

Macmillan/McGraw-Hill Science: A Closer Look ©2008

Macmillan/McGraw-Hill Science: A Closer Look Grade K

Be a Scientist Lesson 1: Science Skills
The Scientific Method Lesson 2: Science Methods

Be a Scientist, Lesson 1: Investigate Weather (6 pp.)
Objective: Observe and record the weather over the course of the year.
Activities: Watching Weather, Graph the Weather, Weather Words

Be a Scientist, Lesson 2: The Five Senses (6 pp.)
Objective: Use the five senses to sort, classify, and categorize objects.
Activities: Sorting Apples, Rough or Smooth?, Sing About Apples

Be a Scientist, Lesson 3: Living Things (6 pp.)
Objective: Investigate living things in the classroom.
Activities: Living and Nonliving, Look Closely, Sorting Plants

Life Science

UNIT A – Plants

- *Unit Opener* (2 pp)

Lesson 1 Parts of Plants (6 pp)

Objective: Understand that plants have parts that help them get what they need to grow and mature.

- Circle Time – Make a Plant
- Be a Reader – Leveled Reader/Big Book: *Plant Parts*
- Be a Math Wiz – Find a Match
- What are the parts of plants?
- Be a Scientist Activity – Observing Stems
- Centers – Art, Cooking, Movement

Lesson 2 What Plants Need (8 pp)

Objective: Recognize that plants are organisms that need air, water, light, and soil to survive.

- Circle Time – Observe a Plant
- Be a Reader – Leveled Reader/Big Book: *Where Do Plants Live?* and *Plants Grow*
- Be a Math Wiz – How Tall?
- What do plants need to live?
- How are they alike? How are they different?
- Be a Scientist Activity – Window Box Wonder
- Centers – Art, Dramatic Play, Sand Table

Lesson 3 How Plants Grow (6 pp)

Objective: Recognize that a plant's seeds are found in its fruit, and that the same type of plant will grow from the seed.

- Circle Time – Sprouting Seeds
- Be a Reader – Leveled Reader/Big Book: *Small Plants, Tall Plants*
- Be a Writer – Plant Sequence
- Be a Math Wiz – Predict How Many
- How do plants grow?
- Be a Scientist Activity – Planting Seeds
- Centers – Music, Art, Blocks

Lesson 4 Look at Leaves and Flowers (8 pp)

Objective: Recognize that plants can be recognized by its parts.

- Circle Time – Sorting Plants
- Be a Reader – Leveled Reader/Big Book: *From Seed to Sunflower*
- Be a Writer – Favorite Flower
- Be a Math Wiz – Patter Flowers
- How are these leaves alike? How are they different?
- How are these flowers alike? How are they different?
- Be a Scientist Activity – Matching Leaves
- Centers – Music, Blocks, Art

Lesson 5 Plants We Use (6 pp)

Objective: Identify and explore plants that we eat and the foods that come from different plants.

- Circle Time – Feely Box
- Be a Reader – Leveled Reader/Big Book: *All Kinds of Plants*
- Be a Math Wiz – Counting Peas
- What plant parts do we eat?
- Be a Scientist Activity – Plant Part Soup
- Centers – Drawing and Writing, Art, Blocks

UNIT A – Assessment (2 pp)

- **Performance Assessment**
- **Formative Assessment**
- **Portfolio Assessment**

UNIT B – Animals

- *Unit Opener (2 pp)*

Lesson 1 Animals are Everywhere (6 pp)

Objective: Understand the basic definition of an animal and explore animals in your neighborhood.

- Circle Time – Are They Animals?
- Be a Reader – Leveled Reader/Big Book: *Good morning*
- Be a Math Wiz – Find and Graph Animals
- Which animals could you see in this park?
- Be a Scientist Activity – Animal Habitat
- Centers – Art, Movement, Blocks

Lesson 2 What Animals Need (8 pp)

Objective: Understand what animals need in order to survive.

- Circle Time – Pet Care
- Be a Writer – *Make a Pet Book*
- Be a Math Wiz – Our Pets
- What do animals need to live?
- Be a Scientist Activity – Animal Homes
- Centers – Music, Art, Movement

Lesson 3 Bugs and More Bugs (6 pp)

Objective: Learn about insects and arthropods, their attributes, and where they live.

