

The following instructional plan is part of a GaDOE collection of Unit Frameworks, Performance Tasks, examples of Student Work, and Teacher Commentary. Many more GaDOE approved instructional plans are available by using the Search Standards feature located on GeorgiaStandards.Org.

Georgia Performance Standards Framework

Unit One Organizer: (9 weeks-Ideally taught at the beginning of spring)

OVERVIEW: SPRING

In this unit students will:

- Identify the basic patterns of spring weather
- Use simple instruments to measure temperature, wind, and precipitation
- Observe sky conditions
- Collect weather data
- Create a weather journal
- Identify the basic needs and physical characteristics of plants
- Identify the basic needs and physical characteristics of animals
- Compare and contrast how animals move

STANDARDS ADDRESSED IN THIS UNIT

Focus Standards:

S1E1. Students will observe, measure, and communicate weather data to see patterns in weather and climate.

- a. Identify different types of weather and the characteristics of each type.
- b. Investigate weather by observing, measuring with simple weather instruments (thermometer, wind vane, rain gauge), and recording weather data (temperature, precipitation, sky conditions, and weather events) in a periodic journal or on a calendar seasonally.
- c. Correlate weather data (temperature, precipitation, sky conditions, and weather events) to seasonal changes.

S1L1. Students will investigate the characteristics and basic needs of plants and animals.

- a. Identify the basic needs of a plant.
 1. Air 2. Water 3. Light 4. Nutrients
- b. Identify the basic needs of an animal.
 1. Air 2. Water 3. Food 4. Shelter
- c. Identify the parts of a plant—root, stem, leaf, and flower.
- d. Compare and describe various animals—appearance, motion, growth, basic needs.

STANDARDS ADDRESSED IN THIS UNIT

Supporting Standards:

SS1H1 The student will read about and describe the life of historical figures in American history.

- a. Identify the contributions made by these figures: Meriwether Lewis and William Clark with Sacagawea (exploration)

ELA1R6. Reads and listens to a variety of texts for information and pleasure.

ELA1LSV1c. Respond appropriately to orally presented questions.

S1CS3. Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities.

- a. Use ordinary hand tools and instruments to construct, measure, and look at objects.

LITERATURE SELECTIONS

Source of Recommendation	Title	Author	ISBN
NSTA Outstanding Trade Book	Spring Thaw	Steven Schnur	0-670-87961-4
NSTA Outstanding Trade Book	Plants on the Trail with Lewis and Clark	Dorothy Hinshaw Patent	0-618-06776-0
NSTA Outstanding Trade Book	Claws, Coats and Camouflage: The Ways Animals Fit into Their World	Susan E. Goodman	0-7613-1865-8
NSTA Outstanding Trade Book	Seeds, Stems, and Stamens: The Ways Plants Fit into Their World	Susan E. Goodman	0-7613-1874-7

ENDURING UNDERSTANDINGS	
<ul style="list-style-type: none"> • Spring is a season of the year. • Identify the weather conditions in spring. • Plants need: air, water, light, and nutrients. • Animals need: air, water, food, and shelter. • The parts of the plant are: roots, stem, leaf, and flower. • Animals have differences such as: appearance, motion, and growth. 	
ESSENTIAL QUESTIONS:	
<ul style="list-style-type: none"> • How can spring weather be described? • How do you measure spring weather? • How does spring weather affect the types of clothing I wear? • What are the basic needs of a plant? • What are the parts of a plant? • What are the basic needs of an animal? • How do animals adapt to their environment? 	
MISCONCEPTIONS	PROPER CONCEPTIONS
<ol style="list-style-type: none"> 1. All animals have the same characteristics. 2. Weather does not change season to season. 	<ol style="list-style-type: none"> 1. Animals have different characteristics which help them survive in their environment. 2. There are changes in each season.

