STORYPATH®

Sample Pages

Sample pages from this product are provided for evaluation purposes. The entire product is available for purchase at

www.socialstudies.com

or

www.teachstorypath.com

Creating a Constitution
The Space Colony

by Margit E. McGuire, Ph.D.
Professor of Teacher Education, Seattle University

ACKNOWLEDGMENTS

Content Consultant

A special thank you to Mark Roddy, Seattle University, for his review of the science component of this Storypath. His assistance with resources and advice about activities are greatly appreciated. I am also grateful to Dr. Eric Carlson, Adler Planetarium astronomer emeritus, for his thoughtful suggestions.

Class Test Sites

I am grateful to Su Hickenbottom, Snohomish School District, Snohomish, Washington, who piloted this unit in her classroom. Su's suggestions for organizing the unit and activities for student learning have enriched this learning experience. Her flexibility, enthusiasm, and support are greatly appreciated.

My thanks also to Helen Babbin, who piloted *Creating a Constitution: The Space Colony* in her classroom. I appreciate her ideas and suggestions.

–Margit E. McGuire

Storypath Advisory Panel

The Storypath advisors review each unit prior to publication. We sincerely thank the following advisors for their comments and recommendations regarding *Creating a Constitution: The Space Colony:*

Dr. Amy Jo Baker
San Antonio School District
San Antonio, Texas

Su Hickenbottom
Snohomish School District
Snohomish, Washington

Marilyn Linquist
Bloomington Public Schools
Bloomington, Minnesota

Barbara Moses
Philadelphia School District
Philadelphia, Pennsylvania

Program Consultants: Katherine L. Schlick Noe, Ph.D., Professor and Director of Literacy, Seattle University; H. "Sonny" Carreno, B.A. Education, Licensed Instructor, English as a Second/New Language (Texas, Wisconsin, Indiana)

Program Management: Morrison BookWorks LLC

Program Design: Herman Adler Design

STP640
978-1-56004-611-0

Published by Storypath
10200 Jefferson Boulevard
P.O. Box 802
Culver City, California 90232-0802
1-800-359-0961
www.teachstorypath.com

ABOUT STORYPATH

THE STORYPATH STRATEGY

Storypath offers both a structure for organizing the social studies curriculum and an instructional strategy for teaching. The structure is a familiar one: the story. The strategy is grounded in a belief that children learn best when they are active participants in their own learning, and places students' own efforts to understand at the center of the educational enterprise. Together, the structure and the teaching strategy ensure that students feel strongly motivated and have meaningful and memorable learning experiences.

Originally developed in Scotland during the 1960s, Storypath draws support from decades of experience with teachers and students. The approach has its roots in these beliefs about children and learning:

- The world is complex and presents many layers of information. Children know a good deal about how the world works and have a reservoir of knowledge that is often untapped in the classroom.
- When children build on that knowledge through activities such as questioning and researching, new understandings are acquired. Because children construct their own knowledge and understanding of their world, their learning is more meaningful and memorable.
- Problem solving is a natural and powerful human endeavor. When children are engaged in problem-solving, they take ownership for their learning.
- The story form integrates content and skills from many disciplines and provides a context for children to gain a deeper, more complex understanding of major concepts.

AN INQUIRY APPROACH

Questioning, by both teacher and students, is a key component of Storypath. Through the story structure and the discourse it creates, the teacher guides students in their search for meaning and understanding as they acquire new knowledge and skills. Your questions, and the discussions they engender, cause students to:

- ask their own questions and think critically about what they know;
- use their prior knowledge to make sense of new information;
- connect personally to important social studies concepts.

The story structure and inquiry guided by unit goals provide the framework for students to integrate skills and complex content through problems they encounter. As they do so, their understanding of important concepts is extended and key connections are made.

THE STORY STRUCTURE

For thousands of years, stories have helped us create order and make connections between events. Storypath's narrative structure helps students understand concepts that they often find difficult to comprehend in the traditional social studies curriculum.