- Circle Time – Be a Bug
- Be a Reader – Animal Match
- Be a Math Wiz – Favorite Bugs
- How are these bugs alike? How are they different?
- Be a Scientist Activity – Bug Collection
- Centers – Blocks, Drawing and Writing, Art

Lesson 4 Reptiles (6 pp)

Objective: Understand the basic definition of a reptile, its attributes, and where it lives.

- Circle Time – Reptile or Not?
- Be a Reader – Leveled Reader/Big Book: *Our Desert Home*
- Be a Math Wiz – Snake Patterns
- What do you notice about these reptiles?
- Be a Scientist Activity – Reptile Guest
- Centers – Water Table, Blocks, Sand Table

Lesson 5 Up Above and Down Under (8 pp)

Objective: Learn about birds, fish, and other water animals.

- Circle Time – Be a Bird
- Be a Reader – Leveled Reader/Big Book: *Animals on the Move*
- Be a Writer – Animal Motion
- Be a Math Wiz – How Many Birds?
- What helps these birds fly?

- What helps these animals move?
- Be a Scientist Activity – Bird Feeder
- Centers – Music, Art, Cooking

Lesson 6 Staying Safe (6 pp)

Objective: Explore how animals have adapted to their environments.

- Circle Time – People Staying Safe
- Be a Reader – Leveled Reader/Big Book: *All About Animals*
- Be a Math Wiz – Fill the Camel’s Hump
- What helps these animals stay safe?
- Be a Scientist Activity – Wormy Behavior
- Centers – Art, Sand Table, Cooking

Lesson 7 Grow and Change (8 pp)

Objective: Understand how animals grow and change as they mature.

- Circle Time – Babies Grow
- Be a Reader – Leveled Reader/Big Book: *Animals Grow*
- Be a Math Wiz – Measure Up
- How do these lions grow and change?
- How do these baby animals get what they need?
- Be a Scientist Activity – Growing Animals
- Centers – Drawing and Writing, Art, Dramatic Play

Lesson 8 People and Animals (6 pp)

Objective: Explore relationships between people and animals.

- Circle Time – Pet Diagram
- Be a Reader – Leveled Reader/Big Book: *Good morning*
- Be a Writer – Animal Drawings
- Be a Math Wiz – Collect the Eggs
- How do animals help us?
- Be a Scientist Activity – Ask an Expert
- Centers – Blocks, Art, Cooking

UNIT B – Assessment (2 pp)

- **Performance Assessment**
- **Formative Assessment**
- **Portfolio Assessment**

REVIEW TOGETHER – Plants and Animals

Earth Science

UNIT C – Our Earth, Our Home

- *Unit Opener (2 pp)*

Lesson 1 Soil Under Your Feet (6 pp)

Objective: Explore the composition and uses of soil.

- Circle Time – See-Through to Soil
- Be a Reader – Leveled Reader/Big Book: *What’s in the Soil?*
- Be a Math Wiz – Fill the Jar
- What can you find in soil?
- Be a Scientist Activity – Sampling Soil
- Centers – Sand Table, Art, Cooking

Lesson 2 Rocks (6 pp)

Objective: Investigate the characteristics of different rocks.

- Circle Time – My Rock
- Be a Reader – Leveled Reader/Big Book: *Rocks*
- Be a Math Wiz – Rock Weight
- How are these rocks alike? How are they different?
- Be a Scientist Activity – Sorting Rocks
- Centers – Games, Drawing and Writing, Art

Lesson 3 Land High and Low (8 pp)

Objective: Learn characteristics of geographic features that are high and low.

- Circle Time – High Places, Low Places
- Be a Reader – Leveled Reader/Big Book: *America, the Beautiful and Land High and Low*
- Be a Math Wiz – ‘Round the Mountain
- What makes these places different?
- How do volcanoes change the earth?
- Be a Scientist Activity – Make It Rain!
- Centers – Music, Movement, Art

Lesson 4 Water All Around (6 pp)

Objective: Learn characteristics of rivers, streams, lakes, and oceans.

