## **Venus Fact Sheet**

Read through the information on the fact sheet about Venus on Page 2 or research your own information online (search **Venus facts for children**).

Design a car that would be good for keeping you safe on Venus.

Think about what the car would need in order for you to survive – eg it would need to be very strong so that it doesn't get crushed by Venus's atmosphere; it would need to be resistant to high temperatures – and label these features on your car.

In the example below, I've included key facts about Venus to help you as well as some sentence openers which will help you explain the features of your car.

465 C - hot enough to melt lead wind can blow you over air can crush you to death! permanently cloudy



clouds of sulphuric acid

volcano nearly a mile tall and 248 miles wide mountainous

clouds travel around the planet in 4 days same size as Earth - our evil twin! spins in the opposite direction can be seen from Earth

Although the atmosphere is hugely heavy, a double layered thick metal capsule stops this from crushing the vehicle and driver.



Suggested Sentence Openers

Beneath the wheels there are ...

Climbing Venus's mountains is easy with ...
To filter the air ...

Filtering the air is ...

Because it is so hot ...

Before the sulphuric acid reaches the occupants, ...

As it is incredibly windy ...

Due to the winds ...

Although the atmosphere is hugely heavy, ...

Climbing Venus's mountains is easy with the incredibly large wheels.

Think about your presentation and make this as neat as possible. Photograph your car design and upload this to the website.

## **Venus Information**

https://www.bbc.co.uk/bitesize/clips/zqfnvcw - watch this short video about Venus

Venus is the brightest object in our solar system after the Sun and our Moon which means on a clear night you might be able to see it without using a telescope.

Because of this, people have known about its existence since prehistoric times and the first probe to visit it was in 1961.

Venus is sometimes called the 'Twin Planet' because it is similar to Earth. It's only slightly smaller than Earth and has an atmosphere complete with clouds.

These clouds are a bit more deadly than ours because they are made of sulphuric acid which is poisonous to us.

Acid clouds, mixed with an atmosphere of carbon dioxide, make Venus the hottest planet in the solar system reaching 482°C - that's almost 7 times higher than the hottest temperature ever recorded on Earth! Venus is so very hot that it's hot enough to melt lead! This is all down to Venus having a huge amount of carbon dioxide in its atmosphere which has caused an extreme greenhouse effect to take hold... Not a very nice place for a holiday...

Venus also has the slowest rotation in the solar system. Ok so this is a little confusing so bear with us... One day on Venus (that is the time taken for Venus to make one rotation) is the same length as 243 Earth days. But one year on Venus only lasts around 224 earth days making a year on Venus shorter than just one day on Venus. Weird, right? Just think, one day of school would feel like forever!

Venus just like earth, has a lot of volcanoes! Venus has a few more than us though... in fact it has more volcanoes than any other planet in the solar system. Scientists think there could be around 1,600 on its surface. That's a lot of volcanoes, although scientists don't know how many are active today.

Here on Earth, the surface pressure is perfect for life to flourish - we can move around easily and breathe without problems. On Venus, the surface pressure is totally different. It is the equivalent of being half a mile under the sea. In other words imagine having the weight of half a mile of water on you and trying to breathe...

Venus is a very windy planet. Wind speeds blowing through the middle layer of cloud above Venus' surface hit an astonishing 450 miles an hour! That is officially faster than the fastest tornado recorded on planet earth and would definitely wreck your kite...or your drone... or pretty much anything you tried flying in it!