

HMH  Into Science®

HMH  ¡Arriba las Ciencias!

Scope and Sequence

Grades K–5



Grade K

ENGINEERING & DESIGN

Unit 1: Engineering Design Process

K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3

Hands-On Unit Project: Design a Coin Sorter

Hands-On Unit Performance Task: Build an Airplane

Lesson 1: Using a Design Process

Hands-On Activities: Explore a Problem, Solve a Problem

LIFE SCIENCE

Unit 2: Plants and Animals

K-LS1-1, K-ESS3-1

Hands-On Unit Project: What Living Things Need

Hands-On Unit Performance Task: Do Plants Need Air

Lesson 1: What Plants Need

Hands-On Activities: Explore Plants and Water, Plants and Sunlight

Lesson 2: What Animals Need

Hands-On Activities: Explore People Needs, Make a Pill Bug Home

Lesson 3: Where Plants and Animals Live

Hands-On Activities: Match Animal Homes, Observe Where Plants Live

EARTH & SPACE SCIENCE

Unit 3: Resources in Environments

K-ESS2-2, K-ESS3-3, K-ESS3-1, K-2-ETS1-2

Hands-On Unit Project: Reuse a Milk Carton

Hands-On Unit Performance Task: Natural Resources as a System

Lesson 1: Plants and Animals Make Changes

Hands-On Activities: Look at a Worm Home, Look at Plant Changes, Plan a Playground

