

Welcome Stellar Teacher! Let's Grow Some Astronauts.

UP, UP AND AWAY - WHY WE EXPLORE SPACE



For thousands of years, people have stared up the night sky and wondered what it would be like to walk on our moon. Scientists believed in the concept that space travel was possible, and in the twentieth century, these ideas became a reality. That is why you are here StarAcers- you believe that you have the ability to join the other space pioneers here at the Canadian Space Agency.

MISSION CONTROL COMMENTS (TEACHERS CORNER)



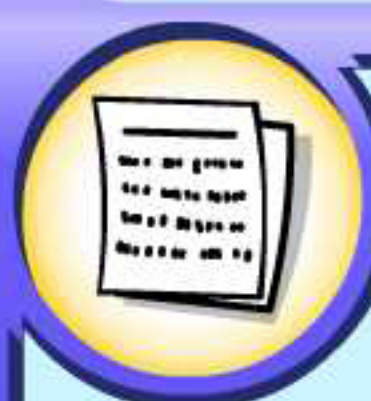
CURRICULUM OUTCOMES

- Space Exploration Students will be able to identify individuals, past and present, involved in space exploration.
- Students will be able to identify technologies used in space exploration.
- Students will recognise the benefits to society that have been realised from space exploration.
- Students will gain knowledge of the role Canada and its citizens have played in space exploration.



TIME FLOW

- A Find the Facts minimum 3 x 45 minutes
- B Get it Together minimum 2 x 45 minutes
- C The Big Bang - Making Connections 60 minutes
- (will vary according to number of students and special guest presenters)



EXTRA RESOURCES

- StarAcers.com has links for your mission!
- A scientific report outline in the Common Documents
- Student and teacher rubrics