Each Storypath unit centers on a unique and engaging story that provides a concrete context for understanding the social science content. This story may be based on actual historical events, as developed in *Struggle for Independence*. Or the story might instead be based on typical community or business structures, as developed in *Families in Their Neighborhoods* or in *Understanding the Marketplace*. From all of these structures, students develop a meaningful context for developing understanding of the topic.

Typical structure of a Storypath unit

CREATING THE SETTING

Students create the setting by completing a frieze or mural of the place.

CREATING THE CHARACTERS

Students create characters for the story whose roles they will play during subsequent episodes.

BUILDING CONTEXT

Students are involved in activities such as reading, writing, and research to stimulate them to think more deeply about the people and the place they have created.

CRITICAL INCIDENTS

Characters confront problems typical of those faced by people of that time and place.

CONCLUDING EVENT

Students plan and participate in an activity that brings closure to the story.

CREATING A CONSTITUTION THE SPACE COLONY

MAKE KEY DECISIONS

Make Space for the Storypath. You will need enough wall space for students to make the space colony frieze and to display their characters and the various projects they complete during the unit. Sometimes teachers are tempted to put the planet posters, frieze, and characters in the hallway outside the classroom. It is important, however, to display these items inside the classroom where students can easily refer to them throughout the Storypath.

Gather Resources. Selecting a planet for colonization and planning its settlement will require that students find information about planets in our solar system. The Content Slides provide some information, but you may want to assemble other resources for students beforehand.

Reserve Adequate Time and Resources for the Writing of the Constitution Although space and the colonization of a planet are the focus of many of the Storypath episodes, the most significant experience in the unit will probably be the writing of the space colony constitution in Episode 6. Be sure to budget enough time and resources for this important process. For background information on constitutional governments, see TH pages 66–67.

Balance Imagination with Fact. Throughout the unit students will use their imaginations to create a space colony. Science fiction has often led to new ways of thinking about space and science. Encourage students to use their imaginations, but challenge them to support their ideas with facts. Given the fast pace of technological advancements, some of these young people may well become the space colonists of the future!

CUSTOMIZE THE UNIT

Adapt the Unit. There will likely be many times in this unit when you will want to modify the curriculum to suit your own needs and follow the logical progression of the story. Alternative activities or special arrangements are suggested at various points during the unit to assist in adapting the unit to meet your unique needs. The primary challenge of this unit is to keep students focused on the key ideas. The topic is very broad, and students can become mired in details that lead away from the primary learning goals. You may need to keep students pointed in the direction you want to follow in the Storypath.

Frequently students will provide an unanticipated twist to the Storypath, or important learning opportunities will arise. The Storypath allows for the accommodation of such special circumstances.

There are times when students will role-play the characters in the story to understand particular viewpoints. At other times students will reflect on the events of the unit while out of role so that situations can be examined and understood from students' own perspectives. These are opportune times to help students draw upon their own experiences to deepen their understanding of the role of colonists both in the future and the past.

Connect to the World of Work. This unit reinforces the connection between the world of school and that of work. Students create biographies for their characters, consider occupations needed within the colony, and examine ways colonists work together effectively. Exploring the jobs of colonists and the work they do makes the learning experience meaningful and relevant to the world of work.

Connect to Other Storypaths. *The Struggle for Independence in Colonial Boston* can be taught prior to or following this unit. Students will then be able to evaluate and compare decisions related to our democratic governing process in two settings: an historical colony and their space colony.

Integrate the Science Curriculum. If you normally study space in your science curriculum, you will find many ways to integrate science activities into this unit. Various science experiments and other activities can be substituted for those suggested. However, be careful not to get sidetracked by such experiments and thereby lose the momentum of the story.

INVOLVE OTHERS

Involve Families. Family members and other adults can serve as excellent resources for you and your students. It is possible that family members have special knowledge about space or work in businesses that have benefited from space technology. Invite them to share what they know. Some families may have emigration experiences and may be willing to share their feelings about leaving their homelands to come to a new and different place.

