# Macmillan/McGraw-Hill Science: A Closer Look

# **Grade 1**

Be a Scientist Lesson 1: Science Skills

The Scientific Method Lesson 2: Science Methods

# Life Science

#### **UNIT A – Plants**

**Unit Opener Spread** 

**Unit Literature (Ranger Rick: Insect-Eating Plants)** 

## Chapter 1 – Plants Are Living Things

# **Lesson 1 - Learning About Living Things (6 pp)**

### **OBJECTIVE**

- Compare and classify living and nonliving things.
- Explain what plants need to live and grow.
- Explore:
- What are living and nonliving things?
- Why are plants living things?

# **Inquiry Skill Builder – OBSERVE**: Observe a rose

## **Lesson 2 Parts of Plants (6 pp)**

#### **OBJECTIVE**

- Know that many plants have roots, stems, leaves, flowers, fruits, and seeds.
- Describe that these different parts do for the plant.
- Explore:
- What are the parts of plants?
- What do the parts of plants do?
- Reading Skill: Summarize

Writing in Science - Meet General Sherman Math in Science - Seed graph

# **Lesson 3 Different Plants (6 pp)**

## **OBJECTIVE**

- Classify and compare different plants.
- Know some edible plant parts.
  - Explore:
  - How are plants different?
  - Which plant parts can you eat?
  - Reading Skill: Problem and Solution

Reading in Science - Strawberry Fields I Read to Review- My Plant Book Chapter Review (2 pp)

## **Chapter 2 – Plants Grow and Change**

# Lesson 1 - Flowers, Fruits, and Seeds

#### **OBJECTIVE:**

- Describe and compare different seeds.
- Explain why flowers and fruits are important to plants.
  - Explore:
  - Why are flowers important?
  - What are the parts of a seed?

# Inquiry Skill Builder - CLASSIFY: Classify plants

# **Lesson 2 - How Plants Grow and Change**

#### **OBJECTIVE:**

- Describe the life cycle of a plant.
- Know that plants can grow from seeds and other plant parts.
  - Explore:
  - How do plants grow from seeds?
  - How else do plants grow from seeds?

# **Reading in Science** – A Giant Grass (Bamboo) (new)

# **Lesson 3 Plants Live in Many Places**

#### **OBJECTIVE:**

- Describe how plants survive in different places
  - Explore:
  - Where do plants live?
  - How can plants survive in the cold?

# Writing in Science- Your Own Garden

Math in Science – Fruit for Sale

#### I Read to Review - All About Plants

Chapter Review (2 pp)

# **Inquiry Investigation** – How does sunlight affect leaves?

Careers - Park Ranger

#### **UNIT B – Animals and Their Homes**

**Unit Opener Spread** 

**Unit Literature (Giraffes)** 

#### **Chapter 3 – Kinds of Animals**

# **Lesson 1 All Kinds of Animals (8 pp)**

- Observe and describe different kinds of animals.
- Explain how animals are the same and different.
  - Explore:
  - What are some types of animals?
  - What are reptiles and amphibians?

- What are some other types of animals?
- Reading Skill: Compare and Contrast

# **Inquiry Skill Builder – COMPARE:** Venn diagram; compare an alligator and a duck

## **Lesson 2 What animals need to live (6 pp)**

#### **OBJECTIVE:**

- Identify what animals need to survive.
- Explain and describe how different animals get what they need.
  - Explore:
  - What do animals need to live?
    - How do animals meet their needs?
    - Reading Skill: Classify

**Writing in Science** – Write about how to take care of a pet **Math in Science** – Animal bar graph

# **Lesson 3 How Animals Get Food (6 pp)**

#### **OBJECTIVE:**

- Explain how the shape of an animal's teeth is related to what it eats.
- Classify different kinds of animals according to what they eat.
  - Explore:
  - Which animals eat plants?
  - Which animals eat meat?
  - Reading Skill: Put Things in Order

# **Inquiry Investigation** – What do animals eat?

# **Lesson 4 Animals Grow and Change (8 pp)**

## **OBJECTIVE:**

- Explain how different kinds of animals have different kinds of life cycles.
- Explain how some baby animals do not look like their parents.
  - Explore:
  - How do mammals grow and change?
  - How do birds grow and change?
  - How do frogs grow and change?
  - Reading Skill: Compare and Contrast

