



Names of the Planets - Teacher's Notes

An excellent introduction to this topic would be Brian Cox's video produced by the BBC on the planets.

Our own solar system, the Milky Way, is only one of millions in our galaxy. There are billions of galaxies that make up the Universe. Although our Solar System came into being about 5 billion years ago, it had already taken billions of years to develop. It is centered on our sun whose immense mass creates gravity that binds matter together. It is called a system because everything in it is affected by everything else.

The Sun - Our Star

Our sun contains 99.9% of all the mass (matter) in our solar system. That means that all the planets, moons, asteroids and comets are made from the remaining 0.4%. It is a huge thermo-nuclear reactor that smashes together hydrogen atoms to create the gas helium, and a little light and heat as a byproduct (Helios is the ancient Greek name for the Sun).



The solar wind that emanates from the Sun "blows" cosmic radiation and photons (light) across our solar system. At the outer edge of the solar system lies the heliopause. Here the Sun's radiation or the "solar wind" is no longer active against cosmic ions and particles from deep space. There is a lot of space between the planets of the solar system. Only stars produce their own energy, planets and moons reflect light from the Sun.

The Planets

Orbiting round our Sun are four rocky or terrestrial planets, a belt of fragments called asteroids and then four outer gas planets. The planets are named by the ancient Greek words "planetes" which means wanderers. Early

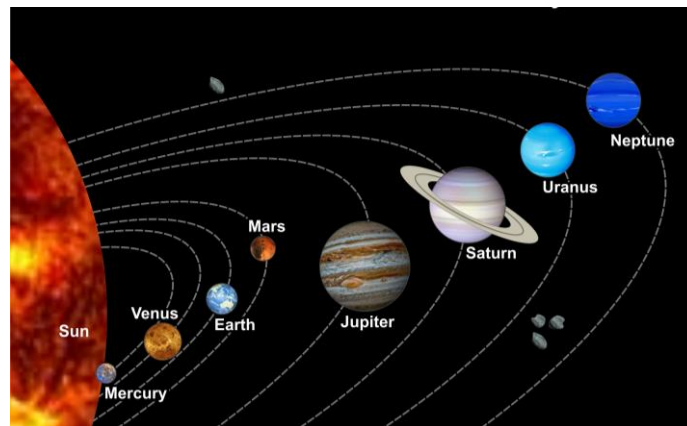




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astronomers noticed that although stars seem to follow fixed tracks across the sky as the year progresses the planets do not. Sometimes their tracks seem to double back on their tracks.

Remembering the Names of the Planets



Early astronomers had to rely on their eyesight to recognise and describe planets. By medieval times they had already seen and named Mercury, Venus, Mars, Jupiter and Saturn. Good telescopes and mathematics helped later astronomers to find Uranus (1781) and Neptune (1846) and to also find rings, moons, dwarf planets, asteroids and comets. Mathematicians had already predicted where to find Neptune and the dwarf planet Pluto (1930) long before they were seen through a telescope.

A mnemonic is a short phrase that reminds you of something important. When you were trying to learn the colours of the rainbow (Red, Orange, Green, Blue, Indigo and violet) you may have memorised phrases like "ROY G BIV" or "Richard of York gained battles in vain" because they contain the first letters of the colours you have to remember in the correct sequence.





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Ask students to create a phrase that uses the first letters of the planets in the correct sequence. They could then share their phrase with other members of the class.

Mercury **V**enus **E**arth **M**ars **J**upiter **S**aturn **U**ranus **N**eptune

M _____

V _____

E _____

M _____

J _____

S _____

U _____

N _____

Some examples:

My **V**ery **E**ducated **M**other **J**ust **S**erved **U**s **N**oodles

My **V**ery **E**xcited **M**onkey **J**ust **S**erved **U**s **N**uts

If the weather is good, students can walk round the oval chanting their mnemonic to develop a kinesthetic memory as well.