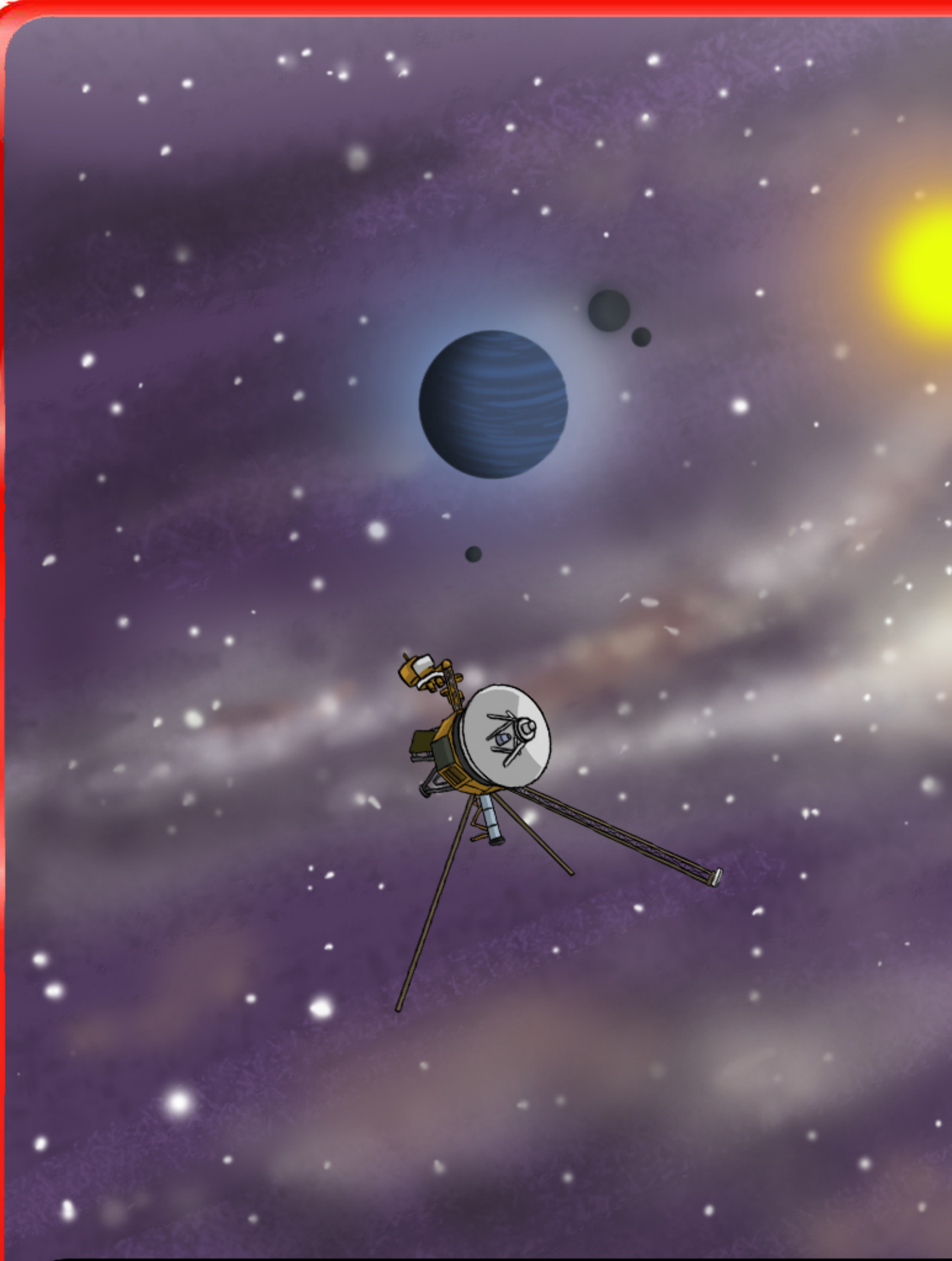
GROUP RESOURCES

SUGGESTED GROUP PRESENTATION RESOURCES

- Depending on the number of students, it may required and beneficial to pair up students to cover all topic areas.
- Invite in other teachers, parents, and guests to be part of the audience for the Roundtable.

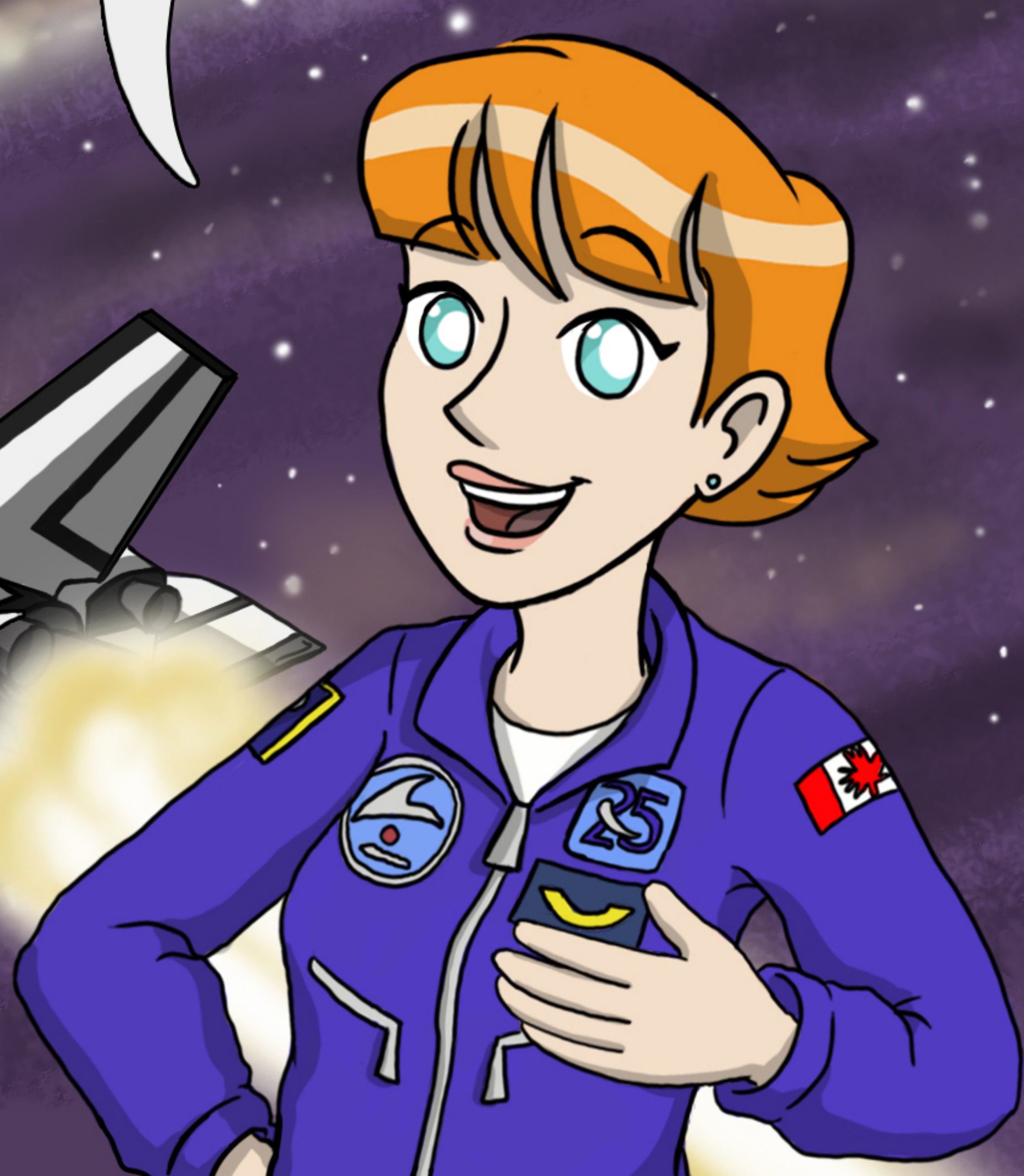
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PART 1 - THE BRIEFING ROOM



"Polls have shown that due to current economic conditions the public is sceptical of continuing to fund space exploration. The government needs your help in making a presentation to educate the Canadian public on the history, technological advances and benefits of space travel and exploration. You will need to prepare a presentation that convinces both government and the public on the benefits of exploring this new frontier."

