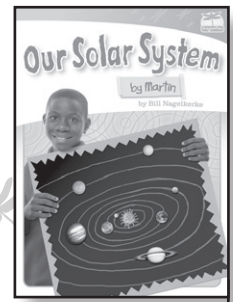


Our Solar System by Martin

by Bill Nagelkerke



Overview

This simple text is presented as if written by a child as part of a school project. Using photographs and childlike drawings, it includes brief descriptions of our solar system, such as the hottest planets, the biggest planets, moons, asteroids, and comets. (Big idea: Scientists study Earth and space.)

Suggested purposes

This book supports the following **comprehension strategies**:

- making connections between prior knowledge and the text **MC**
- identifying the main ideas **MI**
- visualising. **V**

It supports the following **non-fiction strategies**:

- gathering information from labels
- gaining information from photographs
- how to personalise factual information
- using a glossary (boldface type).

Key vocabulary

The vocabulary that is focused on includes:

- Anchor words – *Earth, planets, solar system, space, stars*
- Content words – *air, asteroids, comets, craters, dust, gas, ice, Jupiter, kilometres, live, Martians, Mars, Mercury, moon, orbit, people, rings, rock, Saturn, sun, Venus, water, years*
- High-frequency words – *as, away, from, has, have, one, our, put, some, that, there, they, two, your*

Features of the text

- Non-fiction features:
 - cover flap, which provides support for identifying the big ideas and anchor words
 - the topic (*our solar system*), which expands on pages 10 and 11 of the anchor book *Being a Scientist*
 - preview question on the back cover
 - labelled diagrams
 - photographs
 - comparison chart
 - glossary (boldface type)
 - fact boxes
 - bulleted list
 - captions
- Word study:
 - proper nouns – *Mars, Saturn*
 - initial consonant blends – “sp-”, “pl-”, “dr-”, “thr-”
 - final blend – “-st”
 - initial digraphs – “ch-”, “th-”, “sh-”
 - contractions – *it’s, that’s*
- Exclamation marks
- Comparative language – *bigger than, more than, biggest, closest, hottest*
- Report format as if written by a child



Setting the scene

If you have already introduced the topic using the whole-class lesson plan and the anchor book (*Being a Scientist*), you can review the discussion and show the students pages 10 to 11 of the anchor book.

Discuss the planets.

- *What do you know about the planets?*
- *What do you know about the sun?*
- *What other things are up in space?*

ELL support

As they acquire more English, ELL students will speak in simple sentences, showing a wider vocabulary and better comprehension. Encourage them to actively participate in small-group discussions. While it is better to model complete sentences, your teaching should focus on communication rather than form.

Introducing the book

Front cover – Discuss the photograph. Point out that the boy, Martin, is holding a poster. *How can you tell that he made this poster?* Read aloud the title.

Provide support for “solar system”. Read aloud the author’s name. *Who is the real author of this book? What do you think you will learn when you read this book? What questions do you have about the solar system?* List the questions on the board. The students can revisit these as they read and research unanswered questions as a follow-up activity.

Back cover – Read aloud the preview question. Discuss the students’ predictions.

Using the flap – Read aloud the text on the flap, and (if relevant) remind the students that they have read this in *Being a Scientist*. Read aloud the anchor words on the other side. Tell the students that they can point out the words when they find them in the book. Ask them to leave the flap open as they read.

Title page – Read aloud the title. *Who is going to tell us about the solar system?* **(Making connections)** Explain that Martin used many ways to make his report interesting. Ask the students to think about Martin’s style of writing as they read. *You may like to use his ideas the next time you write a report. We can also tell whether Martin enjoyed researching this topic.*

MC

The first reading

Pages 2 and 3 – Discuss the picture. *How has Martin illustrated the solar system? How many planets are there? Point to the planets as you read aloud the labels. Where is the sun? How has Martin shown the path of each planet? Look up “orbit” in the glossary. Which planet has the longest orbit? Which has the shortest?* Place a length of string along the orbit to find out.

Pages 4 and 5 – Point to Earth in the photograph. *What planet is this? How do you know?* Encourage the students to find “Earth” on the cover flap. Use the glossary to clarify “gas”. *How has Martin presented information about the sun? Why do you think he presented it in this way?* (to personalise the information, to create a sense of drama, to show “at-a-glance” information) *How does his label about the sun’s distance from Earth match the text? Why has Martin done this?*

MC **Pages 6 and 7** – **(Making connections)** Point out that Martin has used lots of labels. *How are the labels useful? (quick to read) How has Martin showed that Mars is one of his favourite planets? (Martin – Martian) How are Earth and Mars different? How are they similar? Which planet would you prefer to live on? Why?* **(Visualising)** Have

the students close their eyes and imagine that they live on Mars. *You live on a dry, dusty, rocky planet. What is it like?* Have them share with a partner.