- Circle Time – Swim to the Circle
- Be a Reader – Leveled Reader/Big Book: *Our Land*
- Be a Writer – Water and me
- Be a Math Wiz – How Many Matches?
- How can water change the earth?
- How do we use water?
- Be a Scientist Activity – Getting Water
- Centers – Music, Drawing and Writing, Water Table

Lesson 5 Earth’s Resource (8 pp)

Objective: Learn about Earth’s natural resources that are used in everyday life and that resources can be conserved.

- Circle Time
- Be a Writer – These are Made From Trees
- Be a Math Wiz
- How do we use these resources? [images: windmills, lumber, solar panel reflecting the Sun]
- How do we use water?
- Be a Scientist Activity – Conserve Water
- Centers – Art, Library, Blocks

Lesson 6 Recycle, Reuse (6 pp)

Objective: Learn different reasons for and ways of recycling and reusing.

- Circle Time – What’s Recycled?
- Be a Reader – Leveled Reader/Big Book: *Recycle, Reuse*
- Be a Writer – School Recycling
- Be a Math Wiz – Penny Toss
- How can we reuse things?
- Be a Scientist Activity – Recycling Center
- Centers – Drawing and Writing, Art, Cooking

UNIT C – Assessment (2 pp)

- **Performance Assessment**
- **Formative Assessment**
- **Portfolio Assessment**

UNIT D – Weather and Sky

- *Unit Opener (2 pp)*

Lesson 1 Exploring Weather (8 pp)

Objective: Recognize the characteristics of different kinds of weather, such as wind, sun, rain, and snow.

- Circle Time – What’s the Weather?
- Be a Reader – Leveled Reader/Big Book: *What Is the Weather?*
- Be a Writer – Our Favorite Weather
- Be a Math Wiz – Weather Match
- What do you know about snow?
- What can wind do?
- Be a Scientist Activity – Wind Effects
- Centers – Art, Movement, Water Table

Lesson 2 Look at Clouds (6 pp)

Objective: Recognize and describe different types of clouds.

- Circle Time – Cloud Words

- Be a Reader – Leveled Reader/Big Book: *What Will I Wear Today?* and *Clouds*
- Be a Math Wiz – Sorting Clouds
- What do you notice about these clouds?
- Be a Scientist Activity – Observe Clouds
- Centers – Drawing and Writing, Movement, Art

Lesson 3 The Seasons (6 pp)

Objective: Identify what occurs in nature and what people do in different seasons.

- Circle Time – What to Wear?
- Be a Reader – Leveled Reader/Big Book: *Seasons* and *Our Favorite Season*
- Be a Math Wiz – Take a Survey
- What happens in each season?
- Be a Scientist Activity – Nature Walk
- Centers – Art, Blocks, Dramatic Play

Lesson 4 Night and Day (8 pp)

Objective: Recognize changes that occur in the sky from day to night and night to day.

- Circle Time – Day Sky/Night Sky
- Be a Reader – Leveled Reader/Big Book: *The Night Sky*
- Be a Math Wiz – Connect the Stars
- How does the sky change?
- What do you see in the night sky?
- Be a Scientist Activity – The Night Sky
- Centers – Music, Art, Dramatic Play

Lesson 5 Sun and Shadows (6 pp)

Objective: Recognize that the Sun creates shadows and appears to move through the sky.

- Circle Time – Guess the Object
- Be a Writer – Sun Activities
- Be a Math Wiz – Measure Shadows
- What makes shadows? Why do they change?
- Be a Scientist Activity – Change Shadows
- Centers – Music, Art, Blocks

UNIT D – Assessment (2 pp)

- **Performance Assessment**
- **Formative Assessment**
- **Portfolio Assessment**

REVIEW TOGETHER – Earth and Weather

Physical Science

UNIT E – Exploring Matter

- *Unit Opener (2 pp)*

Lesson 1 Paper and Cloth (6 pp)

Objective: Identify and explore the ways we can use and change paper and cloth.

