

2nd Grade Science Pacing Guide

First Nine 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 and 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 Nine Weeks

Earth and Space Science

Standard 6 Universe

- 6.1** Observe and collect data on the sun's position at different times of the day.
- 6.2** Use science journals to draw and record changes in the moon over a period of time.

Standard 7 The Earth

- 7.1** Sort, analyze, and compare a variety of soil types.
- 7.2** Observe rocks of different sizes with a hand lens and describe these materials according to their basic features.
- 7.3** Identify and categorize items in the classroom made from renewable or nonrenewable resources.
- 7.4** Identify simple methods for reusing the earth's resources.

Standard 8 The Atmosphere

- 8.1** Use records and graphs of seasonal temperature changes to draw conclusions about the weather during different times of the year.

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.
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Embedded Technology and 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 Nine Weeks

Physical Science

Standard 9 Matter

- 9.1** Use tools such as hand lenses, measurement devices, and simple arm balances to gather data about the physical properties of different objects.
- 9.2** Describe what happens when ice changes from a solid to a liquid.
- 9.3** Describe what happens when water is heated to the point of evaporation.
- 9.4** Explain what happens when a balloon is blown up and pops.

Standard 10 Energy

- 10.1** Identify and explain how the sun affects objects on the surface of the earth.
- 10.2** Investigate how the sun affects various objects and materials.

Standard 11 Motion

- 11.1** Use a variety of objects that vibrate to demonstrate how sounds are produced.
- 11.2** Describe the sounds produced by different types of vibrating objects.

Standard 12 Forces in Nature

- 12.1** Explain how two magnets interact.
- 12.2** Describe what happens when an object is dropped and record the observations in a science notebook.

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 and 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.

2nd Grade Science Pacing Guide

Fourth Nine Weeks

Life Science

Standard 1 Cells

1.1 Identify specific parts of a plant and describe their function.

Standard 2 Interdependence

2.1 Distinguish between living and non-living things.

2.2 Determine how plants and animals compete for resources such as food, space, water, air, and shelter.

Standard 3 Flow of Matter & Energy

3.1 Identify the basic needs of plants and animals.

3.2 Recognize that animals obtain their food by eating plants and other animals

Standard 4 Heredity

4.1 Select an illustration that shows how an organism changes as it develops.

4.2 Distinguish between characteristics that are transmitted from parents to offspring and those that are not.

Standard 5 Biodiversity and Change

5.1 Investigate an organism's characteristics and evaluate how these features enable it to survive in a particular environment.

5.2 Investigate populations of different organisms and classify them as thriving, threatened, endangered, or extinct.

5.3 Match the organism with evidence of its prior existence.

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 and 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.