

Space Newsletter Assignment

It is the year 2159 and as a reporter of the *BLMS Times*; your job is to produce this month's newsletter. Your editor has asked you to do an article on the Sun, its 8 planets and our moon. You will be flown to each location and while you are there, you will conduct research and answer questions about each one. You must then create a professional document for submission to your editor which includes:

- a travel log including accurate distances and travel times (your travel times will be determined by your travel speed which you will make up) overlaid on a map of the solar system. Travel log will be expressed in lightyears.
- a header with the name of your newspaper.
- all questions and answers.
- pictures of the different celestial bodies.
- an additional fun/interesting fact about each location which is not included in the list of questions.

Rubric

	0	1	2	3
Account of your Journey	3 of the criteria are missing or are incomplete.	2 of the criteria are missing or are incomplete.	1 of the criteria is missing or is incomplete.	Travel log contains accurate distances and time calculations. All information is overlaid on an organized and easy to follow map of the solar system. Solar system map is clear, accurate and very well done.
Newsletter	3 or 4 of the criteria are missing or are incomplete.	2 of the criteria are missing or are incomplete.	1 of the criteria is missing or is incomplete.	All questions are answered accurately and concisely. Newspaper header is included and is creative. Pictures of the different celestial bodies are included. Additional fun/interesting fact is included for each celestial body.
Miscellaneous	3 of the criteria are missing or are incomplete.	2 of the criteria are missing or are incomplete.	1 of the criteria is missing or is incomplete.	Obvious effort and time was put into this assignment. Rough copy of travel time calculations are included on a separate sheet of paper. Newsletter was submitted by the due date.

To do your research on the Sun and planets please tell what websites you are using. Please cut and paste URS (web addresses) into answers.

The Sun:

- 1) How old is the Sun?
- 2) What is the Sun's composition?
- 3) What will happen to the Sun in the future?
- 4) What can cause an aurora borealis?

Mercury:

- 1) Is Mercury terrestrial?
- 2) What is the temperature range on Mercury (High and Low temperature)

Venus:

- 1) Why is it called the morning and evening star?
- 2) Why is it hotter than Mercury even though it is further away?
- 3) Describe Venus' atmosphere. How is it different from Earth's?

Earth:

- 1) How much of the Earth is water and how much is land?
- 2) What is the composition of the core and what temperatures does it reach?
- 3) Why is the greenhouse affect important for our survival?

Mars:

- 1) What causes the reddish colour on its surface?
- 2) What makes up the permanent ice caps at each of Mars' poles?

Jupiter:

- 1) How many Earth's would it take to fill the inside of Jupiter?
- 2) At its widest point, how much larger is the Great Red Spot on Jupiter compared to Earth?
- 3) What is the composition of Jupiter?
- 4) How many moons does Jupiter have?

Saturn:

- 1) Who first observed Saturn and when did he do it?
- 2) What is the composition of Saturn?
- 3) Describe Saturn's Rings.

Uranus:

- 1) What is different about the axis of Uranus?
- 2) What spacecraft has visited Uranus and when did it happen?
- 3) What causes its blue color?

Neptune:

- 1) Neptune was the first planet to be discovered using what?
- 2) What causes Neptune to be blue?

To answer the questions on the Moon you need to do a little online research.

The Moon:

- 1) How far is it from Earth in km?
- 2) What is the mass of the Moon compared with Earth (fraction e.g. 1/12)
- 3) If you weigh 127 pounds on Earth, how much would you weigh on the Moon?
- 4) Can you breathe on the Moon? Why or why not?
- 5) Who was the first person to walk on the Moon and who did it?

Please upload your answers to either of our teacher pages or email to david.gray@nbed.nb.ca / carlin.arsenault@nbed.nb.ca.

If you have limited access to technology write answers down on paper, use a cell phone to share picture of completed work with our emails and will grade it and attempt to provide feedback.

Take Care, Mr. Gray & Mr. Arsenault