

Sampler



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COURSE DESCRIPTION

In this visually stimulating, engaging science course students will investigate the following concepts through reading, experimentation, and observation. Students will study the scientific method, tools and skills of scientists, scientific inquiry and observation, and lab reporting. Students will also explore technology, living and nonliving things, plants and animals in their natural habitats, environmental science, marine science, the growth and development of plants, and the growth and development of specific animal species. Later on in the course, students will explore earth science by studying rocks, soil, the water cycle, weather, and the four seasons. Students will then examine physical science through studying light, matter, energy, and movement. Students taking this course will also participate in experimentation and scientific inquiry in each chapter.

GRADING

Assessments for this course include chapter and unit tests. There are 9 chapters included in 4 units of study for this course.

ALTERNATIVE ASSESSMENTS

Students may also complete the alternative assessments located in the instructor guide for any unit test. A project rubric is available to score the alternative assessment projects.

RESOURCES

The resources can be found throughout the instructor guide to supplement the course and help the student gain a deeper understanding of the content as well as provide variety in learning styles and expressions. Required and recommended extension activities are indicated in the suggested pacing of the guide. Helpful references are also included for the course instructor.

THE LEARNER - THE DOER

For kinesthetic-tactile learners, activity is the key to unlocking their potential.

WHO: They need to experience the world through their senses.

WHAT: They learn by manipulating objects and active participation as well as art and creative projects.

WHERE: They learn best in a space that allows for lots of hands-on activities and movement.

WHEN: They like to take frequent breaks to move around.

HOW: They learn best through hands-on activities involving all five senses, such as acting it out, demonstrating, and experimenting.

RESOURCE LIST

- Interactive Textbook
- Online Interactive Teacher Resource
- Elephango Resources
- Suggested Reading
- Alternative Assessments
- Graphic Organizers
- Suggested Pacing and **EXPLORE MORE** Activities



RESOURCES

- 11910 Inquiry and Science
- **11919** The Five Senses and Science
- **11913** Recording Scientific Data
- 10592 Engineering
- **10187** Classify Living and Nonliving Things
- 11567 Life Cycle of a Plant
- **11378** What Do Living Things Need to Survive? (Animals)
- **11377** What Do Living Things Need to Survive? (Plants)
- 11766 Where Do Animals Live?
- 10197 Habitats in Our World
- 11557 Parts of a Flower
- **10223** Vertebrate Animal Classification
- 11210 Tundra (Part 1)
- 11565 The Life Cycle of a Bird
- 11734 Earth (Bodies of Water)
- 11733 Earth (Landforms)
- 10471 Nature Rocks! Seriously, It Does!
- 11587 Nutrients in Soil
- **11513** What Is Soil Made Of?
- 11716 Changing the Earth (Weathering)
- 11717 Changing the Earth (Erosion)
- 10024 What Is Recycling?
- 11768 The Shining Sun
- 11767 Magnificent Moon
- 11735 Earth (Rotation vs. Revolution)
- 11923 Ice Melting Experiment
- 10398 Weather Patterns
- **10511** Weather Tool Thermometer
- **10254** Create and Describe Patterns 2: Spring Time
- **10486** Everything's the Matter!
- 11758 States of Matter (Review)
- 11907 Gummy Bear Experiment
- **10509** Forces Push and Pull















11378







Day 1

How Things Work: In the Yard by Lisa Campbell Ernest

Day 2

What Makes Popcorn Pop?by Jack Myers

Day 21

Inventions Help Us by Julie Ellis

Day 24

Water Habitats by Bobbie Kalman

Day 30

Land Habitats by Bobbie Kalman

Day 46

Looking at Life Cycles: How Do Plants and Animals Change? by Angela Royston

Day 53

Under the Sky by Rozanne Lanczak Williams

Day 66

Weather by Gallimard Jeunesse

Day 93

A Picture Book of Thomas Alva Edison by David A. Adler

More Suggested Reading

Diary of a Worm by Doreen Cronin Oh Say Can You Seed?: All About Flowering Plants by Bonnie Worth The Adventures of a Plastic Bottle: A Story About Recycling by Alison Inches The Sun by Allison Lessieur Oh Say Can You Say What's the Weather Today?: All About Weather by Tish Rabe Weather Words and What They Mean by Gail Gibbons What's the Matter in Mr. Whisker's Room? by Michael Elsohn Ross What is the World Made Of? All About Solids, Liquids, and Gases by Kathleen Weidner Zoehfeld The Powerful World of Energy with Max Axiom, Super Scientist by Agnieszka Bishop Move It!: Motion, Forces and You by Adrienne Mason Robert Crowther's Pop-Up House of Inventions: Hundreds of Fabulous Facts About Your Home by Robert Crowther



