

Level
D

Exploring

**Content
Area
READING**

- Science • Social Studies
- Language Arts • Mathematics

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For teachers' inspection ONLY

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Preface

PREFACE

A preface [ˈpreɪfəs] is an introduction to a book. In a preface, the author explains the point of the book, as well as other important information about the book and its goals. The following is what a preface might look like in a science textbook.

Using This Book

This Planet, Our Planet is a science textbook that tells you all about the Earth—from its core to its atmosphere. It describes the features of Earth's surface, including mountains, rivers and land masses, and how they have changed over time. It also informs you about the animals and plants that live on the surface of the Earth. The information in the book is arranged in a particular way. Knowing how the book is arranged will help you quickly find the information you need. This, in turn, will make it easier for you to learn and to do homework.

The book is divided into eight units. The first two pages of each unit give you a summary and overview of

the unit. This overview tells you the general subject area that the unit covers. Each unit is divided into chapters. The chapters are made up of separate lessons. On the first page of each lesson is a colored box. In the box, you will find the central idea that is discussed in the lesson. You will also find a list of words from the lesson that you might not know. At the end of each lesson is a thick, red line. Below it is a review of the materials and an experiment or activity that relates to the lesson.

Other Parts of the Book

There are many other features of *This Planet, Our Planet*. Knowing about them—and using them—will make it easier for you to read and understand the book.

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The Age of the Earth

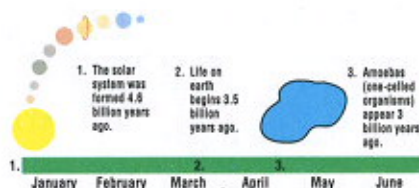
A Gas and Dust Cloud

No one really knows how old Earth is. But, we do know that our planet is part of the solar system, which includes our sun and all of the objects that travel around it. Most scientists believe that the solar system is about 4.6 billion years old. A giant cloud of gas and dust was spinning around like a flat circle. It was millions and millions of miles wide. Most of the gas in this cloud, or nebula, was hydrogen.

Our Sun Is Born

Gradually, over thousands of millions of years, the gases in the nebula were pulled toward the center of the circle by gravity. This created a tightly packed ball in the center of the circle. This big ball was the beginning of the star that is our sun.

This time line shows the relative time when events would have happened if the time since Earth began was condensed into a year. Humans would have appeared at 5 p.m. on the last day of December!



GLOSSARY

The glossary is found near the back of the book. It lists words from the book that are printed in boldface. The glossary gives definitions of these difficult words, along with the correct way to pronounce them. It also shows the page number where the words first appear in the book. The words in the glossary are listed in alphabetical order.

Glossary

A

Air pressure: Pressure caused by the weight of the air.

Atmosphere: Air surrounding the earth.

Atom: Smallest part of a substance. An atom contains a mass of protons and neutrons in a center called a nucleus that is surrounded by electrons. Everything is made up of atoms.

B

Block mountain: Mountain formed when land is forced up through faults in the earth, creating a block-like shape.

C

Climate: Pattern of weather over a period of time.

Condensation: Process by which a gas changes into a liquid.

Continental drift: Slow movement of the continents.

Convection current:

Movement in the air that pushes water vapor from oceans and rivers into the air.

Core, outer: Layer of earth beneath the mantle and above the inner core.

Core, inner: Deepest and hottest layer of the earth.

Crust: Hard, rocky covering of the earth that consists mostly of two types of rock, granite and basalt.

D

Delta: Land area formed by clay and soil where a river meets the sea.

Desalination: Process of removing salt from sea water.

E

Erosion: Wearing away of rocks and soil by water, wind, and ice.

Evaporate: Process by which water turns into vapor.

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TIME LINES

Found throughout the book are various time lines. Each time line shows a different aspect of Earth's development.

INDEX

This also appears at the back of the book. It is a list of many of the things that are mentioned in the book, including subjects, ideas, places, and names. The index makes it simple to find information in the book because the words are listed in alphabetical order with the page numbers. If the page number is printed in bold type, it means either a picture or a map is on that page.

For teachers' inspection ONLY

Comprehension Connection



Before Reading

1. Look through the pages at the front of one of your textbooks. What do you see in these pages?
2. You find a science book you plan to read. What would you like to know about the book before you begin reading it?
3. You write a school textbook. What would you say to students before they use your book?