CONCEPTS:	KNOW AND DO	LANGUAGE	EVIDENCE OF LEARNING
Spring Weather: Spring is a season with its own weather patterns.	<ul style="list-style-type: none"> Identify the types of weather in spring. 	<ul style="list-style-type: none"> spring thaw warm leaves flower buds spring showers 	<ul style="list-style-type: none"> Science Journal entries Word Web: Spring Weather Comparison Chart Spring Language Rubric
Spring weather can be communicated to others through the process of observing, measuring and recording weather data.	<ul style="list-style-type: none"> Observe weather using simple weather instruments Record weather data 	<ul style="list-style-type: none"> thermometer wind vane rain gauge temperature precipitation sky conditions weather events 	<ul style="list-style-type: none"> Measurement Tools Table
Plants need air, water, light, and nutrients.	<ul style="list-style-type: none"> Identify the basic needs of a plant. 	<ul style="list-style-type: none"> air water light nutrients soil 	<ul style="list-style-type: none"> Class book: "Plants on the School Yard"
The parts of the plant are: roots, stem, leaves, and flower.	<ul style="list-style-type: none"> Identify the parts of a plant. 	<ul style="list-style-type: none"> roots stem leaves flower 	<ul style="list-style-type: none"> Plant Illustration
Animals need air, water, food, and shelter.	<ul style="list-style-type: none"> Identify the basic needs of animals. 	<ul style="list-style-type: none"> air water food shelter 	<ul style="list-style-type: none"> KWL Chart Animal Illustration Basic Needs of an Animal
Animals have differences such as: appearance, motion, and growth.	Using books and observations of animals, describe the differences in animals.	<ul style="list-style-type: none"> adaptation feather habitat scales fur camouflage 	<ul style="list-style-type: none"> Animal Illustration

Culminating Activity: GRASPS activity

GRASPS

Goal: Students will identify the needs of plants and animals through the creation of a book or an original story. Students will write a story about plants and animals in the spring. Illustrations should demonstrate the student has a basic understanding of weather conditions in the spring.

Role: Author and Illustrator

Audience: Elementary school students

Scenario: The media specialist has asked the 1st grade students to create fiction or nonfiction books about plants and animals in the spring. The books will be on display for all students to read.

Product: The book/original story

General Timeline			
Introduction to Spring	Spring Thaw	Seeds, Stems, and Stamens: The Ways Plants Fit into Their World	Claws, Coats and Camouflage: The Ways Animals Fit into Their World
1 Week	1-2 Weeks	1-2 Weeks	1-2 Weeks

TASKS

The following collection of tasks represents the level of depth, rigor and complexity expected of all students to demonstrate evidence of learning.

Lesson: Introduction to Spring (1 Week)

Description:

A. Introduce Standards:

S1E1. Students will observe, measure, and communicate weather data to see patterns in weather and climate.

S1L1. Students will investigate the characteristics and basic needs of plants and animals.

Continue using “language” from the standards during the unit. Refer to posted standard as necessary throughout unit. Create a “Spring Word Wall” for the following (to be added once discussed in class): root, stem, leaf, flower, air, water, light, nutrients, food, shelter, appearance, motion, growth, adapt, hibernate, and migrate to the class word wall to encourage students to use these words in their writing.

B. Use KWL chart for “Spring: Animals, Plants, and Weather.” Write what the students already know under the “K.” Write what the students want to know/learn under the “W.” Under the “L” write what the students learned about the standard after the lessons are complete.

C. Hook and Attention Getter – Show students pictures of the four seasons. (The picture should have plants, animals, and people.) Ask which season is spring. Once the students select the spring picture, post it above a piece of chart paper. Have students write (or have the teacher write) about what they see in the picture. Students should notice the weather conditions, animals, and plants growing.

D. Place spring books in the class reading center in order to spark interest for the students.

E. Create a [class weather recording center](#). This should be an area that is updated daily to include: temperature, precipitation, sky conditions (sunny, cloudy, etc.) The weather can be graphed to help students understand that the weather changes day to day (Use the [Sky Conditions Graph](#)). Use a rain gauge to record precipitation. A “meteorologist job” can be created to help maintain and update the weather day to day. This weather recording center would work best to be done all year long for the students to see the changes. (The Class Weather Recording Center chart can be enlarged to a poster-size or can be used as a guide to set up a bulletin board in the class.)