PROJECT STEPS

- 1. Review the projects for this unit below.
- 2. Choose one project to complete that will show what you have learned about earth science.
- 3. Complete the project over the next few days. Be sure you include the required criteria in your project.
- 4. Reflect on the alternative assessment project with your instructor. Use the alternative assessment project rubric to evaluate the project.

PROJECT CRITERIA

- The project displays clear and concise information demonstrating knowledge of science content.
- The student accurately follows the RAFT technique (Role, Audience, Format, and Topic).
- The project is creative, wellconstructed, and accurate.
- The project's description is accurate.

MAKE A CONCEPT MAP

Cut out pictures of the four seasons from magazines or print them from the Internet. Make a concept map using words and your pictures to describe what each season is like where you live.

WRITE A SONG OR STORY

Write a song or story about the sun. Tell how the sun can help people. Tell how the sun can hurt people.

EROSION EXPERIMENT

Gather samples of sand, soil, and clay. Find out how long it takes erosion to move each one.



Alternative Assessment Project Rubric

	4	3	2	1	Points
Required Elements	The project included all required elements as well as additional information.	All required elements were included in the project.	Some of the required elements were included in the project.	Several required elements were missing.	
Grammar and Mechanics	Excellent display of accurate grammar and mechanics throughout the project.	Some errors were noted with grammar and mechanics within the project.	Many errors were noted with grammar and mechanics within the project.	The grammar and mechanics errors interfered with the project message.	
Details	Excellent details related to the project theme were presented within the project.	The project contained some details related to the project theme.	Few details were included in the project related to the project theme.	The project lacked detail related to the project theme.	
Presentation of Project	The project was exceptionally attractive in terms of design, layout, and neatness.	The project was attractive in terms of design, layout, and neatness.	The presentation of the project lacked neatness and organization.	The project was messy and poorly designed.	
Pres				Total Points Earned Average Grade	



Read and complete Unit A Chapter 2 Lesson 3 What is the design process? on pages 50-51.

EXPLORE MORE

Suggested Reading:

• Inventions Help Us by Julie Ellis

Plan a design for a new invention to use in the kitchen. It can serve any purpose and combine any number of kitchen appliances or materials. Make a list of materials that you will need and draw a blueprint for this new invention.

SUPPORT

Use the Chapter 2 Vocabulary Smart Cards to introduce the vocabulary for Lesson 3 and review previously learned vocabulary.

Provide the **DOER** with materials necessary to draw a design for a new invention.







Read and complete Unit B Chapter 3 Living Things and Their Environments on pages 72-75.

EXPLORE MORE

Explore Elephango for a living and nonliving things activity.

10187 Classify Living and Nonliving Things

elephango

Use the 5 Ws to gather information from what you read or hear about.

SUPPORT

Answer the question on page 72 and have your student tell you his or her answer to the prompts on page 73. Introduce the **Big Question** on page 73.

Read **Let's Read Science!** on page 75 and have your student complete the **Practice It!** at the bottom. **DOERS** may enjoy a field trip to a local aquarium to draw more conclusions about sea animals.





Read and complete Unit C Chapter 5 Lesson 1 What is on Earth? on pages 162-163.

EXPLORE MORE

Explore the **Big Question** on page 163 and describe how you can tell the difference between the land and the water on a globe.

SUPPORT

On pages 197-200 of the textbook, have your student cut out the Vocabulary Smart Cards. Use these throughout Chapter 5 to introduce and review vocabulary words.

Place the Vocabulary Smart Cards in the envelope for Chapter 5 in the science notebook when you are not using them.

DOERS may like to color the land green and the water blue on the globes below.