Pages 8 and 9 – **(Making connections)** Read aloud the heading. *Why are these the hottest planets? Look at the pictures. What do these planets look like? Point to the label “crater”. Clarify the meaning using the glossary. How has Martin presented a key fact about Venus? How has Martin helped us to think about how hot it is? What does this tell you about how he likes to present information?* **(Visualising)** Have the students close their eyes and imagine they live on Venus. *What is your life like? What clothes and shoes do you wear? What is your home like? How do you get to a friend’s house?*

MC

V

Pages 10 and 11 – **(Making connections)** Read aloud the heading. *Which planets are these? How has Martin given us this information? How many planets are bigger than Earth? Which planet is the biggest?* Prompt the students to think about what they have read. They already know about four other planets and the sun, but this chapter tells us that there are huge planets in space. *What does this tell you about space?* Encourage

MC

MC them to share their thinking. Draw out the idea that space is very big. *Scientists still don't know how big it is!* Point out the way that Martin has added detail about chunks of ice. *If this were your project, how would you present this?* Look at the headings on pages 6 to 11. *How has Martin organised information about the planets? What other ways could he organise the information?* (biggest to smallest, in sequence from the sun) (**Identifying the main ideas**) Explain that Martin has chosen the information that he thinks is the most interesting.

Pages 12 and 13 – (Visualising) *Think about times when you have seen the moon. What have you wondered about? Is the moon always in the same place? Does it always look the same?* (**Making connections**) Prompt the students to use the word “orbit”. Remind them that other planets have moons too. *How has Martin shown the moon's orbit? How has he shown movement?* Ask the students to imagine what it would be like if Earth had thirty moons. (**Making connections**) Point to the fact box on page 13. *How has Martin made this information interesting?* (talks of “cool names”, describes Jupiter as having “the record” as though it is a contest, uses exclamation mark)

Pages 14 and 15 – Read aloud the heading. Discuss what rocks and comets might look like. *How has Martin made the information about asteroids interesting? Does his photo and label help you to understand the information? How does Martin feel about the solar system?*

Vocabulary activity

Focus word: Earth (page 6)

1. Reread page 6. *Earth is the only planet that people can live on.*
2. Write “Earth” on the board. Say “Earth” with me.
3. Explain that Earth is a planet in our solar system. In this book, Earth means the name of the planet that we live on. When we write “Earth”, we use a capital letter to show that it is a name. “Earth” can also mean the ground or the dirt or soil. *Without earth, plants wouldn't grow.* Explain that when we say “earth” to describe the ground, dirt, or soil, we don't use a capital letter because the word is not a name.
4. Give examples of other ways we use the word “Earth”.
 - *The earth in my garden is dark, soft soil.*
 - *In some parts of the countryside, the earth is steep and hilly.*
 - *Many animals live under the earth. Rabbits burrow into the earth. Worms slither through the earth.*

5. Do the following activities:
 - Have the students think about things that can be put into the earth. Have them share their ideas with a partner.
 - Ask the students to visualise an earthmover making a road. *What movements does the earthmover make? Why?* Have a few students act out what the earthmover does.
 - Tell the students to imagine that they have found another planet. *The planet is similar to Earth. What would you name it?* Have them share with a partner.
6. *What is the word we've been learning that means our planet or the soil? Say the word with me.*

ELL activity

Language objective: Comparative language (hottest, closest, nearly as big as, bigger than, biggest)

1. Turn to page 8. Ask a student to read the heading. (The Hottest Planets)
2. *What word does Martin use to tell us about the planets? Write “hottest” on the board.*
3. *Let's read pages 8 and 9. What other words does Martin use to describe Mercury and Venus? Accept multiple answers, but emphasise “closest” and “nearly as big”.* Write “closest” and “nearly as big” on the board.
4. Repeat the activity with pages 10 and 11. Add “biggest” and “bigger” to the list.
5. Explain that Martin uses all these words to describe the planets. *These words also help Martin to compare the planets. Venus is nearly as big as Earth. This means that Earth is just a little bigger than Venus. They are almost the same size.*
6. Ask the students to turn to a partner and to use the words in complete sentences to compare things in the classroom. Ask the pairs to share their sentences with the group.

Ideas for revisiting the text

1. Review and check

- Listen as the students reread the text, observing their fluency and the decoding strategies.
- Review the anchor and content words. Check that the students know what each word means and how it is pronounced.
- Summarise the main ideas. *Our solar system is a big place with many objects in it. There are still things to discover.*

2. Stop and learn

a. Decoding/word attack activities

Practising blends

- Write “planets” and “crater” on the board.
- Ask the students to practise saying “pl” and “cr”.
- Emphasise the difference in the blends and ask the students to look at each other as they say them.
- *What did “pl” look like? What did “cr” look like?*
- *Now watch each other say “planets” and “crater”.*
- *What other words begin with “cr” or “pl”?*

Practicing digraphs

- Write “chunks” and “shapes” on the board.
- Repeat the same process as with the blends (above).

BLM – Practising writing blends and digraphs

The students can write the appropriate words in the spaces provided.

b. Comprehension activities

Discuss our solar system. Explain that “solar” means “sun”. *The sun is the centre of the solar system. What objects orbit the sun? (planets, asteroids, comets, moons) What objects orbit some of the planets? (moons)*

BLM – Reading and completing sentences

The students can write the correct word in the spaces provided. (ELL students may need help to read the instructions on the BLM.)

c. Writing activity

- Have the students write about their favourite planet. Model the sentence structure of a simple report. For example, “[Saturn] is ...” “[Saturn] has ...” Encourage the students to think about interesting ways to present the information the way Martin did.

3. Suggestions for further activities

- Visit a planetarium or an outer-space display in a museum.
- Create a solar system in the playground.
- Look at the moon on page 12. Write a list of words and phrases (not sentences) that describe the moon. Use these words and phrases to write a poem.