

Reader Summaries

The Bread Book and The Bake Sale

The Bread Book (lesson on pages 36–40)

Multiplying and Dividing

Reading Level 4.5

This reader concentrates on giving students experience working with multiplication and division in real-life scenarios. Throughout the text of this reader, students will learn about the process of making bread and how this process has changed throughout time. This reader familiarizes students with the many different types of bread made around the world, such as tortillas in Mexico and naan in India. Students will learn how to read a recipe and understand the importance of measuring ingredients, including how to double a recipe. The charts and diagrams throughout this reader provide clear visuals for students to understand how to multiply and divide fractions.

The Bake Sale (lesson on pages 41–45)

Multiplying and Dividing

Reading Level 3.4

This reader is designed to give students a real-life experience of participating in a school bake sale. As students progress through the text, they will learn how to divide larger recipes into smaller batches and use multiplication to change ingredient amounts. Students will also work with dollar amounts as they figure out how much profit they will make if they sell their muffins at a set cost and if their total profit is enough to meet their final goal of raising money for the school library.

Reader Summaries *(cont.)*

Natural Disasters and People Who Predict

Natural Disasters *(lesson on pages 60–64)*

Estimating

Reading Level 4.6

This reader focuses on the importance of predicting and estimating in relation to natural disasters. Students will explore the different types of natural disasters, including hurricanes, tornadoes, and tsunamis. This reader focuses on real-life events, such as Hurricane Katrina and the Asian tsunami of 2004, and the effects these events had on the world. Students will also learn about meteorologists and how they can track storms using radar and satellite images. Charts and data are provided for the students to understand how scientists can make predictions about upcoming natural disasters and how these predictions can save people's lives.

People Who Predict *(lesson on pages 65–69)*

Estimating

Reading Level 3.6

In this reader, students are introduced to the many different jobs in which people make predictions for the future based on data collected in the past. Students will learn about volcanologists and how they use tiltmeters to predict future volcanic eruptions, as well as seismologists, who use seismometers and creepmeters to estimate when a significant earthquake may occur. Data collection is a very important tool for these scientists to use, and students will explore how these scientists use different tools to track storms and changes in the weather. Students will also learn how to round numbers and record data to make natural disaster predictions.

Reader Summaries *(cont.)*

Patterns Around Us and Patterns in Nature

Patterns Around Us (lesson on pages 84–88)

Recognizing Patterns
Reading Level 4.6

This reader introduces students to patterns found in the world around them. Students will look at patterns occurring in nature, such as on plants, animals, and rock formations, as well as man-made patterns occurring in art, fashion, and architectural designs. They will then apply this knowledge as they study geometric patterns and number patterns. Students will conclude by learning about Fibonacci and his famous sequence of numbers.

Patterns in Nature (lesson on pages 89–93)

Recognizing Patterns
Reading Level 3.7

This reader takes students on a journey to Camp Patton. They will read about a group of students and their teacher who take a trip to a nature camp, where they search for patterns in nature. As they hike through the wilderness, they find continuous patterns occurring in the lake water. They also find patterns on leaves, pine cones, and animals. Students will learn to recognize, create, and continue various numerical patterns.

Reader Summaries *(cont.)*

Shapes in Our World and Building Houses

Shapes in Our World (lesson on pages 108–112)

3-D Shapes

Reading Level 4.4

This reader gives students a foundation for understanding 3-D shapes. Students will learn how to identify bases, faces, edges, and vertices of different three-dimensional shapes, including cylinders, prisms, cones, and spheres. Real-life photographic examples such as the pyramid at the Louvre Museum, the hexagonal prisms found in a honeycomb, and the sphere-shaped pearls made by oysters, allow students to connect geometry to the real world.

Building Houses (lesson on pages 113–117)

3-D Shapes

Reading Level 3.5

This reader tells the story of a young boy and his family as they plan to build their home. Students will learn how geometry and 3-D shapes are fundamental tools used by architects when planning to construct buildings. As students progress through the text, they will learn step-by-step how homes are constructed, beginning with the foundation, the walls, the trusses, and even the plumbing and wiring. Each piece of the home is identified by its 3-D shape. Along the way, students will learn about famous architectural sites such as Hearst Castle and the Brooklyn Bridge.

