Teacher Guide for ASK, So Many Moons!February 2009

Betty Lou Askin, a retired educator, who lives in Toronto Ontario, prepared this guide.

Scoops (pages 2-3)

Plants Take Two Aspirin

- How do trees get their medicine?
- Explain why this is an excellent discovery for farmers.

Ancient Ant

- Describe the ancient ant.
- Why is its discovery important to entomologists?

Plucky Ducks

- How was the experiment set up?
- What is the purpose of the experiment?

Nestor's Dock (pages 4-5)

- What was the experiment that the friends hoped to achieve?
- Did Trip doubt himself?
- Why is he going to keep the story for his grandchildren?

Making Moons (pages 6-11)

Ideas for discussion:

- Describe the various types of moons.
- Using the information in this article, create a chart that shows the development of the solar system.
- How many and where are the many moons to be found?
- Tell how Earth's moon was formed.
- Why does Earth's moon stay with us?
- Explain the difference between the moons developed at the same time as a planet and those that were captured.
- Why are scientists interested in KBOs?
- · Describe how maria were formed.
- Explain a living moon.

Life Without Gravity (pages 12-15)

Reading for understanding:

- Tell what happens to a body in zero gravity.
- As the students read this article ask them to make a list of the body changes that take place in low gravity.
- After a week what changes take place to the body in a weightless space?
- Describe the difficulty of eating in low gravity.
- Explain how astronauts adapt to life back on Earth.

Home Sweet Moon (pages 16-33)

- What missions to the moon have been successful?
- What is planned for 2020?
- Explain how regolith will help with the next excursion to the moon.

- How will the astronauts obtain water?
- Describe the extreme temperatures and how these will be overcome.
- Why are lunar mobile homes necessary?
- Without electricity how will power be obtained?
- Explain how they hope to grow plants.
- Describe ATHLETE.
- Writing Activity: Write an essay telling why you would or would not like to be one of the colonists on the next voyage to the moon. Use information from the text to support your decision.

Loony Moons (pages 34-35)

- There are 7 stories on these pages. Divide the class into seven groups and assign one story to each group. Ask the students to read their given passage and to prepare a verbal presentation to the rest of the class.
- Creative Activity: Ask the students to create their own loony moons story using the ones in this article as inspiration. Have them also illustrate their story.

Jimmy the Bug (page 32)

- How are goose bumps raised?
- How is raised hair supposed to help you?

Marvin and Friends

Why do Marvin's friends not wish to travel with him?