"Hey **StarAcers**, I'm **Amelia Kennedy**, a **StarAcer** graduate **exonaut** . As someone who has gone through the rigorous training to become an astronaut,I can tell you it is a life altering experience. You and I know the importance of space exploration. However, not everyone hashad the exciting opportunities that we have. That is why the Canadian government needs your help!"



PART 2 - THE POCKET GUIDE TO SPACE EXPLORATION

Dr. Bob Thirsk

GPS

Grooved Highways

CSA

NASA

Memory Foam

International Space University

Vocabulary

Julie Payette

Canadarm

Satellites

Water Purification Systems

Body Scanning Technologies

Enhanced Baby Formula

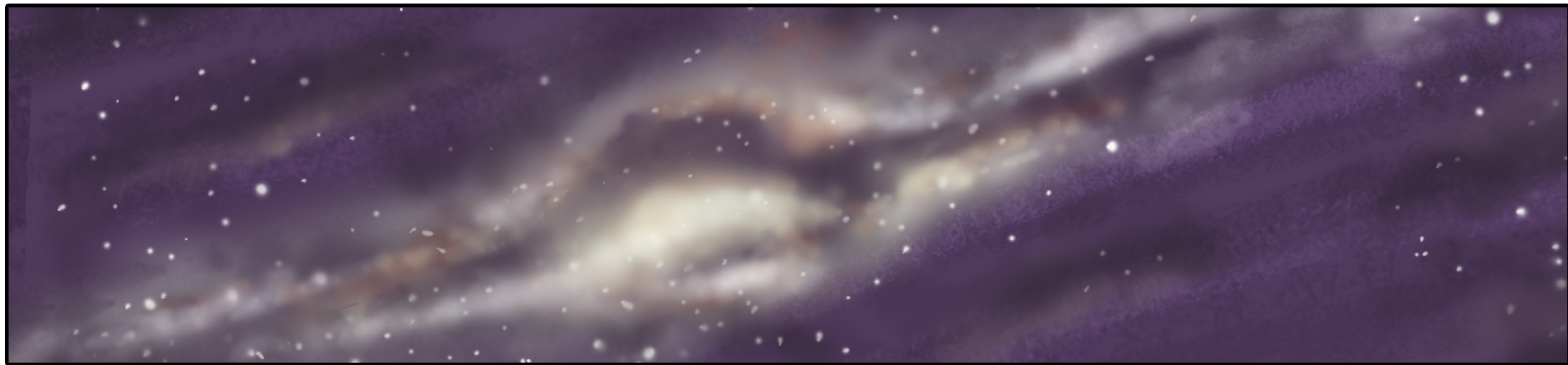
Velcro

Mission 003: Up, Up and Away - Why We Explore Space

Earth and Space Sciences: Space. Exploration of Extreme Environments

6AB, 6ON, 6NB, 6NS 6PEI, 6NFLD, 6YK, 6NWT

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A. PART 3- FIND THE FACTS

Your mission will be to research a particular topic related to the question: Why do we explore space? A convincing argument must be made to ensure continued funding for the Canadian Space Agency.

A list of various research topics is listed below:

- Biographies of Canadian astronauts
- Canadian space achievements
- Space technology used in everyday life
 - Materials
 - Fabrics
 - Technology
 - Dietary
 - Survival Skill
- Increased understanding of our solar system
- Satellite networks (GPS, weather, communications, military)
- International cooperation
- Future scientific exploration
- Space tourism



B. PART 4 - GET IT TOGETHER

Each group must prepare a verbal presentation along with a poster.

Get up and shout about it: The verbal presentation must include the research you've conducted and provide a convincing argument for continued funding.

Show it off: The poster will represent your research and become part of a public exhibit in your classroom to convince both the government and citizens as to the benefits of space exploration.

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C. THE BIG BANG - MAKING CONNECTIONS

Mission Control will moderate this discussion. You and your fellow StarAcers will present your research to government officials and members of the general public. Each group will be given time to present their verbal arguments and display their poster boards. There will be an opportunity at the end of the Roundtable for members of the audience to ask questions of the presenters.



DO YOU MEASURE UP?

Get a rubric from Mission Control. How do you measure up based on the work that you have just completed in Mission 003?



WANT MORE ADVENTURE?

Want a challenge? Try answering these questions:

- Create videos of all presentations and prepare a promotional video
- Invite special guest speakers
- Generate a list of opposing view points and perspectives



Create a verbal presentation that includes all of the research you have collected on your selected topic, and provide a convincing argument to ensure the continued funding for the Canadian Space Agency.

This image shows a single page of white paper with horizontal black lines, resembling notebook paper. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

Mission 003: Up, Up and Away - Why We Explore Space
Earth and Space Sciences: Space. Exploration of Extreme Environments
6AB, 6ON, 6NB, 6NS 6PEI, 6NFLD, 6YK, 6NWT



UP, UP AND AWAY - WHY WE EXPLORE SPACE

Hi **StarAcer**! Use this template to design your poster to present along with your argument. Make sure the poster fully represents your research as it will help convince both the government and citizens the benefits of space exploration.