During Reading

1. You are beginning a lesson in this book. How will the colored box on the first page of the lesson help you?
2. You want to find information about Earth's weather. What parts of this book could help you find that topic in the book?
3. You are writing a report on the scientist Louis Pasteur. Where could you look for information about him in this book?

After Reading

1. How is this preface like a table of contents? How is it different?
2. Why do you think the author included the last sentence in the first paragraph?
3. Do you think the preface on this card would help you use the book? Will you look for a preface the next time you get a new science book?

Skill Focus

Using the Preface

By now you know about parts of books. You know about the table of contents, index, and glossary. You have probably used these parts. But one book part you may not know about is the preface. Think about words such as preview and preschool. They mean "before" something. The preface comes at the front of the book, so it is before the main part of the book. The author uses the preface to introduce the book to readers.

Suppose you are a book author. In your preface, you might want to say, "This is what I hope you will learn from my book." Look at the preface on the card. Where does this author say that? The first few sentences summarize what you will learn from the book—all about the Earth and the living things on it.

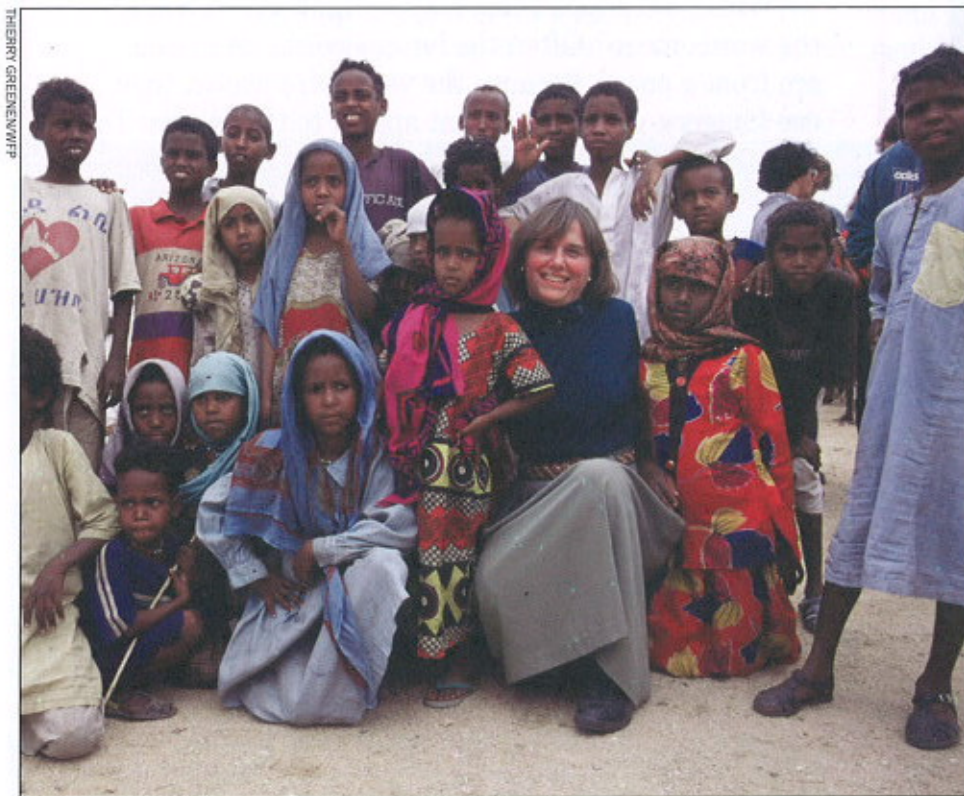
In your preface, you might also want to say, "Here are some tips I think will help you." Where does this author say that? Look at the last part of the first paragraph. The author explains that understanding how the book is arranged will help you learn and do homework. The author then describes this arrangement in the next paragraph. Suppose you want to know how to use the parts of a lesson. Where will you find that information?

