

SPACE—A FEW FACTS:

In RESET, Justin feels that the Earth is communicating with aliens from another world in our Universe, one we do not yet know about. RESET is **Science Fiction**, but it pays to know a lot more about our world and our galaxy.

The Universe is vast. It is more enormous than we can comprehend. Everything we know is within this universe. Our planet, **Earth**, is in our **Solar System** and like the other planets in our solar system, it orbits our **sun**.

Our Solar System is not the only one in the Universe. There are many, but our one has eight **planets** ranging in different sizes and properties. There are even **dwarf planets** and ones we don't know about yet.

The smallest planet is called **Mercury**, and it is also the closest to the Sun. Mercury orbits the sun in only 88 Earth days! Way faster than any other planet in the solar system. However a day on Mercury takes almost 59 Earth days!

The second planet from the sun is called **Venus**. Venus **orbits** the sun every 225 Earth days and orbits in reverse to all the other planets. We measure a day by the time between light and dark so a day on Venus takes almost 117 Earth days before it has a night time.

Venus has a very dense **atmosphere** and because of this, Venus retains a lot of heat from the sun. That makes it the warmest planet at 462 degrees **Celsius**. Venus is really bright, and can be seen easily from Earth, if you know where to look.

ACTIVITY:

You will need a tablet, phone or other device loaded with the Google Sky Map app.

- 1) Open the Sky Map app.
- 2) Use the Search function  (magnifying glass symbol) that appears when you tap the screen anywhere.
- 3) Type in VENUS
- 4) A circle with an arrow will come up on your screen, move the phone in the direction of the arrow until you find where Venus is.
- 5) Stars and planets and **constellations** are always moving and orbiting... write down the date and time of your observation and list what objects were closest to Venus at the time you looked.
- 6) In a small group, each look up one or two of the objects you found near Venus and find out what they are. Report back to the others in your group when you have found out.
- 7) *For example: Taurus might be near Venus. Find out what the Taurus Constellation is made up of.*
- 8) EXTENSION – Do this once a week for a month and see if the objects change. Try different times of day or different days of the week too. Chart them with your class or by yourself.
- 9) EXTENSION 2 – Look up other planets, stars and constellations on Sky Maps. Work out where Earth is. During the day, find where our Moon is located. On the side of the globe that your device is pointed at, it is night time.

