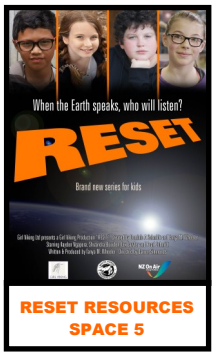
SPACE— GIANT JUPITER:



Jupiter is the biggest planet in our Solar System. If you were to combine all of the other planets, Jupiter would still be 2.5 times bigger. Even though it is big, it is still only 1/1000th the size of our Sun.

Unlike the rocky planets, Jupiter is a gas giant. Jupiter is the third brightest object in the night sky (after the Moon and Venus) and can be seen without a telescope if you know where to look. Jupiter doesn't just have one or two moons, it has 67 of them!

The atmosphere on Jupiter extends for almost 5000 km above the planet's surface. On Earth, the atmosphere is about 8 km high. The surface pressure is about ten times that of Earth.

You won't be able to breathe on Jupiter as the air contains hydrogen, helium and even ammonia.

ACTIVITY:

1) The moons that orbit Mars have the names of Greek gods. Look up the list of Jupiter's sixty -seven moons and see if you can find out what they are all named after. It is a long list so you might want to share the list out around the whole class so that you only have to look up two or three names each.
2) If the atmosphere on Jupiter consists of hydrogen, helium and other gases, find out what gases the Earth's atmosphere consists of. What are we breathing on our planet? Why can't we breathe some of the gases on Jupiter? What would they do to our lungs?
3) Find out the Periodic Table code letters for each of the gases in Earth's atmosphere. *For example: Oxygen is O.*
4) Find out the Periodic Table code letters for each of the gases in the atmosphere of Jupiter. Are any of them the same as Earth's? Do the percentages of each gas change between planets?
5) In RESET, Luke and Heather are in the Science Lab at school in Webisode 8, when Luke makes a discovery about the orange goo that has appeared everywhere. Watch the RESET Webisode and find out what is in the orange ooze, and look up the properties of that substance. What are some of the things that it might be used for?