

## Solar System tourist

### Introduction

Imagine that you have been chosen to travel to one of the planets in our Solar System. Which planet would you like to visit and why?

In this activity you will use your research skills to find out:

- how the position of a planet in the Solar System affects conditions on the surface of the planet
- what it would be like to walk on different planets in the Solar System
- how your chosen planet compares with other planets in the Solar System.

You will be using your literacy skills to produce a presentation explaining your reasons for choosing your planet to other students your age.

### Brief

Prepare a presentation you can show to other students your age to explain which planet in the Solar System you would choose to visit and why.

#### Step 1

Before preparing your presentation make sure you know the structure of the Solar System.

#### Step 2

- Find out how the year-length and temperature depend on a planet's position in the Solar System.
- Find out how gravity, day-length, atmosphere, and the surface vary on different planets.
- Use your research to compare the planets and choose which one you would like to visit.

#### Step 3

Use your research to describe what it would be like to visit your chosen planet and why you chose it.

#### Step 4 (extension)

It isn't possible for people to travel as tourists to different planets yet. Missions to the Moon and Mars have been planned. Describe some difficulties faced by people wanting to travel into space.

#### Step 5

Plan the structure of your presentation and the information you will include. Your presentation should include at least eight slides. Do not put too much information on each slide; you can include diagrams instead of long explanations.

#### Step 6

Create your presentation.

## Sources

### The Solar System

These websites describe the structure of the Solar System. You can also find out about different planets, their moons, and conditions on each planet:

[www.esa.int/esaKIDSen/SEMF8WVLWFE\\_OurUniverse\\_0.html](http://www.esa.int/esaKIDSen/SEMF8WVLWFE_OurUniverse_0.html)

[www.bobthealien.co.uk/table.htm](http://www.bobthealien.co.uk/table.htm)

### Weather on other planets

This website compares weather conditions on the planets in our Solar System:

[www.spaceplace.nasa.gov/planet-weather/](http://www.spaceplace.nasa.gov/planet-weather/)

### The structure of other planets

This website contains facts about the structure of other planets in our Solar System:

[www.sciencekids.co.nz/sciencefacts/planets.html](http://www.sciencekids.co.nz/sciencefacts/planets.html)

### Gravity on other planets

This website calculates your weight on other planets:

<http://www.learningaboutelectronics.com/Articles/Weight-on-planets-conversion-calculator.php>

### Problems of space travel (extension)

This site gives information about problems facing people who travel in space:

[www.ehow.com/info\\_8109558\\_problems-space-exploration-travel.html](http://www.ehow.com/info_8109558_problems-space-exploration-travel.html)

**Writing frame**

Prepare a presentation you can show to other students your age to explain which planet in the Solar System you would choose to visit and why.

Summarise your research findings on the key areas below.

Which planet did you choose? List three reasons why you chose this planet and what a visit would be like.

Describe where your planet is in the Solar System. Explain how this affects your planet.

What is the weather and atmosphere like on your planet? Compare these with Earth and one other planet.

What is the day-length and gravity on your planet? Compare these with Earth and one other planet.

What is the year-length and temperature on your planet? Compare these with Earth and one other planet.

Plan for layout of presentation

**Important points**

- Use interesting images and language that can be understood by students your age.
- Do not include too much writing on slides; use pictures and your own words.

## Your work

You have now prepared a presentation you can show to other students your age to explain which planet in the Solar System you would visit and why.

Look at the questions below and check whether you have met the brief.

- Have you explained how the year-length and temperature depend on a planet's position in the Solar System?
- Have you described the different conditions on the different planets?
- Have you said which planet you would like to visit?
- Have you described what it would be like to visit this planet?
- Have you explained why you chose this planet?
- Is your presentation at least eight slides long?
- Have you included images and headings?
- Have you used pictures and language suitable for people your age?