F. http://www.alfy.com/Scripts/go.asp?url=http://www.fema.gov/kids/&purl=/Teachers/Teach/Thematic_Units/Weather/Weather_1.asp

Assessment:

**Enrichment/
Extension/
Homework:**

Informal Assessment-Conferencing with class

- Record and Post KWL chart on butcher paper, poster board, etc. Use sticky notes to add student knowledge and understanding under “Learned” column.
- Discuss tornadoes. Explain that tornadoes occur most often in the spring. Read: “Twister: A book about tornadoes” by Rick Thomas. The following website also helps students understand the warning signs for tornadoes:

Literature Selection: *Spring Thaw: Spring Weather*

Description:

Days 1-4:

Essential Questions: How can spring weather be described?
How does spring weather affect the types of clothing I wear?

A. Read the book: "Spring Thaw"

B. Discuss the different things that happen in nature with the students. Have students write in their science journal about the spring thaw.

C. Review *language*:

- Spring -thaw – warm – leaves - flower buds -spring showers

Have students work in cooperative learning groups to help understand the *language*. The teacher can make groups of four. Each group can be responsible for one word. Students can each be assigned a task: defining the word from a dictionary, creating a sentence using the word, drawing a picture to help understand what the word means, and creating a definition in the students' own words. After each student completes their task, the group will share what they completed with each other and post the work on chart paper. The teacher can then allow all of the groups to present their work and allow students to learn from each other. The [Spring Language Rubric](#) can be used to assess students.

C. Compare winter to spring using the [Comparison Chart](#).

Assessment:

[Comparison Chart](#)

[Spring Language Rubric](#)

Enrichment/

Spring video segment

Extension/

www.unitedstreaming.com keyword search: *Magical Mother Nature: The Four Seasons* (15 minutes)

Homework:

This video allows students to understand the season Spring.

Discuss the video and allow students to write one sentence about spring and draw an illustration.

Literature Selection: <i>Spring Thaw: Word Web</i>	
Description:	Days 5-7: Essential Question: How can spring weather be described? A. Review standards and “language” from unit. B. Have students create a word web with the title: “Spring Weather.” Students can work with a partner to develop their ideas. In the web, the students can use words or illustrations to describe the spring weather. Have students recall the story <i>Spring Thaw</i> and think about the different things that happened to help the students develop their word web. C. Have students share the web with the class. D. The teacher should ask students questions about the word web to see what the students understand.
Assessment:	Word Web: Spring Weather Rubric
Enrichment:	Have students share their word web with kindergarten students.

Literature Selection: <i>Spring Thaw: Communicating Weather Data</i>	
Description:	Days 8-10: Essential Question: How do you measure spring weather? A. Review standards and <i>language</i> : <ul style="list-style-type: none">• Thermometer wind vane rain gauge temperature precipitation• sky conditions-(sunny, cloudy, etc.)weather events-(thunderstorms, tornados, and hurricanes) B. Complete the Measurement Tools Table with the students. Use various research sources to fill in C. the table (Internet, science books, nonfictions books, etc.) as a class or have students work in pairs. D. Have students share their table with the class. E. Use the weather recording center to remind students of the ways we measure spring weather.
Assessment:	Teacher observation Measurement Tools Table
Enrichment:	Have students create their own weather instruments.

Literature Selection: *Seeds, Stems, and Stamens: The Ways Plants Fit into Their World*

Description:

Day 1 and 2:

Essential Questions:

What are the parts of a plant?

Teacher Instructions:

- A. Read the book: "Seeds, Stems, and Stamens: The Ways Plants Fit into Their World"
- B. Show students the picture on page 23. Ask students to name the parts of the plant that they see. Have students notice: roots, stem, and leaves. Ask students why a plant would need all of these parts.
- C. Have the class work together to draw a picture of a plant (It does not have to be a particular plant). Tell the students it needs the following parts: roots, stem, leaves, and flower. Call one student to draw one part, until all parts have been drawn. Call on other students to create a label for the plant parts. Discuss the functions of the plant parts again.