#### **Reading in Science – Meet Melanie Stiassny** Eel migration

I Read to Review - My Animal Book

Chapter Review (2 pp)

#### Chapter 4 – Places to Live

Reading Skill: Cause and Effect

#### **Lesson 1 Land Habitats (6 pp)**

- Describe land habitats.
- Explain how different animals adapt to different environments.
  - Explore:

- What is a grassland habitat?
- What is a forest habitat?
- Reading Skill: Predict

# **Inquiry Skill Builder – COMMUNICATE:** look at picture of habitats

# **Lesson 2 Water Habitats (6 pp)**

#### **OBJECTIVE:**

- Describe water habitats.
- Explain how animals meet their needs in a water habitat.
  - Explore:
  - •What is a lake habitat?
  - What is an ocean habitat?
  - Reading Skill: Main Idea and Details

Writing in Science- PU Animal Facts (Arctic Fox/Lemming)
Math in Science – count the number of legs

# **Lesson 3 Plants and Animals Live Together (8 pp)**

#### **OBJECTIVE:**

- Explain how the interdependence of plants and animals help them thrive in their habitats.
- Describe why each part of a food chain is important.
  - Explore:
  - Why are habitats important to animals?
  - What is a food chain?
  - What happens to living things when a habitat changes?
  - Reading Skill: Cause and Effect

# **Reading in Science-** Meet Jin Meng

I Read to Review - My Habitats Book Chapter Review (2 pp) Careers - Veterinarian

# **Earth Science**

UNIT C – Our Earth Unit Opener Unit Literature (Sand)

# **Chapter 5 – Looking at Earth**

## **Lesson 1 What Earth Looks Like (8 pp)**

- Identify different types of land on Earth.
- Describe differences between bodies of water.
  - Explore:
  - What is on the surface of Earth??
  - What is Earth's water like??

- What is Earth's land like?
- Reading Skill: Summarize

# **Inquiry Skill Builder – MAKE a MODEL** of a lake

## **Lesson 2 Rocks and Soil (6 pp)**

#### **OBJECTIVE:**

- Observe rocks and sort them into groups based on physical properties.
- Examine soil according to color, texture, and composition.
  - Explore:
  - What are rocks?
  - What is soil?
  - Reading Skill: Put Things in Order

# **Reading in Science** – Meet Rondi Davies (Rocks/Diamonds)

# **Lesson 3 Changing the Land (6 pp)**

#### **OBJECTIVE:**

- Use explanatory writing to describe how erosion can be stopped.
  - Explore:
  - How can rocks change?
  - How can the land change?
  - Reading Skill: Compare and Contrast

Writing in Science - Erosion Story Math in Science - Adding rocks

I Read to Review - My Earth Book Chapter Review (2 pp)

# Chapter 6 – Caring for Earth

# **Lesson 1 Earth's Resources (6 pp)**

# **OBJECTIVE:**

- Identify and describe natural resources.
- Explain how we use natural resources.
  - Explore:
  - What is a natural resource?
  - Why is soil important?
  - Reading Skill: Predict

# **Inquiry Skill Builder – INVESTIGATE:** soil properties; water capacity

# **Lesson 2 Using Earth's Resources (6 pp)**

# **OBJECTIVE:**

- Explain why air and water are important resources.
- Define pollution and the need for clean air and water.
  - Explore:
  - Why are water and air important?
  - Why are clean water and air important?