Lesson 1: Natural Resources

Hands-On Activities: Match the Resource, Find Solutions for Trash

Unit 4: Weather

K-PS3-1, K-PS3-2, K-2-ETS1-1, K-2-ETS1-2, K-ESS2-1, K-ESS3-2

Hands-On Unit Project: Local Weather Forecasts

Hands-On Unit Performance Task: Build a Model Shelter

Lesson 1: Protection from the Sun

Hands-On Activities: Test the Sun's Heat, Plan and Build Shade

Lesson 2: Weather Patterns

Hands-On Activities: Measure Temperature, Patterns in Weather

Lesson 3: Prepare for Weather

Hands-On Activities: Weather Reports, Prepare for Severe Weather

PHYSICAL SCIENCE

Unit 5: Pushes and Pulls

K-PS2-1, K-PS2-2, K-2-ETS1-1, K-2-ETS1-2

Hands-On Unit Project: A Game of Motion

Hands-On Unit Performance Task: Figure 8 in Motion

Lesson 1: All About Motion

Hands-On Activities: Push or Pull, Change Motion

Lesson 2: Change the Way Things Move

Hands-On Activities: Roll a Ball, Design a Track





Grade 1

ENGINEERING & DESIGN

Unit 1: Engineering Design Process

K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3

Hands-On Unit Project: Pocket Lock-It

Hands-On Unit Performance Task: Build a House

Lesson 1: A Design Process

Hands-On Activities: Explore a Problem, Solve a Problem

PHYSICAL SCIENCE

Unit 2: Light and Sound

1-PS4-1, 1-PS4-2, 1-PS4-3, 1-PS4-4

Hands-On Unit Project: Make a Rainbow

Hands-On Unit Performance Task: Communicate with Sound

Lesson 1: All About Light

Hands-On Activities: Watch it Glow, Make Observations in Different Light

Lesson 2: Light and Materials

Hands-On Activities: Reflect Light, Test What Happens to Light

Lesson 3: All About Sound

Hands-On Activities: Send a Message, Make Something Move with Sound

LIFE SCIENCE

Unit 3: Plant Parts

1-LS1-1, 1-LS3-1

Hands-On Unit Project: Explore Plant Parts

Hands-On Unit Performance Task: Design a House

Lesson 1: Parts Help Plants Live

Hands-On Activities: Observe Roots and Leaves, Observe Stems, Ideas from Plants

Lesson 2: Plants and Their Parents

Hands-On Activities: Grow Carrot Tops, Compare Parts

Unit 4: Animal Parts

1-LS1-1, 1-LS1-2, 1-LS3-1

Hands-On Unit Project: Compare Animal Behavior

Hands-On Unit Performance Task: Match Animals and Their Young

Lesson 1: Parts Help Animals Live

Hands-On Activities: Observe Animal Parts, Ideas from Animals

Lesson 2: Animals and Their Parents

Hands-On Activities: Explore Animal Families, Match the Animals

Lesson 3: Animals Take Care of Their Young

Hands-On Activities: Describe How Animals Help Young, Compare Animal Parents

EARTH & SPACE SCIENCE

Unit 5: Objects and Patterns in the Sky

1-ESS1-1, 1-ESS1-2

Hands-On Unit Project: Explore the Moon's Phases

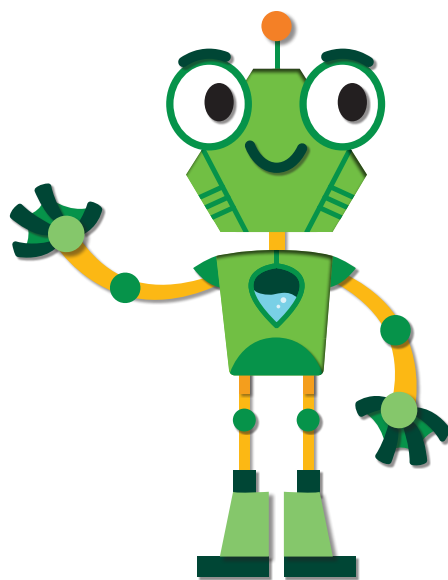
Hands-On Unit Performance Task: Explore Short and Long Days

Lesson 1: Patterns in the Sky

Hands-On Activities: Observe the Daytime and Nighttime Sky, Trace a Shadow

Lesson 2: Patterns of Daylight

Hands-On Activities: Measure Daylight, Observe Patterns of Sunrise and Sunset





Grade 2

ENGINEERING & DESIGN

Unit 1: Engineering Design Process

K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3

Hands-On Unit Project: Runaway Wagon

Hands-On Unit Performance Task: Build a Water Bottle Holder

Lesson 1: Compare Design Solutions

Hands-On Activities: Design a Ramp, Compare Features

PHYSICAL SCIENCE

Unit 2: Matter

2-PS1-1, 2-PS1-2, 2-PS1-3, 2-PS1-4, K-2-ETS1-1

Hands-On Unit Project: Explore Melting

Hands-On Unit Performance Task: Build a Model Boat

Lesson 1: Properties of Matter

Hands-On Activities: Sort Objects, Explore Properties

Lesson 2: Objects Can Be Put Together

Hands-On Activities: Explore What Objects are Made Of, Build Objects from Smaller Pieces

Lesson 3: Matter Can Change

Hands-On Activities: Explore Cooling, Explore Heating

EARTH & SPACE SCIENCE

Unit 3: Earth's Surface

2-ESS2-2, 2-ESS2-3

Hands-On Unit Project: Explore Ocean Landforms

Hands-On Unit Performance Task: Map an Island

Lesson 1: Water on Earth

Hands-On Activities: Observe Water All Around, Observe Temperature Changes to Water