Writer's World

1. Pretend you are writing a book about a favorite hobby or sport. Imagine you are explaining your book to a friend. Then use that "conversation" to write a preface to your book.
2. Choose one of your textbooks that does not have a preface. Write a short preface to that book. Use ideas from the preface on this card.
3. Suppose you want to read a nonfiction book about dinosaurs. What parts do you hope the book will have? Borrow ideas from the preface on this card. Make your own list of book parts.



Catherine Bertini: A Hero to Hungry Nations



Bertini visits kids getting food aid in Ethiopia, a nation in Africa. A terrible drought had ruined crops there.

Catherine Bertini has 90 million hungry mouths to feed. She has traveled the world as chief of the United Nations World Food Program (WFP) for nine years. Bertini is responsible for raising money. She also says that she “makes sure food gets to the right people at the right time.” Bertini is the first American and the first woman to head the WFP. This organization does work mostly in very poor nations, like Ethiopia, Somalia, and India.

Serving People

Bertini grew up in Cortland, NY. At first she wanted to be a music teacher. But eventually she became interested in government service. Bertini studied political science at the State University of New York at Albany. Then she worked in the U.S. Department of Agriculture. Since taking over the

WFP, she has seen 25 countries “graduate” from the WFP. These nations went from receiving emergency money to being able to provide food for their people. These countries include Vietnam, Mexico, and Botswana.



Catherine Bertini

Setting Goals

Bertini has set a goal. She wants 80% of relief food to go to women. That's because most refugees are women and children. In the past, most food aid went to men. The WFP now delivers more than 60% to women to share with their families. Bertini has another goal: to give half of aid for school meals to girls. In many poor countries girls don't get to go to school. This policy has gotten more families to send their daughters to school.

One of the best things about her job, says Bertini, is “seeing what a difference it makes to have women empowered. They're empowered when we give them food.”

Bertini works in Italy, the home of the WFP. But she plans to return to the U.S. when she finishes her second five-year term. For now she has the job of a lifetime. “In how many places,” she asks, “do you get the chance to improve the lives of millions of people?”

IMPORTANT DATES

March 30, 1950: Born in Syracuse, New York

1977–1987: Member of the Illinois Human Rights Commission

1987: Worked for the Department of Health and Human Resources

1992: Became the first woman and first American to head the United Nations World Food Program (WFP)

1996: Named one of “The World's Most Powerful Women” by the (London) Times magazine

1997: Chosen to head the WFP for another 5-year term

2000: Appointed special UN representative to the Horn of Africa. Her job is to fight famine in that area.

Comprehension Connection



Before Reading

1. When you begin to read a story, do you ever think, "Why am I reading this?" Explain.
2. What is a biography? Who have you enjoyed reading about?
3. What does *drought* mean? What is *famine*? How are they connected?

During Reading

1. Catherine Bertini worked at the U.S. Department of Agriculture. How do you think that experience has helped her manage a food program?
2. State two of Bertini's goals for the work she does.
3. What do you think Bertini means by *empowered women*?

After Reading

1. Do you think a list of dates and achievements makes a good biography? Explain your answer.
2. Do you agree with Bertini's goals for giving out food? State your reasons.
3. Would you like to help improve the lives of people? What would you do?

Skill Focus

Why Will I Read This?

You are an experienced reader, right? So you know there are many different kinds of things to read. There are poems, news stories, funny essays, scary tales, and so on. Always figure out what you are reading before you read it. Then you can set a purpose for reading.

When you set a purpose for reading, you decide on a reason for reading. If you are reading a funny essay, your reason for reading is to be entertained. If you are reading a news story, your purpose for reading is to get information. Why should you set a purpose before you read? Because you read in different ways for different purposes.

Here is an example: Read the title on this card. Read the headings. Look at the dates in the box. These things tell you that this is a biography, the story of a person's life. Why do you read a biography? To get information about a person. That is your purpose for reading. As you read, you look for facts about the person. You ask, "Why is this person important? What should I remember about this person?" You read to get information. The purpose that you set before you began reading helps guide the way that you read.

Writer's World

1. Write a short biography of someone you know well. Think about what others might want to know about the person before you begin writing.
2. Think about goals you would like to set for yourself. Make a list of your goals. Give the list an interesting title.
3. Choose one of the countries mentioned in this biography. Use an encyclopedia or the Internet to find out more about it. Write a short article about the country and its people.

