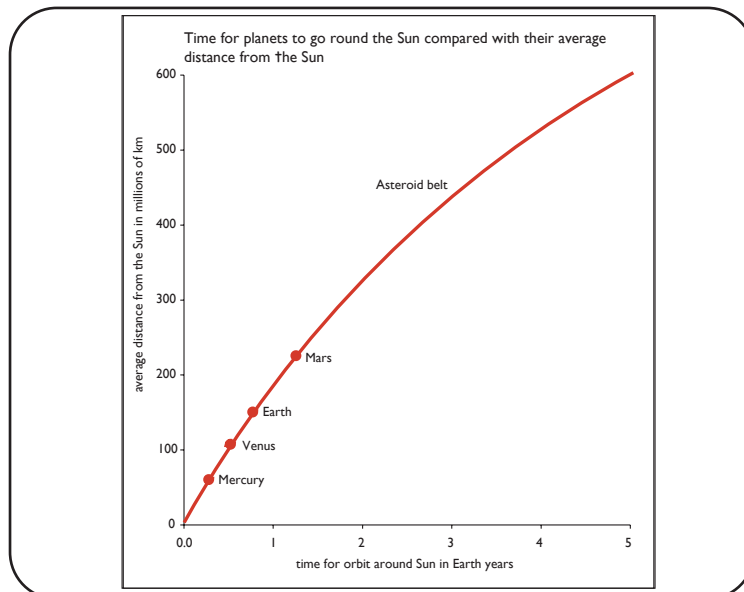


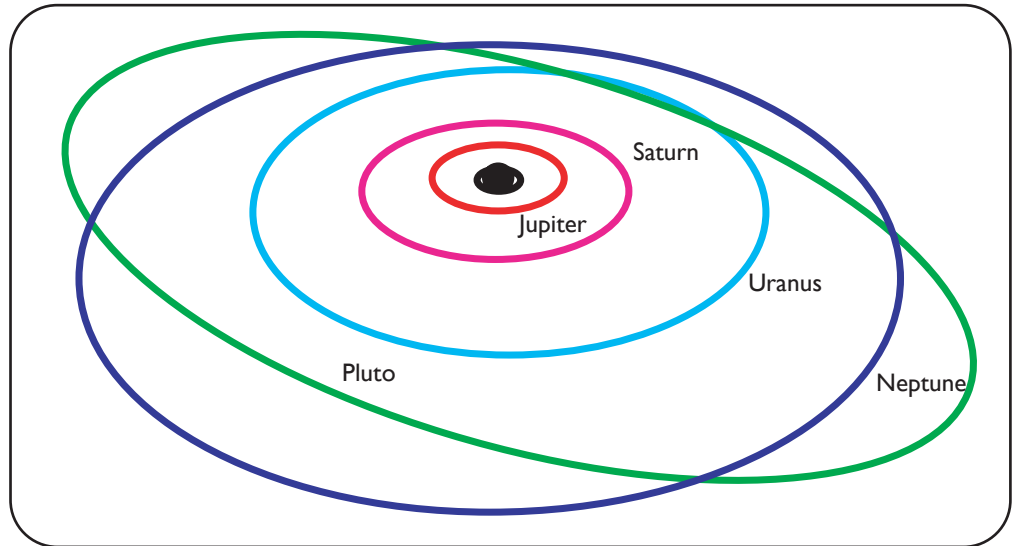
Information package from CCLRC ‘Objects in Space’

The graphs, tables and diagrams give information about the Solar System. Use them to fill in the fact sheets.

