- **Math**
    - Concepts (numeration, number concepts, fractions and decimals, algebra, properties)
    - Computation (addition and subtraction of whole numbers, fractions, and decimals; multiplication and division of whole numbers)
    - Applications (geometry, measurement, and problem solving)
- **Science***
    - Electricity/Magnetism
    - Plant and Animal Structures
    - Water/Weather Cycles
    - Human Body
    - Astronomy
- **Social Studies***
    - United States Regions
    - State History
    - World Regions/Climates
    - Map Skills
    - Economics

*Since states and often districts determine units of study within Science and Social Studies, the content in this book may not be aligned with the content offered in all courses of study. The content within each area is grade level appropriate. It is based on a sampling of state standards. The tests in Science and Social Studies include both multiple choice and written answer.

Comprehensive Practice Test Includes

- Content Area (i.e. Language)
- Subtopics (i.e. Language Mechanics)
- Directions, examples, and test questions
- Separate answer sheet with “bubbles” to be filled in for answers

Sample Tests

Sample tests are included for all subtopics. These sample tests are designed to apply the knowledge and experience from the skill lessons in a more formal format. No clues are included. These sample tests are shorter than the comprehensive tests and longer than the skill lessons. The skills on the test items are presented in the same order as introduced in the book.

Sample Tests Include

- Subtopic (i.e. Language Mechanics)
- Directions, examples, and test questions

Skill Lessons

Skill lessons include sample questions and clues for mastering the skill. The questions are formatted as they generally appear in tests, whether the tests are standardized and nationally normed or state specific.

Skill Lessons Include

- Subtopic (i.e. Language Mechanics)
- Skill (i.e. Punctuation)
- Directions and examples
- Clues for completing the activity
- Practice questions

Use

This book can be used in a variety of ways, depending on the needs of the students. Some examples follow:

- Review the skills correlation on pages 8–10. Record the skills tested in your state and/or district on the blanks provided.
- Administer the comprehensive practice test for each content area. Have students use the sample answer sheet in order to simulate the actual testing experience. The tests for Reading, Language, and Math are multiple choice. Evaluate the results.

1-57768-974-7 *Spectrum Test Practice 4*

Name _____ Date _____

SCIENCE

● Lesson 2: Applications

Directions: Read the selection. Answer the questions using complete sentences.

Example

Dinosaurs were vertebrates. A vertebrate is an animal that has a backbone. A backbone is made of many smaller bones, called vertebrae. The vertebrae are connected to each other. Humans and all other mammals, reptiles, birds, fish, and amphibians that live today are vertebrates.

A. What do modern mammals have in common with dinosaurs?

_____

_____

_____

Read carefully. Circle any words you don't understand and come back to them later.

● Practice

Why Are There Seasons?

Earth revolves around the sun. It also spins on an invisible axis that runs through its center.

It takes 365 $\frac{1}{4}$ days, or one year, for the Earth to revolve once around the sun. Just as the moon moves in an orbit around Earth, Earth moves around the sun. The Earth does not move in a perfect circle. Its orbit is an ellipse, which is a flattened circle, like an oval. As Earth revolves around the sun in an elliptical shape, it spins on its invisible axis.

Earth's axis of rotation is not straight up and down, it is tilted. This important feature produces the seasons on Earth. No matter where Earth is in its rotation around the sun, its axis is tilted in the same direction and at the same angle. So, as Earth moves, different parts of it are facing the sun and different parts are facing away. The North Pole is tilting toward the sun in June, so the northern half of Earth is enjoying summer. In December, the North Pole is tilted away from the sun, so the northern part of the world experiences winter.

This important relationship between Earth and the sun determines how hot and cold we are, when we plants our crops, and whether we have droughts or floods.

1. If North America is having summer, what season would the Australians be enjoying and why?

_____

_____

_____

2. What do you think would happen if Earth's axis were not tilted, but straight up and down?

_____

_____

_____