**Planet PowerPoint Project**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Due Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

You are to collect data about each of the planets in our solar system.

**Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto.**

Using Excel you will create a spreadsheet of information about the Solar system.

Information that you could collect may include the following. Choose at least 12 topics from the following list:

Named after

Year discovered

First up close probe (year)

Mean distance from Sun

Eccentricity

Inclination to ecliptic (Deg.)

Rotation period (Axial rotation)

Orbit period (Sidereal period)

Inclination of equator to orbit (Deg.)

Surface temperature (K)

Atmosphere Press (atm)

Atmospheric Composition

Number of moons

Diameter (km)

Mass (kg)

Volume (m^3)

Mean density (1000kg/m^3)

Surface gravity

Use will need to analysis the information by creating **graphs** in Excel. These graphs will then be put into a PowerPoint presentation to help you answer the following questions. From the 12 topics you have chosen, choose several to graph that will support your reasoning for the three questions:

1. Which planets are similar to Earth?
2. Which planets would be easy to explore and/or live on?
3. Why is Pluto referred to as a Dwarf planets?

For each question you should provide at least 3 pieces of data to make your point.

Your PowerPoint presentation needs to:

1. State the question and explain how you are going to answer it.
2. Show and analysis your graphs (at least 3) that relate to the question.
3. Summarise your results and answer the question.

The PowerPoint should only have text and graphs, not pictures or images.

**Marking Key**

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| --- | --- | --- | --- | --- | --- |
|  | **Grade** | | | |  |
| **Task:** | **Excellent** | **Highly Satisfactory** | **Satisfactory** | **Unsatisfactory** | **My Mark** |
| **Data**  **1 mark/correct data in each topic** | Student accurately represents data for at least 12 topics in an excel spreadsheet (12 marks) | Students accurately represent data for 9-11 topics in an excel spreadsheet (9-11 marks) | Students accurately represent data for 6-8 topics in an excel spreadsheet (6-8 marks) | Student attempts to input data for few topics in a spreadsheet OR student does not include any data in a spreadsheet (0-5 marks) |  |
| **Graphs**  **1 mark for title**  **1 mark for correct axis labels**  **2 marks for correct graph** | Student provides accurate graphs for at least 4 topics (8 marks) | Student provides accurate graphs for 3 topics (6 marks) | Student provides accurate graphs for 2 topics (4 marks) | Student provides inaccurate graphs for one or no topics (0-2 marks) |  |
| **Question Responses**  **Maximum of 5 marks per question** | Student provides accurate responses to all 3 questions using data from the graphs and spreadsheet as relevant supporting evidence (15 marks) | Student provides responses to all 3 questions using some evidence from their spreadsheet/graphs (12 marks) | Student provides responses to all 3 questions loosely linking their responses to the spreadsheet/graphs (9 marks) | Student attempts to provide responses to some of the questions (0-8 marks) |  |
| **Spelling/Grammar and presentation** | Excellent spelling and grammar. Professional appearance of PowerPoint graphs and data with accurate information (5 marks) | Spelling and grammar is to a high standard with professionally presented PowerPoint, graphs and data that is accurate (4 marks) | Spelling and grammar is mostly correct. PowerPoint does not contain any unnecessary information and data is accurate. Overall presentation is neat (3 marks) | Poor spelling and grammar. PowerPoint, graphs and data is inaccurate, contains unnecessary information and/or is not presented neatly (0-2 marks) |  |
|  |  |  |  |  | Total:  /40 |