- Circle Time – Fold It
- Be a Reader – Leveled Reader/Big Book: *Soft or Hard?*
- Be a Writer – Make a Book
- Be a Math Wiz – Paper Chains
- How can we change paper and cloth?
- Be a Scientist Activity – Making Paper
- Centers – Drawing and Writing, Art, Dramatic Play

Lesson 2 Wood and Metal (6 pp)

Objective: Identify and explore the ways we can use and change natural resources such as wood and metal.

- Circle Time – Feely Box
- Be a Reader – Leveled Reader/Big Book: *Working with Wood*
- Be a Math Wiz – Sorting Screws
- How can we use wood and metal?
- Be a Scientist Activity – Sculpture Fun
- Centers – Drawing and Writing, Water Table, Art

Lesson 3 Working with Clay (6 pp)

Objective: Identify that clay is a natural resource that comes from the earth and that we can manipulate it to make things.

- Circle Time – Feel Clay
- Be a Reader – Leveled Reader/Big Book: *Made from Clay*
- Be a Math Wiz – Clay Patterns
- What can we do with clay?
- Be a Scientist Activity – Pinching Pots
- Centers – Drawing and Writing, Cooking, Art

Lesson 4 Investigate Water (8 pp)

Objective: Identify and explore the properties and changing states of water and objects that sink and float in water.

- Circle Time – Altered States
- Be a Reader – Leveled Reader/Big Book: *Melting Snow* and *I Like Ice* and *Matter Changes*
- Be a Math Wiz – Weighing In
- Where is the water?
- Be a Scientist Activity – Float or Sink?
- Centers – Music, Water Table, Cooking

UNIT E – Assessment (2 pp)

- **Performance Assessment**
- **Formative Assessment**
- **Portfolio Assessment**

UNIT F – Moving Right Along

- *Unit Opener (2 pp)*

Lesson 1 Wheels (6 pp)

Objective: Recognize that wheels affect speed and motion and make moving easier.

- Circle Time – On the Move
- Be a Reader – What Has Wheels?
- Be a Math Wiz – How Far?
- How do we use wheels?
- Be a Scientist Activity – Pull with a Pulley
- Centers – Music, Drawing and Writing, Blocks

Lesson 2 How Things Move (8 pp)

Objective: Explore ways objects move and forces that cause movement.

- Circle Time – Make It Move
- Be a Reader – Leveled Reader/Big Book: *Toys That Move* and *Water Moves*
- Be a Math Wiz – Rollers and Sliders
- What ways can the gerbils move?
- What makes these toys move?
- Be a Scientist Activity – Sliding and Rolling
- Centers – Drawing and Writing, Blocks, Art

Lesson 3 Ups and Downs (6 pp)

Objective: Understand that certain objects, like the Sun and Moon stay in the sky, while others, like an airplane, are in the sky but return to Earth.

- Circle Time – Toss Up
- Be a Writer – Up in the Sky
- Be a Math Wiz – Going Down
- What will come down?
- Be a Scientist Activity – All Fall Down
- Centers – Art, Movement, Blocks

Lesson 4 Sounds All Around (6 pp)

Objective: Explore ways objects move and forces that cause movement.

- Circle Time – Describe sounds and understand how they are made.
- Be a Reader – Leveled Reader/Big Book: *Making Sounds*
- Be a Math Wiz – Sound patterns
- What sounds might you hear?

- Be a Scientist Activity – Sound Cylinders
- Centers – Music, Drawing and Writing, Art

Lesson 5 Magnets (6 pp)

Objective: Recognize that magnets can be used to make some objects move without being touched.

- Circle Time – Try Magnets
- Be a Reader – Leveled Reader/Big Book: *What Can a Magnet Do?*
- Be a Writer – Magnetic Walk
- Be a Math Wiz – Paper Clip Chains
- What do you notice about these magnets?
- Be a Scientist Activity – Moving Clips
- Centers – Drawing and Writing, Art, Blocks

UNIT F – Assessment (2 pp)

- **Performance Assessment**
- **Formative Assessment**
- **Portfolio Assessment**

REVIEW TOGETHER – Matter and Motion

Teacher Resources

Science Handbook

Graphic Organizers

Health Handbook

Teacher Glossary

Science Songs Sheet Music