

# 1<sup>st</sup> Grade Science Pacing Guides

## First 9 Weeks

### Life Science

#### Standard 1 Cells

- 1.1** Combine pictures of major body parts to assemble a complete animal.
- 1.2** Communicate the effect of using tools like magnifiers when examining different body parts.
- 1.3** Make diagrams to record and communicate observations.

#### Standard 2 Interdependence

- 2.1** Identify the basic characteristics of living things.
- 2.2** Record information about living or non-living objects in local environments.
- 2.3** Sort and classify a variety of living and non-living materials based on their characteristics.

#### Standard 3 Flow of Matter and Energy

- 3.1** Conduct investigations and record data about the growth of different plants under varying conditions.
- 3.2** Describe what plants and animals need in order to grow and remain healthy.

#### Standard 4 Heredity

- 4.1** Observe, describe, and record the life cycle of a particular animal.
- 4.2** Match pictures of parents and related offspring by identifying common characteristics.

#### Standard 5 Biodiversity and Change

- 5.1** Observe plants and animals on the school grounds and group them according to where they are found.
- 5.2** Create a chart of different habitats and match animals to specific locations.
- 5.3** Sort pictures or illustrations of animals into groups that are extinct and those that still exist and offer possible explanations for extinction

### Embedded Inquiry

- Inq.1** Use senses and simple tools to make observations.
- Inq.2** Communicate interest in simple phenomena and plan for simple investigations.
- Inq.3** Communicate understanding of simple data using age-appropriate vocabulary.
- Inq.4** Collect, discuss, and communicate findings from a variety of investigations.

### Embedded Technology & Engineering

- T/E.1** Explain how simple tools are used to extend the senses, make life easier, and solve everyday problems.
- T/E.2** Invent designs for simple products.
- T/E.3** Use tools to measure materials and construct simple products.

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## Second 9 Weeks

### Earth & Space Science

#### Standard 6 The Universe

- 6.1** Create a chart of things that can be observed in the day and night sky.
- 6.2** Identify objects in the sky and describe their observable similarities and differences

#### Standard 7 The Earth

- 7.1** Create a diagram of the school grounds to identify where water, rocks, soil, living organisms, and man-made objects are found.
- 7.2** Sample areas of the school grounds to identify where different materials are found.
- 7.3** Use bagged samples of earth materials or pictures from different areas to classify materials according to their use.

#### Standard 8 The Atmosphere

- 8.1** Collect daily weather information to predict what conditions might occur on the following day.
- 8.2** Discuss what makes a weather prediction accurate or inaccurate.

### Embedded Inquiry

- Inq.1** Use senses and simple tools to make observations.
- Inq.2** Communicate interest in simple phenomena and plan for simple investigations.
- Inq.3** Communicate understanding of simple data using age-appropriate vocabulary.
- Inq.4** Collect, discuss, and communicate findings from a variety of investigations.

### Embedded Technology & Engineering

- T/E.1** Explain how simple tools are used to extend the senses, make life easier, and solve everyday problems.
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## Third 9 Weeks

### Physical Science

#### Standard 9 Matter

- 9.1** Classify solids according to their size, shape, color, texture, hardness, ability to change shape, magnetic attraction, whether they sink or float, and use.
- 9.2** Compare liquids according to their color, ability to flow, solubility in water, and use.
- 9.3** Investigate and describe the results of mixing different substances such as salt and pepper, water and sand, water and oil, and water and salt

#### Standard 10 Energy

- 10.1** Predict and determine what happens over the course of a school day when containers of sand, soil, and water with thermometers are placed in a sunny window.
- 10.2** Predict and determine what happens over the course of a school day when containers of sand, soil and water with thermometers are placed in a shady location.
- 10.3** Compare the temperature at different places around the school such as black top driveway, lawn, concrete areas, side of the building, under a shade tree, wet area, in the ground.

#### Standard 11 Motion

- 11.1** Use familiar objects to explore how the movement can be changed.
- 11.2** Investigate and explain how different surfaces affect the movement of an object.

#### Standard 12 Forces in Nature

- 12.1** Identify and classify objects in the classroom as magnetic or non-magnetic.
- 12.2** Make predictions about how various objects will be affected by a magnet

### Embedded Inquiry

- Inq.1** Use senses and simple tools to make observations.
- Inq.2** Communicate interest in simple phenomena and plan for simple investigations.
- Inq.3** Communicate understanding of simple data using age-appropriate vocabulary.
- Inq.4** Collect, discuss, and communicate findings from a variety of investigations.

### Embedded Technology & Engineering

- T/E.1** Explain how simple tools are used to extend the senses, make life easier, and solve everyday problems.
- T/E.2** Invent designs for simple products.
- T/E.3** Use tools to measure materials and construct simple products.

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## Fourth 9 Weeks

### Life Science

#### Standard 1 Cells

**1.1** Design a new living thing and explain how it would acquire food, water, and air.

#### Standard 2 Interdependence

**2.1** Draw or use pictures of a local environment to label the plants and animals.

**2.2** Investigate ways that plants and animals depend on each other.

**2.3** Construct a flow chart that demonstrates how plants, animals, and the environment interact to provide basic life requirements

#### Standard 3 Flow of Matter and Energy

**3.1** Describe the habitat of a particular organism based on its food, water, and air requirements.

**3.2** Design a model of a habitat for an organism in which all of its needs would be met.

#### Standard 4 Heredity

**4.1** Compare and contrast the life cycles of different organisms such as a chicken, butterfly, meal worm, frog, or human.

**4.2** Sequence a collection of pictures or illustrations into the correct stages of an organism's life cycle.

**4.3** Look for similarities in pictures of members from the same human family.

**4.4** Create a graphic organizer that compares observable traits that offspring share with their parents

#### Standard 5 Biodiversity and Change

**5.1** Compare and contrast the characteristics of organisms from two different environments.

**5.2** Infer the characteristics needed by an organism to survive in a particular environment.

**5.3** Observe fossils or pictures of fossils and make inferences about the organisms from which they originated.

**5.4** Compare pictures of fossils with animals or plants that are living today.

### Embedded Inquiry

**Inq.1** Use senses and simple tools to make observations.

**Inq.2** Communicate interest in simple phenomena and plan for simple investigations.

**Inq.3** Communicate understanding of simple data using age-appropriate vocabulary.

**Inq.4** Collect, discuss, and communicate findings from a variety of investigations.

### Embedded Technology & Engineering

**T/E.1** Explain how simple tools are used to extend the senses, make life easier, and solve everyday problems.

**T/E.2** Invent designs for simple products.

**T/E.3** Use tools to measure materials and construct simple products.