Involve Experts. Flight museums or space-related companies in and near your community can also serve as excellent resources. Field trips or presentations by guest speakers in your classroom can enrich students' experiences. Such activities should be carefully timed, however, and should take place only when students are truly interested in learning from the field trip or are ready to listen to the guest speaker. Field trips or visits by guest speakers should occur at the end of the unit when students can knowledgeably compare and contrast their own "space colonization" experiences with the new information they are receiving.

Create a Learning Community. An open and supportive atmosphere is essential for students to engage in the discourse that is basic to the learning process of the Storypath approach. Students should understand the value of reflective discussions and the importance of collaborative work in deepening their understanding of complex ideas. Consequently, students should be expected to listen carefully and respond thoughtfully and respectfully to one another's ideas.

5

EPISODE

BUILDING CONTEXT
DAILY LIFE

INTRODUCING THE EPISODE page 39

Students listen to a narration describing their journey to and their early days at the space colony.

Materials Teaching Master 4, *Life in the Colony*, TH p. 52

Grouping Whole class

Schedule Approximately 20 minutes

UNDERSTANDING DAILY LIFE page 39

Students write about daily life on the planet.

Materials Portfolio 12, *Prewriting Daily Life*, p. 16
Portfolio 13, *Self-Assessment: Description of Daily Life*, p. 17

Grouping Individuals, pairs, or small groups

Schedule 1 1/2 hours, not including presentation time.

CONCLUDING EPISODE 5 page 40

Students reflect on the episode.

Materials None

Grouping Whole class

Schedule Approximately 30 minutes

EPISODE OBJECTIVES

- **Culture/Social Interaction** *Identify ways colonists from different cultures address similar needs and concerns.*
- **Culture/Social Interaction** *Explain how colonists interact with the physical environment and adjust to the social conditions of a planet.*
- **Science and Society** *Describe how the colonists might use science and technology to change the physical environment of a planet.*
- **Critical Thinking** *Organize ideas from class discussion in new ways to write about daily life in the colony.*
- **Literary** *Write a description of daily life on the planet.*

