

## **GRADE 2 SCIENCE**

The Second Grade Science Curriculum is divided into Life Science, Physical Science and Earth Science. The children's knowledge is gained chiefly by observation and experience. A systematic approach to the sciences provides the building blocks for a deeper understanding as they continue to learn.

### **LIFE SCIENCE**

#### **Life Cycle**

Students will:

- learn what living things need
- learn that plants make new plants
- understand how plants are alike and different
- identify animal groups
- learn how animals grow and change
- learn about different kinds of habitats

#### **Life Cycle of Humans**

Students will have an introduction to

- the digestive system
- the food pyramid

### **PHYSICAL SCIENCE**

#### **Matter**

Students will:

- identify the properties of solids
- identify the properties of liquids and gases
- learn what is matter and mass
- compare physical and chemical changes
- study evaporation and condensation through experiments
- understand mixtures

#### **Motion and Energy**

Students will:

- identify position, motion, and speed
- learn what makes things move
- learn the history and identify the six simple machines
- use magnets to learn about repel and attract
- explore the different ways we use energy through heat, sound, light, and electricity

### **Earth Science**

## **Meteorology**

Students will:

- distinguish different weather systems
- compare the weather of each season
- learn about the water cycle

## **Simple Machines**

Students will:

- learn the history of the six simple machines
- identify the six simple machines
- understand the purpose of each simple machine

## **Magnets**

Students will:

- distinguish the different types of magnets
- learn the meaning of the words attract and compel
- understand that magnets have a north and a south pole
- learn to use a compass

## **Earth and Space**

Students will:

- distinguish between night and day
- understand why seasons happen
- learn the purpose of the moon and stars
- learn about the solar system

## **Land and Water**

Students will:

- observe different kinds of landforms
- learn about the crust, mantle and core of the Earth
- understand the difference between fresh water and ocean water
- learn about the different ways that the Earth changes
- observe rocks and minerals
- learn ways to protect and use our natural resources

## **Materials**

McGraw-Hill – Science A Closer Look-Teacher Edition

McGraw-Hill-Science A Closer Look-Student Edition  
McGraw-Hill-Science A Closer Look-Activity Flipchart  
McGraw-Hill-Science A Closer Look-Transparencies  
McGraw-Hill-Science A Closer Look-Key Concept Cards and Voc. Cards  
McGraw-Hill-Science A Closer Look-Visual Literacy  
McGraw-Hill-Science A Closer Look-Building Skills Assessment  
McGraw-Hill-Science A Closer Look-Reading and Writing  
McGraw-Hill-Science A Closer Look-Activity Lab Book  
McGraw-Hill-Science A Closer Look-Building Skills Math  
McGraw-Hill-Science A Closer Look-Grade 2 Materials Kit  
McGraw-Hill-Science A Closer Look-Grade 2 Music CD  
Videos to enhance subject matter(Magic School Bus)

Compass

Magnets

Food Guide Pyramid by US Agriculture and US Department of Health and Human Resources

Food Pyramid Poster

Worksheets on Insects and Spiders for Teacher Created Materials

Insects and Spider Worksheet from Evan Moor Corp.

Hands on plastic insect figures

Posters

Worksheets Digestive System from Frank Schaffer Publications, Inc

Poster on Digestive System

Overhead

Simple Machine Samples

Lima Beans

Weather Worksheets by Frank Schaffer

### Resource Books

Creative Teaching Materials for Magnets

Cut and Paste Science by Teacher Created Materials, Inc.

The Education Center, Inc. Worksheets about Nutrition

Teacher Created Materials, Inc

Book Two: Bad Ants

Linking Literature to Science

Anasi the Spider by Mailbox

Hands on Volcanoe Experience.

Watercycle Teaching and Learning Company

The Best Book of Weather by Scholastic

Power Practice Science: reproducible activities

Rocks and Minerals: A gem of a book

### Reading Books

Insects by Beverly Armstrong

Spiders Spin Webs by Yvonne Winer  
The Bugliest Bug by Scholastic  
I Can Read about Insects by Deborah Merrian  
I can read about spiders Deborah Merrian  
Volcanoes by Nichola Nirgiotis  
Parts of Volcano by Evan Moor Corp.  
What is a Volcano by Chris Arvetis  
The Wildleaf Ride by Scholastic  
The Cloud Book by Tomie dePaola  
What is a Machine by John Syrocki  
All about Seeds Troll Associates  
How a Seed Grows by Helene Jarden  
Creepy Crawly Caterpillars by Margery Facklam  
I wish I were a Butterfly by James Howe  
From Caterpillar to Butterfly by Deborah Heiligiman

## **Videos**

Schlessinger Media Videos  
All About Simple Machines  
All about Nutrition and Exercise  
Ants and Bees  
All about Plants  
All about Volcanoes  
All about Magnet

## Magic School Bus Videos

Magic School Bus Ants by Scholastic  
Magic School Bus goes to seed Scholastic

Smartboard  
Computer  
United Streaming  
Brain Pop Jr.

Nutrition Video

Student packets created from a variety of teacher resources  
Teacher made notes, graphic organizers, worksheets, tests, quizzes, study guides, and games  
Arts and crafts materials for various projects related to each topic of study

## **Instruction**

Teachers will:

- Use posters and books to present lessons

- Lead students in class discussion
- Prepare labs for the students on material presented
- Evaluate students by worksheets and tests

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