Lesson 2: Landforms on Earth

Hands-On Activities: Model Landforms, Mapping Landforms and Bodies of Water

Unit 4: Changes to Earth's Surface

2-ESS1-1, 2-ESS2-1, K-2-ETS1-2

Hands-On Unit Project: Make a Windbreak

Hands-On Unit Performance Task: Build an Earthquake-Proof Structure

Lesson 1: Slow Changes on Earth

Hands-On Activities: Try to Change Rocks, Model Weathering and Erosion

Lesson 2: Fast Changes on Earth

Hands-On Activities: Model an Earthquake, Model a Volcano, Model Moving Water

Lesson 3: Prevent Wind and Water from Changing Land

Hands-On Activities: Explore Changing Land, Prevent Water from Changing Land

LIFE SCIENCE

Unit 5: Environments for Living Things

2-LS2-1, 2-LS2-2, 2-LS4-1, K-2-ETS1-2

Hands-On Unit Project: Explore Habitats

Hands-On Unit Performance Task: Observe an Ant Farm

Lesson 1: Plant Needs

Hands-On Activities: Explore Sunlight and Water, Explore Space for Plants

Lesson 2: Plants Depend on Animals

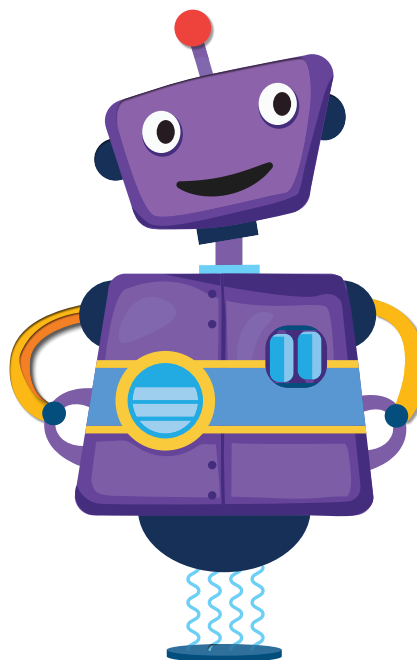
Hands-On Activities: Spread Seeds, Model Moving Pollen

Lesson 3: Plants and Animals in Land Habitats

Hands-On Activities: Model a Plant, Model an Animal

Lesson 4: Plants and Animals in Water Habitats

Hands-On Activities: Compare Water Habitats, Model a Water Habitat





Grade 3

ENGINEERING & DESIGN

Unit 1: Engineering and Technology

3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3

Hands-On Unit Project: Collect Weather Data

Hands-On Unit Performance Task: The Benefits of Research

Lesson 1: Design a Solution to a Problem

Hands-On Activities: Plant Problems, Looking it Over

PHYSICAL SCIENCE

Unit 2: Forces and Motion

3-PS2-1, 3-PS2-2, 3-PS2-3, 3-PS2-4

Hands-On Unit Project: Design Safe Equipment

Hands-On Unit Performance Task: Off and On

Lesson 1: Forces

Hands-On Activities: Move the Car, Ramp Moves

Lesson 2: Motion

Hands-On Activities: Move It, Tick Tock

Lesson 3: Forces That Act From a Distance

Hands-On Activities: Solve a Magnet Problem, Build an Electromagnet

LIFE SCIENCE

Unit 3: Life Cycles and Inherited Traits

3-LS1-1, 3-LS2-1, 3-LS3-1, 3-LS4-2

Hands-On Unit Project: Life Cycle Model

Hands-On Unit Performance Task: Cool Beans! (and Warm and Hot Ones, Too!)

Lesson 1: All Organisms Have a Life Cycle

Hands-On Activities: Exploring a Change, Comparing Life Cycles

Lesson 2: Plants and Animals Inherit Traits from Their Parents

Hands-On Activities: What Will It Look Like?, Monster Traits

Lesson 3: Organisms Use Strategies to be Successful in Their Environment

Hands-On Activities: Battle of the Beans!, All for One

Unit 4: Organisms and Their Environments

3-LS3-2, 3-LS4-1, 3-LS4-3, 3-LS4-4

Hands-On Unit Project: Environmental Change

Hands-On Unit Performance Task: Change It Up

Lesson 1: The Environment Affects Traits

Hands-On Activities: Will They Grow?, Designed Environments

Lesson 2: Adaptations Aid Organisms' Survival

Hands-On Activities: How Do Structures Help?, How Do Behaviors Help?

Lesson 3: Environments Change

Hands-On Activities: Wild Horses, How Can It Cross the Road?

Lesson 4: Evidence of Past Environments

Hands-On Activities: How do Fossils Form?, What Can You Learn From a Fossil?

