The Study of the Universe Unit Task – Celestial Travel Agency  
Space Travel Symposium (Due Date) Thursday April 26th

Our knowledge of space and astronomy has greatly increased since the first satellite was sent into orbit 50 years ago. Today, astronauts live and work on the International Space Station for six months at a time and space tourists blast off to experience a microgravity environment. Many scientists think that in the near future, travel into space for vacations will become commonplace. However, outer space is not hospitable for human habitation, and space travel remains dangerous and expensive. In order for space travel to become more common, scientists will have to figure out a way to make it safer, cheaper and faster.

**Purpose:** In this unit task you will be working for a space travel agency in the year 2211. You must advertise travel to a destination in space for space tourists. You may choose from the following: **videotaping a commercial (approx 5 minutes long)** or preparing a **PowerPoint presentation (approx. 5 minutes long)** to show to potential travelers. You will be presenting your option to the class. There will be 2 presentation days (Thursday and Friday), you must be ready to go on THURSDAY APRIL 26th...we will draw names for the order of presentations.

**Procedure:**
1. You may work in groups of **up to 3 students** (no more). Decide on a name for your agency and choose one of the 3 space travel options your company will offer to the public **based on research** described in steps 2-5.
   - Short journey – travelling into orbit for a vacation in micro-gravity on a space station orbiting Earth
   - Medium journey – travelling to a planet in the solar system that is visible in the night sky
   - Long journey – travelling deep into space to a distant star system that is visible in the night sky
2. Conduct some market research to determine which of the three space journey choices would be most successful. Ask your classmates, friends and family which option they would choose (you must ask and record results from at least 20 people).
3. Create a table to gather responses to this question.
4. Create a bar graph showing how popular each of the journeys to space is.
5. Using your table and graph select the travel option your company will offer.
6. Research the destination you selected. You must submit written notes with the answers to the questions. Keep track of your sources so that you can create a bibliography. These questions should be evenly distributed among the members of the group during your video/presentation.
   - What are the physical properties of the celestial object you are visiting?
   - How far away is it?
   - How long will the journey take? Yes...you may need to do some calculations (you can use current technology as a reference point, although technology will no doubt be improved by 2211!)
   - What are the dangers involved in the journey?
   - What will be some of the physical challenges facing travelers on such a journey?
   - Have Canadian scientists contributed to research on the planet or star system being visited? If so how?
   - What is the history of the planet/star system? How was it created? How old is it? How long have we known about it? What methods have humans used to study it?
7. Design a logo for your company and include it in your video/presentation.
8. Find and include images of your destination to use in your video/presentation.
9. Create your 5 minute presentation (either a video commercial or PowerPoint & brochure). It must be ready to be shown/presented for our first Space Travel Symposium on Thursday April 26th! **Bring your file(s) on USB key/CD/DVD or YouTube.**
Assessment Checklist
Use the checklist to assess your own learning and provide a peer evaluation for each group member (you MUST include comments).

Knowledge & Understanding:
- Display a collection of data on the space travel destination
- Show an understanding of the physical properties and history of the destination

Thinking & Inquiry:
- Plan an advertising campaign and divide the workload accordingly with group members
- Show an understanding of how to find information on the Internet and evaluate the quality of information found.
- Show sources and references in a bibliography format

Communication:
- Use correct terminology and vocabulary regarding astronomy and space science.
- Present graphical information in a clear way in a bar graph and table
- Develop an advertisement that communicate information effectively to the public

Application:
- Include information on health/safety risks
- Include information on Canadian contributions to space travel and research

Team Member #1

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
<th>Unacceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Contribution</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Task Completion</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Attitude</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Quality of work</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Score /25
Comments

Team Member #2

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
<th>Unacceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Contribution</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Task Completion</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Attitude</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Quality of work</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Score /25
Comments