Grade 1 Page 5 of 11

• Reading Skill: Cause and Effect

# Reading in Science Meet Mark Siddall

# **Lesson 3 Saving Earth's Resources (6 pp)**

# **OBJECTIVE:**

- Explore how we use and conserve water.
- Explain how people can conserve, reduce and reuse our resources.
  - Explore:
  - How can we reuse resources?
  - How can we save resources?
  - Reading Skill: Problem and Solution

Writing in Science-Conserving water Math in Science – Recycling graph

**Inquiry Investigation** – Earthworms

I Read to Review - My Resources Book Chapter Review Careers - Hydrologist

# **UNIT D – Weather and Sky**

**Unit Opener** 

**Unit Literature (Ranger Rick—Weather and Wild Animals)** 

#### **Chapter 7 – Weather and Seasons**

# **Lesson 1 Weather All Around Us (6 pp)**

## **OBJECTIVE:**

- Identify different weather conditions.
- Investigate ways to measure different weather conditions.
  - Explore:
  - What is weather?
  - How can you measure weather?
  - Reading Skill: Put Things in Order

# **Inquiry Skill Builder – PREDICT:** weather

#### **Lesson 2 The Water Cycle (6 pp)**

## **OBJECTIVES:**

- Understand how clouds form and water falls back to Earth.
  - Explore:
  - What makes it rain or snow?
  - What are some different kinds of clouds?
  - Reading Skill: Classify

# **Inquiry Investigation (Measure weather)**

# **Lesson 3 Spring and Summer (6 pp)**

#### **OBJECTIVE:**

- Understand that weather changes over the seasons.
  - Explore:
  - What happens in spring?
  - What happens in summer?
  - Reading Skill: Main Idea and Details

**Reading in Science** Museum Mail Call: Spring in other places

# Lesson 4 Fall and Winter (6 pp)

#### **OBJECTIVE:**

- Identify season weather patterns in Fall and Winter.
  - Explore:
  - What happens in fall?
  - What happens in winter?
  - Reading Skill: Summarize

Writing in Science: seasons change Math in Science – weather graph

I Read to Review - My Weather Book Chapter Review

# Chapter 8 – The Sky

# **Lesson 1 The Sky Above (6 pp)**

# **OBJECTIVE:**

- Classify objects seen in the sky during day and night.
- Understand why the Sun is important for life on Earth.
  - Explore:
  - What is in the sky?
  - Why is the Sun important?
  - Reading Skill: Problem and Solution

**Inquiry Skill Builder – RECORD DATA:** Miss Hayes's classroom, who wears warm clothes?

#### **Lesson 2 Earth Moves (6 pp)**

#### **OBJECTIVE:**

- Recognize Earth's movement by observing shadows and seasons.
- Understand that Earth rotates to make day and night.
  - Explore:
  - What causes day and night?
  - What causes a year?
  - Reading Skill: Compare and Contrast

Writing in Science: write about a time of day Math in Science – telling time

# **Inquiry Investigation** – sunlight hours

# Lesson 3 Earth's Neighbors (6 pp)

#### **OBJECTIVE:**

- Observe what the Moon looks like from Earth.
- Understand that nine planets, including Earth, move around the Sun.
  - Explore:
  - How does the Moon look?
  - What are the planets?
  - Reading Skill: Cause and Effect

Reading in Science- Meet Ben Oppenheimer I Read to Review - My Sky Book Chapter Review Careers - Storm Chaser

# **Physical Science**

#### **UNIT E – Matter**

**Unit Opener** 

**Unit Literature (Ranger Rick: Where in the World Is Water?)** 

## Chapter 9 – Matter Everywhere

# **Lesson 1 Describing Matter (6 pp)**

#### **OBJECTIVE:**

- Identify matter as something that occupies space and can be perceived by one more of the senses
- Describe the properties of matter.
  - Explore:
  - What is matter?
  - What is mass?
  - Reading Skill: Put Things in Order

Writing in Science – write about your shoes Math in Science – compare weights

## Lesson 2 Solids (6 pp)

#### **OBJECTIVE:**

- Identify the properties of solids.
- Compare the properties of different solids.
  - Explore:
  - What is a solid?
  - What are some properties of solids?
  - Reading Skill: Classify

**Reading in Science** – 3 Little Pigs and their building materials

# **Lesson 3 Liquids and Gases (6 pp)**

- Describe the general properties of liquids and gases.
- Compare properties of different kinds of liquids and gases.
  - Explore:
  - What are some properties of a liquid?
  - What are some properties of a gas?
  - Reading Skill: Predict