EARTH & SPACE SCIENCE

Unit 5: Weather Impacts

3-ESS2-1, 3-ESS2-2, 3-ESS3-1

Hands-On Unit Project: Seasonal Changes

Hands-On Unit Performance Task: Travel Weather

Lesson 1: We Can Predict Weather

Hands-On Activities: Weather Here and There, Regional Weather

Lesson 2: Severe Weather

Hands-On Activities: The Answer is Blowing in the Wind, Smashing Weather

Lesson 3: Types of Climates

Hands-On Activities: Feel the Heat, Looking for a New Home





Grade 4

ENGINEERING & DESIGN

Unit 1: Engineering and Technology

3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3

Hands-On Unit Project: Extend a Sense
Hands-On Unit Performance Task: Designing a Portable Chair

Lesson 1: Engineering Design

Hands-On Activities: Quick Tower Building, Designing a Listening Device

LIFE SCIENCE

Unit 2: Plant and Animal Structure and Function

4-LS1-1, 4-LS1-2, 4-PS4-2

Hands-On Unit Project: Plant and Animal Partnerships
Hands-On Unit Performance Task: Communication of the Wild

Lesson 1: Plant Parts and How They Function

Hands-On Activities: Flower Power, Slurp

Lesson 2: Animal Parts and How They Function

Hands-On Activities: Dinner is Served, Courtship Displays

Lesson 3: How Senses Work

Hands-On Activities: Touch Test, No Smell No Taste No See

PHYSICAL SCIENCE

Unit 3: Energy and Communication

4-PS3-1, 4-PS3-2, 4-PS3-3, 4-PS3-4, 4-PS4-1, 4-PS4-3

Hands-On Unit Project: Wave Patterns
Hands-On Unit Performance Task: Colliding Objects

Lesson 1: Energy Transfer and Transformation

Hands-On Activities: Full of Energy, Light the Bulb

Lesson 2: Collisions

Hands-On Activities: Test It! Stored Energy in a Rubber Band, Speed and Energy

Lesson 3: Waves

Hands-On Activities: Let's Make Waves, Bobbing and Waving

Lesson 4: Information Transfer

Hands-On Activities: Communication Solution, Pixels to Pictures

EARTH & SPACE SCIENCE

Unit 4: Shaping Landforms

4-ESS1-1, 4-ESS2-1

Hands-On Unit Project: Nearby Weathering
Hands-On Unit Performance Task: Model It, Map It

Lesson 1: Factors that Shape Earth's Surface

Hands-On Activities: Modeling How Far Sediment Travels, A Sweet Test

Lesson 2: Fast and Slow Changes

Hands-On Activities: The Rate of Change, Glaciers on the Move

Lesson 3: Rock Layers Record Landform Changes

Hands-On Activities: Layered Landforms, Layer by Layer

Unit 5: Earth's Features and Resources

4-ESS2-2, 4-ESS3-1, 4-ESS3-2, 4-PS3-4, 3-5-ETS1-2

Hands-On Unit Project: Natural Resources Report Card
Hands-On Unit Performance Task: Withstanding Water

Lesson 1: Patterns on Earth

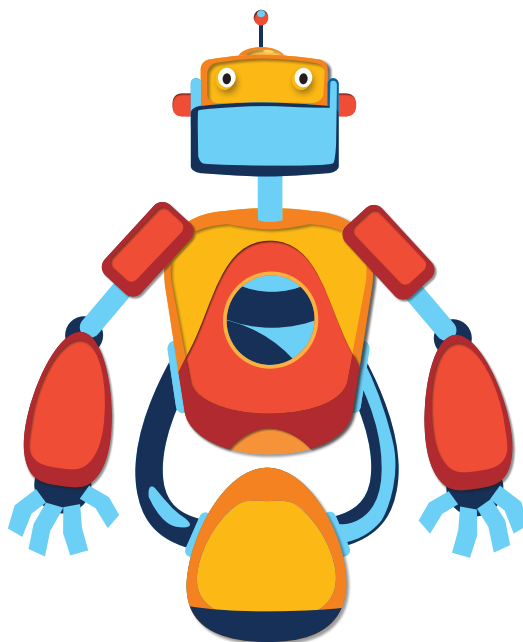
Hands-On Activities: Tracking Quakes, Volcanic Eruptions