Assessment:

Informal Assessment: Teacher observation and Oral Questioning.

Enrichment/

Have students work with a partner for this activity.

Extension/

Give each pair of students one flower (ask a local florist to donate flowers).

Homework:

Students should write a description of their flower, naming all of the parts they see.

Next, use the work mat to have students take the flower apart. Have students draw a picture of the part in the appropriate box. [Flower Work Mat](#)

Students can share and compare findings with the class.

Literature Selection: *Seeds, Stems, and Stamens: The Ways Plants Fit into Their World*

Description:

Days 3-5:

Essential Question:

- What are the basic needs of a plant?
- What are the parts of a plant?

Teacher Instructions:

1. The teacher can bring in a plant or pull a weed from the school yard (example: dandelion).
 2. The students should observe the plant and write in their science journal about the different plant parts that they see.
 3. Reread: "Seeds, Stems, and Stamens: The Ways Plants Fit into Their World." Have students tell what all plants need to survive.
 4. Make predictions about what would happen to a seed that:
 - got plenty of sunlight and water
 - got plenty of sunlight, but not enough water
 - got plenty of water, but not enough sunlightHave students draw a picture of their predictions in their science journal.
 - Use the website to observe a seed that gets plenty of sunlight and water:
http://www2.bgfl.org/bgfl2/custom/resources ftp/client ftp/ks2/science/plants_pt2/light_water.htm
 - Use the website to observe a seed that gets plenty of sunlight, but not enough water:
http://www2.bgfl.org/bgfl2/custom/resources ftp/client ftp/ks2/science/plants_pt2/light.htm
 - Use the website to observe a seed that gets plenty of water, but not enough sunlight.
http://www2.bgfl.org/bgfl2/custom/resources ftp/client ftp/ks2/science/plants_pt2/water.htm
- Review predictions after watching the clips on the website.

Assessment:

Informal Assessment: Teacher observation.

**Enrichment/
Extension/
Homework:**

- "Plants on the Trail with Lewis and Clark"
1. Teacher should read the book to gain background information and decide which parts of the book should be shared with the students.
 - Use a Venn Diagram to compare the different types of roots. (Fibrous and Tap)

Literature Selection: <i>Seeds, Stems, and Stamens: The Ways Plants Fit into Their World</i>	
Description:	Days 6-10: Essential Question: <ul style="list-style-type: none">• What are the basic needs of a plant?• What are the parts of a plant? Teacher Instructions: <ol style="list-style-type: none">2. The teacher will place students in groups. Each group will be responsible for one plant (used in the book <i>Seeds, Stems, and Stamens: The Ways Plants Fit into Their World</i>). The group must create an illustration of the plant, label the illustration, tell what it needs to live, and an interesting fact the group learned about the plant. Use the Seeds, Stems, and Stamens Cards to help students stay on track with their task.
Assessment:	Informal Assessment: Teacher observation Plant Illustration
Enrichment/ Extension/ Homework:	Have students share their illustration and interesting facts with another class in the school. Use the following website to experiment with the basic needs of a plant: http://www.bbc.co.uk/schools/scienceclips/ages/5_6/growing_plants.shtml

Literature Selection: *Claws, Coats and Camouflage: The Ways Animals Fit into Their World*

Description:

Days 1-5:

Essential Question:

How do animals adapt to their environment?

Teacher Instructions:

1. Review language:

- adapt habitat fur feather scales
- camouflage air water food shelter

2. Show students animals (plastic animals, pictures of animals, or stuffed animals).

3. Group the animals according to the habitat in which they live (ocean, forest, lake, etc).

4. Ask students questions about the way they sorted the animals. Ask questions about the habitats and why or why not certain animals could live there. (Example: Could a goldfish live in a tree in the forest?)

5. Read “Claws, Coats, and Camouflage” (Stop along the way to discuss the different adaptations, this may take several days.)

Assessment:

- Informal Assessment: Teacher observation and Oral Questioning.
- Performance Assessment: Have students create a new animal to live in a specific habitat (ocean, rainforest, etc.). They must be able to include the appearance of the animals, how the animal would move, how the basic needs would be met, and any adaptations the animal may have.