1. These graphs show how the time it takes for a planet to go round the Sun changes with the distance from the Sun.



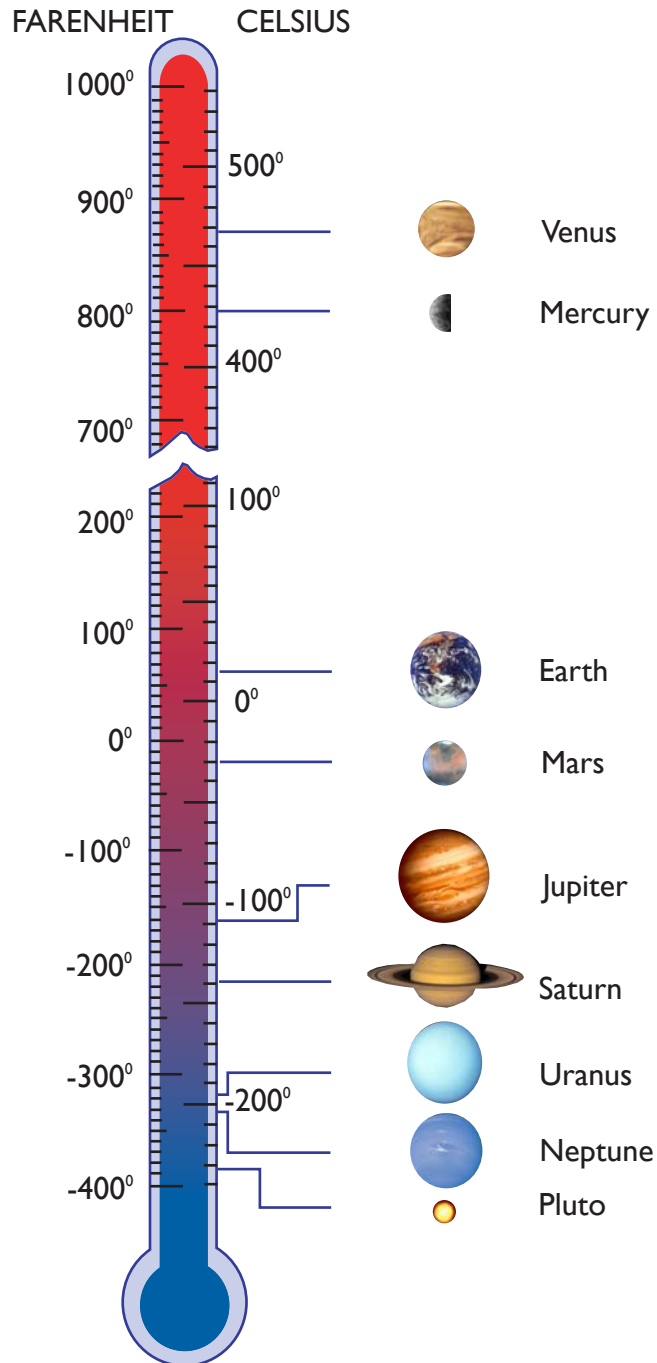
2. This diagram shows the paths of the planets round the Sun.  
Most of the planets lie in the ecliptic plane - the same plane as the Earth.



3. This table gives information about size, orbits and rotation times.

	MASS COMPARED WITH EARTH	DIAMETER/KM	TIME FOR ONE ORBIT ROUND THE SUN/YEARS	TIME FOR ONE ROTATION ON ITS OWN AXIS /HOURS
Ceres	0.0008	975	4.6	9
Earth	1	13 000	1	24
Jupiter	317	140 000	12	9.8
Mars	0.1	6 800	1.9	25
Mercury	0.05	4 900	0.2	1 400
Moon	0.12	3 500	-	709
Neptune	17	51 000	165	16
Pluto	0.002	2 300	248	150
Saturn	95	120 000	29	10.2
Tempel-1	-	-	5.5	-
Titan	0.13	5 150	-	-
Uranus	14.5	51 000	84	17
Venus	0.8	12 000	0.6	5 800

**TEMPERATURE**



OBJECT	DESCRIPTION
Earth and Moon	The Earth has a thick atmosphere of air (mostly nitrogen and oxygen) which acts as a blanket and keeps the surface warm. Earth is the only planet with liquid water on the surface. The continents and ocean floors lie on huge plates of solid rock which float on top of liquid rock and liquid iron. Earth has one natural satellite, the Moon, which is made of almost completely solid rock covered in crunchy dust. From the Moon, the sky looks black because there is no atmosphere to scatter sunlight and create a bright, coloured sky.
Saturn and Titan	Saturn is surrounded by a spectacular set of rings which are made up of tiny rocks frozen in ice. Its surface is all gas - hydrogen, helium, ammonia and methane. Titan, the largest moon of Saturn, has a thick orange-coloured atmosphere that is made mainly of nitrogen. We will find out what the surface of Titan is like when the Cassini - Huygens mission lands a probe there in 2004.
Mercury	Mercury is close to the Sun and has very little atmosphere. It has a heavy core of rock. Its crust is solid and is shaped by impacts and volcanic eruptions. On Mercury, two Earth years pass between one sunrise and the next.
Pluto and Charon	Pluto is smaller than our Moon. Scientists think that Pluto is made of ice and rock and that it is very, very cold. It has a thin atmosphere. Pluto has a moon, Charon, which is half the size of Pluto. Charon has a thicker atmosphere than Pluto.
Tempel-I	Tempel-I moves across the sky with a tail millions of miles long streaming behind. Its head is made from solid rock and its tail is made from gas and dust.