Social Studies S

VOCABULARY

.

R

<u>____</u>

Draw pictures or write definitions of new vocabulary words you have learned.

MAP Draw a map of holidays or celebrations around the world.

TOPIC

What topic would you like to learn more about? What interests you about the topic?

GRAPH

Create a graph of your family's favorite holidays or celebrations.



Read Chapter 12 Neighbors Celebrate Together page 94 in *People and Places Nearby.*

SUPPORT

Reference *People and Places Nearby* Teacher's Guide page 36 for this lesson.

EXPLORE MORE

Make a timeline of your typical week. What happens on each day?

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Morning							
Afternoon							
Evening							



Read World Wildlife Fund on page 82 in People and Places Nearby.

SUPPORT

Reference *People and Places Nearby* Teacher's Guide page 32 for this lesson.

EXPLORE MORE

What did you learn about the wildlife fund from today's lesson? Fill in the bubble map below.





Complete the Chapter Checkup on page 83 in People and Places Nearby.

SUPPORT

Reference People and Places Nearby Teacher's Guide page 32 for this lesson.

EXPLORE MORE

Make a poster showing ways children can take part in cleaning up their neighborhoods. Display your poster at a local public library, at your church, or at a local community center. Be sure to photograph your poster for your portfolio. Use the space provided to draw a rough draft of your poster.



DAY 23 ACTIVITIES

Section 3.1 Multiplication and Division Lesson 23 Looking Back

- Complete work in Textbook 3A on pages 39-40.
- Complete Exercise 14 in Workbook 3A on pages 43-44.

EXPL RATION STATION

Explore Elephango for a fun opportunity to move and multiply.

10748 Multiplication Musical Chairs

elephango

□ Combine music, movement, and math to practice times tables with a fun math facts game. View the instructions for the game online.

SUPPORT

Guide your student through practice problems. Textbook answers can be found in the answer key booklet on page 49. Find workbook answers on page 55.

View an online resource for this activity with your student.

DOERS may enjoy the movement activities in the Elephango lesson or the other **EXPLORATION STATION** activity.



LEARNED the R PES?

DAY 24 ACTIVITIES

Section 3.1 Multiplication and Division Lesson 23 Looking Back

Complete Exercise 15 in Workbook 3A on pages 45-46.

EXPL RATION STATION

□ Improve your multiplication skills with an online hidden picture puzzle.

Suggested Reading:

Amanda Bean's Amazing Dream: A Mathematical Story by Cindy Neuschwander

SUPPORT

Guide your student through practice problems. Workbook answers can be found in the answer key booklet page 55.

View an online resource for this activity with your student.

DOERS may like to solve and color the multiplication puzzle using the color code below.



DAY 28 ACTIVITIES

Section 3.1 Multiplication and Division Lesson 28 Looking Back

□ Complete Practice 3A in Textbook 3A on page 43.

EXPL RATION STATION

□ Make pizza for your family. Cut the pizza into 8 slices. Each person should get at least 2 slices. How many pizzas do you need to make for your family? Find an easy pizza recipe online or purchase the pizza from the store. Draw or write about the process of making enough pizza for the family.

SUPPORT

Answers to Practice 3A can be found in the answer key booklet on page 49. If your student has struggled with this activity, take time to review the text or visit the online resources for additional practice and review.

Assist your student with finding a pizza recipe or purchasing the pizzas.

DOERS may enjoy a trip to the grocery story to purchase the ingredients for the pizza.



DAY 136 ACTIVITIES

Section 6.1 Fractions Lesson 52 Fractions of a Whole

□ Complete Practice 6A in Textbook 3B on page 69.

EXPL RATION STATION

□ Create a fraction picture! Cut several circles into equal parts. You might do halves, fourths, sixths, or eights. Design a fun picture with the shapes.



SUPPORT

Answers to Practice 6A can be found in the answer key booklet on page 65. If your student has struggled with this activity, take time to review the text or visit the online resources for additional practice and review.

Assist your student with gathering the following optional materials for the project.

- □ Construction paper
- Scissors
- Glue
- Crayons, colored pencils, or markers.



If You Lived in Colonial Times

by Ann McGovern

Enduring Understanding

Different types of texts have different purposes and structures.