Reader Summaries *(cont.)*

Looking at Maps and Journeys: Land, Air, Sea

Looking at Maps (lesson on pages 132–136)

Understanding Coordinate Planes

Reading Level 4.6

This reader teaches students all about maps, including how to read maps and why they are helpful. Students are introduced to important fundamentals of maps, such as scale, map ratios, symbols, compasses, and keys. Important vocabulary is introduced, such as *longitude* and *latitude*. Students will also learn about grid coordinates and how to use given coordinates to locate places on a map. Finally, students will learn about cartographers and how the process of making maps has changed over time.

Journeys: Land, Air, Sea (lesson on pages 137–141)

Understanding Coordinate Planes

Reading Level 3.7

In this reader, students will explore the many different types of maps and how they are used every day. Students will read about road maps and how they are helpful in planning distance trips. As technology has improved, Global Positioning Systems (GPS) are now more readily available for people to use to plan their journeys. Students will learn about people who fly planes and sail ships and how GPS technology and compasses are great assets to them. Coordinate planes are introduced as students learn how to use grid coordinates to read street maps to find the best driving routes.

Reader Summaries *(cont.)*

Olympic Technology and Hosting the Olympic Summer Games

Olympic Technology *(lesson on pages 156–160)*

Elapsed Time

Reading Level 4.4

This reader gives students an understanding of the Olympic Games and how they have changed over time. Students will learn about the first games held in ancient Greece in 777 B.C. and will follow a time line to track Olympic milestones along the way. In this reader, students are introduced to new sports technology and how this technology has helped athletes improve their skills over the years. This technology includes good coaches; knowledge of proper nutrition; better clothing, equipment, and sporting venues; as well as the use of computers to record accurate times. Students will learn to solve mathematical problems to determine how much time has elapsed in different Olympic scenarios.

Hosting the Olympic Summer Games

(lesson on pages 161–165)

Elapsed Time

Reading Level 3.4

This reader takes students on a journey around the world as they trace the history of the Olympic Summer Games, starting in ancient Greece. Students will explore the different cities that have hosted the games and will learn about all of the preparation required by the host city. To prepare for the Olympic Summer Games, cities need to build adequate sporting venues, improve transportation systems, and have sufficient housing areas for the athletes to stay. This reader uses mathematical word problems in relation to the Olympics to help students improve their understanding of measuring elapsed time.

Reader Summaries *(cont.)*

Life in the Ocean Layers and All About Sharks

Life in the Ocean Layers (lesson on pages 180–184)

Units of Measure
Reading Level 4.7

This reader takes students on an exploration of the ocean and its various layers. Students will begin at the surface of the water as they learn about the animals and plants that live in the sunlit zone. Then, they will travel deeper into the depths of the ocean, learning about the various sea creatures that inhabit the twilight, dark, and abyss zones. Along the way, students will learn about different units of measurement, including meters, yards, feet, pounds, and ounces.

All About Sharks (lesson on pages 185–189)

Units of Measure
Reading Level 3.6

This reader is all about sharks! Students will learn about what makes sharks unique, including their cartilage, gills, teeth, and fins. The photographs are captivating and descriptive and provide excellent visuals for students to explore the different types of sharks, including great white and whale sharks. Students will learn about different units of measurement in relation to sharks, including measuring the height of a dorsal fin in centimeters and measuring the weight of a baby shark in pounds. Students will also learn how to convert measurements from pounds to ounces, feet to inches, and liters to milliliters.

Reader Summaries *(cont.)*

Eco-Predictions and Animal Investigations

Eco-Predictions *(lesson on pages 204–208)*

Collecting Data

Reading Level 4.7

In this reader, students will investigate two different ecosystems that need help. They will read about environmental experts and how they gather data, make predictions, and then plan ways to help ecosystems in danger. Students will first address a problem at a stream where the population of fish has drastically decreased over time. They will read about the many different ways to collect data and how this information is analyzed in order to solve the problem. Students will then tackle an environmental problem facing a nature reserve. As different data is collected and analyzed, students will be able to see how elements in nature, such as animals in a food chain, are all interconnected.

Animal Investigations *(lesson on pages 209–213)*

Collecting Data

Reading Level 3.3

This reader follows the story of a fourth-grade class field trip to a park, where students will study and investigate different animals. Dragonflies, honeybees, mallard ducks, sparrows, rabbits, and chipmunks are all under investigation. Data is collected and then predictions about these animals are made. Students will see how diagrams, charts, tables, and graphs are useful tools for organizing data.