**Enrichment/
Extension/
Homework:**

Have students read other books about animals.

Literature Selection: <i>Claws, Coats and Camouflage: The Ways Animals Fit into Their World</i>	
Description:	Days 6-10: Lesson Title: Basic Needs of an Animal Essential Question: <ul style="list-style-type: none">• What are the basic needs of an animal? Teacher Instructions: <ol style="list-style-type: none">1. Complete a KWL chart about the basic needs of an animal.2. Show students pictures of animals. Have the students tell what the animals need to live. Have students draw an illustration of an animal in its habitat. Have the student label the basic needs in the picture. (air, water, food, shelter) Complete the "L" part of the KWL chart
Assessment:	<ul style="list-style-type: none">• Informal Assessment: Teacher observation and Oral Questioning.• Performance Assessment: Basic Needs for Animals Assessment
Enrichment/ Extension/ Homework:	Have students act out/ create their own play telling about the basic needs of animals.

TEACHER RESOURCES

Additional Children's Literature:

Green and Growing: A book about plants by: Susan Blackaby

Plant Plumbing: A book about roots and stems by: Susan Blackaby

When Spring Comes by: Natalie Kinsey-Warnock

Web Resources:

http://www.geography4kids.com/files/climate_seasons.html

http://www.ecokids.ca/pub/eco_info/topics/climate/weather/page2.cfm#down
(Helpful website for weather recording center)

<http://www.dcrafts.com/happyspring.htm>

<http://www.miamisci.org/hurricane/graph.html>
(graphing rainfall)

<http://www.nws.noaa.gov/om/reachout/info.shtml>

<http://www.weatherwizkids.com/rain1.htm>
(Making a rain gauge)

Weather Recording Center

Season:

Today's Temperature:

Rain Gauge Measurement:

Have students draw pictures that represent the season and put inside this box.

Staple the monthly sky conditions graph here.

Paste the special weather event information here.
(Example: tornados)

Month _____

Sky Conditions Graph

Number of Days	12						
	11						
	10						
	9						
	8						
	7						
	6						
	5						
	4						
	3						
	2						
	1						
0	Sunny	Cloudy	Rainy	Windy	Foggy	Snowy	

Sky Conditions

Spring Language Rubric

Group Members: _____

CATEGORY	4	3	2	1	Score
Required Elements	The chart paper from the group has all of the required elements: defining the word from a dictionary, creating a sentence using the word, drawing a picture to help understand what the word means, and created a definition in the students' own words.	The chart paper from the group has all but one of the required elements: defining the word from a dictionary, creating a sentence using the word, drawing a picture to help understand what the word means, and created a definition in the students' own words.	The chart paper from the group has all but two of the required elements: defining the word from a dictionary, creating a sentence using the word, drawing a picture to help understand what the word means, and created a definition in the students' own words.	The chart paper from the group has one of the required elements: defining the word from a dictionary, creating a sentence using the word, drawing a picture to help understand what the word means, and created a definition in the students' own words.	
Knowledge Gained	Students did all of the following: defined the word correctly, Created a sentence using the word, drew a picture that helped understand the word, and created a definition in the students' own words.	Students did all but one of the following: defined the word correctly, Created a sentence using the word, drew a picture that helped understand the word, and created a definition in the students' own words.	Students did all but two of the following: defined the word correctly, Created a sentence using the word, drew a picture that helped understand the word, and created a definition in the students' own words.	Students did one of the following: defined the word correctly, Created a sentence using the word, drew a picture that helped understand the word, and created a definition in the students' own words.	
Attractiveness	The chart paper is exceptionally attractive in terms of design, layout, and neatness.	The chart paper is attractive in terms of design, layout and neatness.	The chart paper is acceptably attractive though it may be a bit messy.	The chart paper is distractingly messy or very poorly designed. It is not attractive.	
TOTAL SCORE					_____

Name: _____ Date: _____

Comparison Chart

Read *Spring Thaw* to help complete the chart.