# **Inquiry Skill Builder – MEASURE** properties

I Read to Review - My Matter Book Chapter Review

# **Chapter 10 – Changes in Matter**

# **Lesson 1 Matter Can Change (4 pp)**

#### OBJECTIVE:

- Observe and describe the physical changes of matter.
  - Explore:
  - How can matter change?
  - Reading Skill: Problem and Solution

# Inquiry Skill Builder – PUT THINGS IN ORDER

# **Lesson 2 Making Mixtures (6 pp)**

#### **OBJECTIVE:**

- Understand how mixtures can be made from different solids and liquids.
  - Explore:
  - What is a mixture?
  - What are some other mixtures?
  - Reading Skill: Main Idea and Details

Writing in Science: backpack
Math in Science – trail mix

# **Lesson 3 Heat Can Change Matter (6 pp)**

#### **OBJECTIVE:**

- Explore how matter can be changed by heat.
  - Explore:
  - How can solids and liquids change?
  - How can liquids and gases change?
  - Reading Skill: Summarize

**Reading in Science** – Hot Stuff (insulation)

I Read to Review Mix It Up

**Chapter Review** 

**Inquiry Investigation** – How can water change to a gas? Observe water in open/closed container

Careers - Baker

## **UNIT F – Motion and Energy**

# **Unit Opener**

Unit Literature For a Quick Exit

## Chapter 11 – On the Move

# **Lesson 1 Position and Motion (6 pp)**

#### **OBJECTIVE:**

- Describe the position of an object in relation to other objects.
- Observe an object's motion by recording its change in position.
  - Explore:
  - How can you tell where something is?
  - How do things move?
  - Reading Skill: Compare and Contrast

# **Inquiry Skill Builder – INFER:** motion by size of animal

# Lesson 2 Pushes and Pulls (6 pp)

#### **OBJECTIVE:**

- Explain how forces cause change in the motion of objects.
  - Explore:
  - What makes things move?
  - How are forces different?
  - Reading Skill: Cause and Effect

# **Inquiry Investigation** – Liquids flow fast and slow

#### **Lesson 3 Simple Machines (6 pp)**

## **OBJECTIVE:**

- Discover how simple machines make moving objects easier.
- Understand the functions of pulleys, ramps, and levers.
  - Explore:
  - What are simple machines?
  - What are levers and ramps?
  - Reading Skill: Classify

**Reading in Science:** Identifying simple machines in inventions: elevators and escalators.

# Lesson 4 Magnets Push and Pull (6 pp)

## **OBJECTIVE:**

- Understand that magnets attract some objects and not others.
- Understand that magnets have two poles.
  - Explore:
  - What is a magnet?
  - What are a magnet's poles?
  - Reading Skill: Predict

Writing in Science: describe a picture of a toy train using magnets

**Math in Science**: 2 magnets pick up paper clips. How many more does one pick up?

Grade 1 Page 10 of 11

# I Read to Review - My Motion Book

# **Chapter Review**

# **Chapter 12 – Energy Everywhere**

# **Lesson 1 Heat (6 pp)**

#### **OBJECTIVE:**

- Describe different sources of energy and heat.
  - Explore:
  - What is energy?
  - What is heat?
  - Reading Skill: Main Idea and Details

**Inquiry Skill Builder – DRAW CONCLUSIONS**: heat from the Sun; heat from rubbing hands together;

# Lesson 2 Sound (6 pp)

#### **OBJECTIVE:**

- Identify different qualities of sounds
- Understand what creates sound.
  - Explore:
  - How can you make sound?
  - How are sounds different?
  - Reading Skill: Summarize

**Reading in Science:** Sounds and Safety

## Lesson 3 Light (6 pp)

#### **OBJECTIVE:**

- Describe sources of light.
- Explain how we use light.
  - Explore:
  - What is light?
  - How do we use light?
  - Reading Skill: Put Things in Order

Writing in Science: new, Turn On the Lights Math in Science: stained glass showing shapes

# **Lesson 4 Electricity (4 pp)**

## **OBJECTIVE:**

- Describe how we use electric energy.
  - Explore:
  - How do you use electricity?
  - Reading Skill: Problem and Solution

Writing in Science: electricity Math in Science: battery chart

I Read to Review - My Energy Book

Chapter Review
Careers – Musician