Lesson 2: Reducing the Impacts of Natural Hazards

Hands-On Activities: Strong Stable Structures, Make Your Own Seismograph

Lesson 3: Resources

Hands-On Activities: Modeling Energy Resource Use, Running on Sunshine





Grade 5

ENGINEERING & DESIGN

Unit 1: Engineering and Technology

3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3

Hands-On Unit Project: Dropping Off, Picking Up

Hands-On Unit Performance Task: Lunch Line Life Hack

Lesson 1: Engineering and Society

Hands-On Activities: What Makes a Good Toy Car,
Improving Toy Cars

PHYSICAL SCIENCE

Unit 2: Matter

5-PS1-1, 5-PS1-3, 3-5 ETS1-1, 3-5 ETS1-2, 3-5 ETS1-3

Hands-On Unit Project: Conservation of Matter

Hands-On Unit Performance Task: Physical or Chemical?

Lesson 1: Matter Has Mass and Volume

Hands-On Activities: Measuring Mass and Volume,
Evidence of Matter

Lesson 2: Matter Has Many Properties

Hands-On Activities: So Many Properties, Beat the Heat

Lesson 3: Matter Can Change

Hands-On Activities: Changes in Matter, Which Will
React?

LIFE SCIENCE

Unit 3: Energy and Matter in Organisms

5-LS1-1, 5-PS3-1, 5-LS2-1

Hands-On Unit Project: The Best Light

Hands-On Unit Performance Task: Business Has Bean
Bad

Lesson 1: Plants Transform and Use Energy and Matter

Hands-On Activities: A Tree in a Forest, Needs for Growth

Lesson 2: Organisms Use Matter and Energy

Hands-On Activities: A Filling Morsel, Where's the Heat

Lesson 3: Energy and Matter Move Between Organisms

Hands-On Activities: Modeling Matter Moving Within an
Ecosystem, Break it Down

Unit 4: Energy and Matter in Ecosystems

5-LS2-1

Hands-On Unit Project: Self-Contained Ecosystem

Hands-On Unit Performance Task: Design an Ecosystem

Lesson 1: Organisms Interact in Ecosystems

Hands-On Activities: What's Out There, Environment
Matters

EARTH & SPACE SCIENCE

Unit 5: Earth Interactions and Resources

5-ESS2-1, 5-ESS2-2, 5-ESS3-1, 3-5-ETS1-3

Hands-On Unit Project: My Environmental Impact

Hands-On Unit Performance Task: Protecting a Sphere

Lesson 1: Earth's Systems Interact

Hands-On Activities: Earth Materials Form Systems,
Interactions of Systems Shape Landforms

Lesson 2: Water in Earth's Systems

Hands-On Activities: Water oves Among Earth's Systems,
Water Stores Heat

Lesson 3: Resource Use Affects the Environment

Hands-On Activities: Squeaky Clean Water, Getting to a
Resource

Lesson 4: People Can Protect the Environment

Hands-On Activities: Pocket Park, Reusing at Home

Unit 6: Patterns in the Sky

5-PS2-1, 5-ESS1-1, 5-ESS1-2

Hands-On Unit Project: Starry Sky

Hands-On Unit Performance Task: Solar Size

Lesson 1: Gravity Affects Matter on Earth

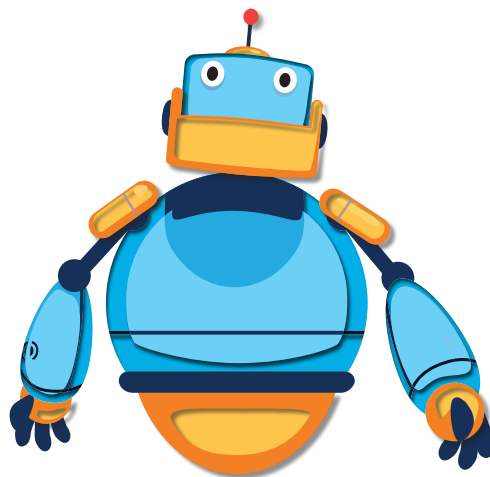
Hands-On Activities: An Ant's View of the World, A Trip
Around the World

Lesson 2: Sky Patterns Over Time

Hands-On Activities: Shadows, The Night Moves

Lesson 3: The Sun

Hands-On Activities: Glowing Light, Color Provides the
Final Clue



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