

# Mysteries of the Solar System

by Ashleigh Young

## Summary

This text explores our solar system, identifying some of its mysterious features. It provides an insight into how the planets were discovered and identifies some major astronomers.

## Features of the Text

- Informational report with explanations
- Fact boxes and diagrams
- Specialized vocabulary
- Organization into chapters, subheadings, and paragraphs
- Descriptive language

## Purpose

*Mysteries of the Solar System* can be used to introduce and reinforce the following skills:

- S** analyzing and synthesizing information;
- S** identifying main ideas and supporting details;
- S** explaining the features of reports.

## The Guided Reading Lesson

- S** Analyzing and synthesizing information

### Introducing the text

If possible, use a diagram or model of the solar system to initiate a discussion. Explore the students' prior knowledge of the solar system.

- *What do you already know about the solar system?*
- *What are the physical features of some of the planets?*
- *How do you think they were explored?*
- *What might be some of the mysteries of the solar system?*

Collate this brainstorm on a two-column chart, under the heading "What We Already Know."

### Reading and discussing the text

Ask the students to read to the end of page 5. Ask them to discuss anything they have learned with a partner.

- *What facts surprised or amazed you?*
- *How does this new information support, build on, or differ from the information that we charted?*

Write this new information in the second column of the chart, under the heading "What We Know Now." Discuss any extensions of their understanding or misconceptions they may have had. Explain that this process of integrating and building on what they already know is called synthesizing information.

Ask the students to discuss what they know about Venus and Mars with a partner. As they read pages 6 to 9, ask them to note any new understandings or misconceptions.

Discuss their new understandings and record them on the chart.

The students can now read to the end of the book. Explain that synthesizing also involves identifying some of the big ideas or themes in a subject and this may change our thinking about it.

- *Do you think all the solar system's mysteries have been solved?*
- *What was the writer's purpose in compiling all of this information?*
- *Why do you think the solar system captivates and interests people?*
- *How would you describe people who have explored our solar system?*

## Following Up

The students can:

- use the blackline master on page 39 to identify main ideas and supporting details about a planet
- research one planet and present information on it to the group
- research a scientist or an instrument from the text and write a biography or explanation of it
- create a model of the solar system using the information and descriptions from the text.