TEACHING MASTER

T4

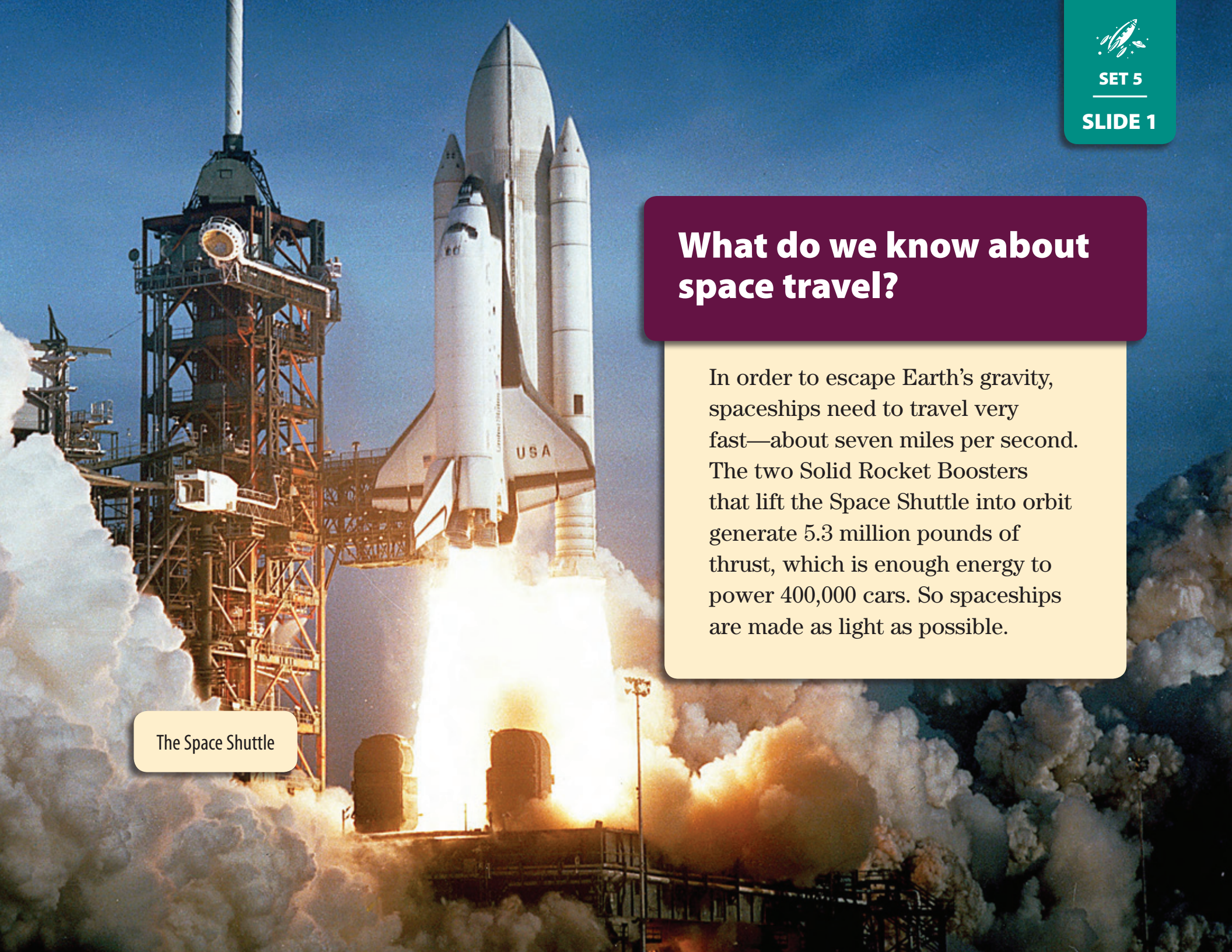
LIFE IN THE COLONY

The spaceship has landed! People are gazing at the barren landscape with both anticipation and fear. Our journey was long but uneventful. As the days passed in the spaceship, we were struck by the beauty of the universe and the strange sensation of seeing Earth become smaller and smaller as we sped away. Looking back on Earth—seeing the blue of the oceans, the green of the forests, and the limited amount of brown continents—reminded us of the work still to be done. It is important that our work here also serve the people back on Earth.

We now must begin setting up the colony according to our plans. The colonists are eager to get started. We are tired of living in the cramped quarters of the spaceship and eager to build our settlement.

A month later . . .

The settlement is off to a good start. Our shelters are up, and plants are starting to sprout on our small farm. We are all working very hard. There is still much work to do, but the settlement is beginning to feel like home. . . .



The Space Shuttle

What do we know about space travel?

In order to escape Earth's gravity, spaceships need to travel very fast—about seven miles per second. The two Solid Rocket Boosters that lift the Space Shuttle into orbit generate 5.3 million pounds of thrust, which is enough energy to power 400,000 cars. So spaceships are made as light as possible.

Once a spaceship passes beyond Earth's atmosphere, it enters airless space. No person could survive in space for more than a few seconds without a space suit or spaceship, which must carry enough air, water, and food to keep its explorers alive.

Edwin E. Aldrin, Jr., of the Apollo 11 mission, walks on the Moon.

A History of Space Exploration

The 1950s marked the beginning of the space age. In 1957, the Soviet Union launched Sputnik 1, the first artificial satellite. In 1969, the United States made history when the Apollo 11 mission successfully landed two astronauts on the Moon.

In 1961, Yuri Gagarin boarded the Soviet spacecraft *Vostok One* and became the first human to travel into space.