Essential Questions

- 1. What does the author want the reader to learn?
- 2. How does the author organize the information and make it easy to follow?

Writing Skills

- 1. Informative or explanatory writing:
 - Name a topic
 - □ Supply facts about the topic
 - Closure
- 2. Recall information to answer a question.

Reading Skills

- 1. Key details:
 - 🛛 Who
 - What
 - □ Where
 - □ When
 - D Why
 - □ How
- 2. Identify the main topic or purpose of the text.
- 3. Describe connections between people, events, ideas, or details.



DAY 1 ACTIVITIES

- □ Explore *If You Lived in Colonial Times* by Ann McGovern. As you explore the text, pay attention to the title page, illustrations, and headings.
- □ After you have had time to explore the text, create a KWL chart. In the first column, create a list of facts you already **KNOW** about colonial life. In the second column, create a list of questions of what you **WANT** to know about colonial life. Leave the third column blank. You will complete it after you have finished the book.

EXPL RATION STATION

□ If you live in an area that has a colonial museum or reenactments, take a field trip to the location. Create a photo album or brochure of your experience.

SUPPORT

Discuss the term *colonial life* and explore what the word means with your student. Discuss how the text is divided into sections and ask your student which section he or she is most interested in reading.

It may be helpful to obtain a threering binder to maintain projects and activities that your student will complete throughout the course. Any suggested assessments or optional extensions and activities can be placed inside the binder.

Your student may also keep a reading response journal in a separate binder or notebook.

View an online resource for this activity with your student.

Whether taking a physical or virtual field trip, have your student record his or her experience in a photo album or a brochure.

K What I KNOW	W What I WANT to Know	U What I LEARNED
		LEARNED the ROPES?

DAY 19 ACTIVITIES

- Read Writing a First Draft on pages 28–29 of Write on Track: A Handbook for Young Writers, Thinkers, and Learners.
- Complete the second step in the writing process by starting a draft of your personal narrative.

EXPL RATION STATION

Explore Elephango for an activity to extend your learning.

□ 12311 Narrative Writing: Introduction



SUPPORT

Review characteristics of a personal narrative on page 87 and the steps in the writing process found on pages 88-89 of Write on Track: A Handbook for Young Writers, Thinkers, and Learners,

Encourage your student to incorporate a variety of sentence types and use a combination of simple and compound sentences. He or she can use the chart below to organize the sentences.

DOERS may enjoy role playing sentences that include a variety of end punctuation for another person to guess the types of sentences.

DECLARATIVE	INTERROGATIVE	IMPERATIVE	EXCLAMATORY
			LEARNED the R@PES?

DAY 41 ACTIVITIES

- □ Read Descriptive Paragraph on page 56 of *Write on Track: A Handbook for Young Writers, Thinkers, and Learners.*
- Create a Venn diagram to compare and contrast descriptive paragraphs to narrative paragraphs.

EXPL RATION STATION

X

Explore Elephango for an activity to extend your learning.

□ 12306 Descriptive Writing: Sensory Details

elephango

Write a descriptive paragraph in your writing journal about your favorite vacation. Use the five senses chart below to organize your thoughts for the story.

SUPPORT

Ask your student to think about when it would be appropriate to use a descriptive paragraph for writing.

DOERS may enjoy making observations using the five senses to draft a list of describing words.



DAY 44 ACTIVITIES

□ Read Understanding Text Structures on pages 61-63 of *Write on Track: A Handbook for Young Writers, Thinkers, and Learners.*

EXPL RATION STATION

Practice using time order transitions. Make a list of a series of events. You can make a list of things you did on your last family vacation or the steps involved in making a peanut butter and jelly sandwich. Be sure the events or steps are listed in order. Look at the list of time order transitions on the Thoughtful Learning website. Write your paragraph using time order transition words. How do time order transitions help your writing make more sense?

SUPPORT

Text structure organizers can be found on the Thoughtful Learning website.

View an online resource for this activity with your student to learn more about transitions.

DOERS may enjoy writing time order transition words and sentences on sticky notes or index cards to be able to move them around for the **EXPLORATION STATION** activity.



WATCHER

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