In the winter...	In the spring...
There are cold winds. 	
There is snow. 	
Icicles can hang from the roof. 	
Some animals hibernate. 	
The few hours of daylight. 	
Trees lose leaves. 	
It is harder for animals to find food. 	
We wear hats, scarves, and coats. 	

Name: _____ Date: _____

Comparison Chart-Key

Read *Spring Thaw* to help complete the chart.

Fill in the column “In the spring” with a sentence that tells what is different from winter.

In the winter...	In the spring...
<p>There are cold winds.</p> 	<p>There are warm winds.</p>
<p>There is snow.</p> 	<p>There is a lot of rain.</p>
<p>Icicles can hang from the roof.</p> 	<p>Icicles that have formed melt away.</p>
<p>Some animals hibernate.</p> 	<p>Animals come out of hibernation.</p>
<p>The few hours of daylight.</p> 	<p>There are many hours of sun.</p>
<p>Trees lose leaves.</p> 	<p>Leaves grow on trees.</p>
<p>It is harder for animals to find food.</p> 	<p>Animals find food easily.</p>
<p>We wear hats, scarves, and coats.</p> 	<p>We wear short sleeved shirts.</p>

Measurement Tools Table

Science Language	Illustration	What is it used for?	How can it help us?
thermometer			
wind vane			
rain gauge			

Name: _____ Date: _____

Word Web: Spring Weather

Student Name: _____

CATEGORY	4	3	2	1	Score
Required Elements	The word web has a middle bubble that clearly states the title: Spring Weather. There are at least four other bubbles with an illustration or words about spring weather.	The word web has a middle bubble that clearly states the title: Spring Weather. There are at least three other bubbles with an illustration or words about spring weather.	The word web has a middle bubble that clearly states the title: Spring Weather. There are at least two other bubbles with an illustration or words about spring weather.	The word web has a middle bubble that clearly states the title: Spring Weather. There is one other bubble with an illustration or word about spring weather.	
Knowledge Gained	Student can accurately answer all questions related to facts in the word web and processes used to create the word web.	Student can accurately answer most questions related to facts in the word web and processes used to create the word web.	Student can accurately answer about 75% of questions related to facts in the word web and processes used to create the word web.	Student appears to have insufficient knowledge about the facts or processes used in the word web.	
Attractiveness	The word web is exceptionally attractive in terms of design, layout, and neatness.	The word web is attractive in terms of design, layout and neatness.	The word web is acceptably attractive though it may be a bit messy.	The word web is distractingly messy or very poorly designed. It is not attractive.	
TOTAL SCORE					_____

Flower Work Mat

Name: _____ Date: _____

Type of Flower:

Petals

How many petals? _____

Leaves

How many leaves? _____

Stem

How many inches long is the stem? _____

Seeds, Stems, and Stamens Cards

Type of plant: **Cactus**

Your group must:

1. Create an illustration of the plant.
2. Label the illustration.
3. Tell what it needs to live.
4. Tell an interesting fact about the plant.

Type of plant: **Floss-Silk Tree**

Your group must:

1. Create an illustration of the plant.
2. Label the illustration.
3. Tell what it needs to live.
4. Tell an interesting fact about the plant.

Type of plant: **China Doll**

Your group must:

1. Create an illustration of the plant.
2. Label the illustration.
3. Tell what it needs to live.
4. Tell an interesting fact about the plant.

Type of plant: **Rubber Tree**

Your group must:

1. Create an illustration of the plant.
2. Label the illustration.
3. Tell what it needs to live.
4. Tell an interesting fact about the plant.

Type of plant: **Venus Fly Trap**

Your group must:

1. Create an illustration of the plant.
2. Label the illustration.
3. Tell what it needs to live.
4. Tell an interesting fact about the plant.

Type of plant: **Bromeliads**

Your group must:

1. Create an illustration of the plant.
2. Label the illustration.
3. Tell what it needs to live.
4. Tell an interesting fact about the plant.

Basic Needs of an Animal

Student's Name _____

Name one basic need in each box. Below the box illustrate the basic need.

Basic Need	Basic Need	Basic Need	Basic Need