2. What might be one thing NASA learned from the Apollo missions? *(making inferences, connecting)*

Questions:

1. Why must spaceships be as light as possible? *(main idea/supporting details)*
2. What might be one thing NASA learned from the Apollo missions? *(making inferences, connecting)*

Slide 1 ◀

What do we know about space travel?

In order to escape Earth's gravity, spaceships need to travel very fast—about seven miles per second. It takes a huge rocket to launch an object away from Earth. The two Solid Rocket Boosters that lift the Space Shuttle into orbit generate 5.3 million pounds of thrust, which is enough energy to power 400,000 cars. So spaceships are made as light as possible. Only the most important items are brought along.

Slide 2 ◀

Once a spaceship passes beyond Earth's atmosphere, it enters airless space. No person could survive in space for more than a few seconds without a space suit or spaceship, which must carry enough air, water, and food to keep its explorers alive.

Slides 1, 2 ◀

The Space Shuttle

Edwin E. Aldrin, Jr., of the Apollo 11 mission, walks on the Moon.

In 1961, Yuri Gagarin boarded the Soviet spacecraft *Vostok One* and became the first human to travel into space.

▶ Slide 3

A History of Space Exploration

▶ Slide 3

The 1950s marked the beginning of the space age. In 1957, the Soviet Union launched **Sputnik 1**, the first artificial satellite. In 1969, the United States made history when the Apollo 11 mission successfully landed two astronauts on the Moon.

Since that initial race into space, our knowledge has expanded dramatically. After the Apollo project, the Space Shuttle missions have been the focus of NASA's space program. In addition to the Space Shuttle missions, robotic space probes have traveled to Mars and beyond. And the International Space Station was launched into orbit around the Earth in 1998.

DATE _____

PREWRITING: DAILY LIFE

You've now settled into life on the planet. Imagine what your daily life is like. Use the guide below to help you organize your ideas.

1. Compare and contrast with life on Earth.

Think about what you know about the space colony already. What are the similarities to life on Earth? What are the differences to life on Earth?

Similarities to Earth	Differences from Earth

2. List the tasks you do each day.

Write the tasks you do from the time you get up until you go to bed.

_____

_____

3. Use all your senses.

To enrich your writing, think about how you would use your senses.

	Describing Words: List some ideas below
See?	
Hear?	
Smell?	
Feel?	
Taste?	

4. Draft your description of daily life on a separate sheet of paper.

Use the ideas you have listed above.

EPISODE 5

PORTFOLIO

13

DATE _____

SELF-ASSESSMENT: DESCRIPTION OF DAILY LIFE

Use the rubric below to evaluate your writing. The first column describes expectations for the assignment.

Rate yourself by putting a number in the second column.

1 = needs lots of work

2 = met the basic requirements of the assignment

3 = went beyond expectations

In the last column explain why you assigned that number for that particular criteria.

Ideas and Content

Criteria for assessment	Rating	Explanation for rating
The content is accurate and realistic to the space colony.		
The description of daily life is focused and includes relevant details.		
Clear descriptions are included about tasks and tools/materials.		
The writing is insightful. The reader can picture daily life because of the vivid descriptions.		

Organization

Criteria for assessment	Rating	Explanation for rating
The introduction is inviting and a satisfying conclusion is provided.		
The sequence is logical and effective.		
The descriptions flow from one event to another.		
Format chosen for description is used effectively.		

DATE _____

READING A PREAMBLE

Our preamble is from _____

1. **Find unfamiliar words.**
   Use a dictionary to find out what the words mean. Divide the work so that everyone looks up a word or works with a partner to look up a word. List the words below and write the meaning of the words.

2. **What values are expressed in the preamble?**
   List at least three values.

3. **Are there statements in the preamble that you like?**
   Would you want to use those statements for the space colony? Discuss in your group. Write at least one idea below. If you don't find anything you like, explain why below.

Assessment: Unfamiliar words are identified and accurate definitions are included for the words. At least three values are identified in the preamble. At least one idea for the preamble is explained as to why it would or wouldn't be suitable for a space colony preamble.