

GLOBE Story Books and the K-4 Virginia Standards

Updated February 2013

- [Discoveries at Willow Creek](#)
- [Do You Know That Clouds Have Names?](#)
- [All About Earth](#)
- [The Mystery of the Missing Hummingbirds](#)
- [The Scoop on Soils](#)

The following standards are introduced within the content of the reading and can be built upon by incorporating activities similar to those detailed in the story.

Discoveries at Willow Creek

Virginia Science Standards

K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

K.2 The student will investigate and understand that humans have senses that allow them to seek, find, take in, and react or respond to information in order to learn about their surroundings.

K.5 The student will investigate and understand that water flows and has properties that can be observed and tested.

K.10 The student will investigate and understand that change occurs over time and rates may be fast or slow.

1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

1.7 The student will investigate and understand weather and seasonal changes.

2.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

2.6 The student will investigate and understand basic types, changes, and patterns of weather.

3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

3.8 The student will investigate and understand basic patterns and cycles occurring in nature.

4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

4.2 The student will investigate and understand characteristics and interactions of moving objects. (ex. direction and speed)

Virginia English Standards

K.1 The student will demonstrate growth in the use of oral language.

a) Listen to a variety of literary forms, including stories and poems.

K.2 The student will use listening and speaking vocabularies.

a) Use number words

c) Use words to describe location, size, color, and shape

g) Begin to ask how and why questions

1.1 The student will continue to demonstrate growth in the use of oral language.

a) Listen and respond to a variety of media, including books, audiotapes, videos, and other age-appropriate materials.

1.2 The student will continue to expand and use listening and speaking vocabularies.

2.1 The student will demonstrate an understanding of oral language structure.

2.2 The student will continue to expand listening and speaking vocabularies.

2.5 The student will use meaning clues and language structure when reading.

2.6 The student will use language structure to expand vocabulary when reading.

2.8 The student will read and demonstrate comprehension of fiction and nonfiction.

- 3.1 The student will use effective communication skills in group activities.
- 3.4 The student will use strategies to read a variety of fiction and nonfiction materials.
- 3.5 The student will read and demonstrate comprehension of fiction.
- 4.3 The student will read fiction and nonfiction with fluency and accuracy.
- 4.4 The student will read and demonstrate comprehension of fiction.

Virginia Math Standards

- K.8 The student will identify the instruments used to measure temperature (thermometer).
- K.10 The student will compare two objects or events, using direct comparisons or nonstandard units of measure, according to one or more of the following attributes: length, height, weight, temperature.
- K.14 The student will display gathered data in object graphs, picture graphs, and tables and will answer questions related to the data.
- 1.14 The student will investigate, identify and describe various forms of data collection.
- 2.14 The student will read the temperature on a Celsius and/or Fahrenheit thermometer to the nearest 10 degrees.
- 2.18 The student will use data from experiments to predict outcomes when the experiment is repeated.
- 3.13 The student will read temperature to the nearest degree from a Celsius thermometer and a Fahrenheit thermometer.
- 3.17 The student will collect and organize data, using observations, measurements, surveys, or experiments.
- 4.7 The student will estimate and measure length, and describe the result in both metric and U.S. Customary units.

Do You Know That Clouds Have Names?

Virginia Science Standards

- K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- K.2 The student will investigate and understand that humans have senses that allow them to seek, find, take in, and react or respond to information in order to learn about their surroundings.
- K.9 The student will investigate and understand that there are simple repeating patterns in his/her daily life.. a) weather observations
- 1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- 1.7 The student will investigate and understand weather and seasonal changes.
- 2.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- 2.6 The student will investigate and understand basic types, changes and patterns of weather.
- 3.1 The student will demonstrate an understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations.
- 4.1 The student will demonstrate an understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations.
- 4.6 The student will investigate and understand how weather conditions and phenomena occur and can be predicted.

Virginia English Standards

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 - a) Listen to a variety of literary forms, including stories and poems.
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 - a) Use number words
 - c) Use words to describe location, size, color, and shape
 - g) Begin to ask how and why questions

- 1.1 The student will continue to demonstrate growth in the use of oral language.
 - a) Listen and respond to a variety of media, including books, audiotapes, videos, and other age-appropriate materials.
- 1.2 The student will continue to expand and use listening and speaking vocabularies.
- 2.1 The student will demonstrate an understanding of oral language structure.
- 2.2 The student will continue to expand listening and speaking vocabularies.
- 2.5 The student will use meaning clues and language structure when reading.
- 2.6 The student will use language structure to expand vocabulary when reading.
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- 4.3 The student will read fiction and nonfiction with fluency and accuracy.
- 4.4 The student will read and demonstrate comprehension of fiction.

All About Earth

Virginia Science Standards

- K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- K.6 The student will investigate and understand the differences between living organisms and nonliving objects.
- K.7 The student will investigate and understand basic needs and life processes of plants and animals.
- 1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- 1.6 The student will investigate and understand the basic relationships between the sun and the Earth.
 - a) the sun is the source of energy and light that warms the land, air and water
- 2.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- 2.5 The student will investigate and understand that living things are part of a system.
 - a) living organisms are interdependent with their living and nonliving surroundings
- 2.8 The student will investigate and understand that plants produce oxygen and food, are a source of useful products, and provide benefits to nature.
- 3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- 3.7 The student will investigate and understand the major components of soil, its origin, and its importance to plants and animals including humans.
- 3.9 The student will investigate and understand the water cycle and its relationship to life on Earth.
- 4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

Virginia English Standards

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 - g) Begin to ask how and why questions
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 - a) Listen and respond to a variety of media, including books, audiotapes, videos, and other age-appropriate materials.
- 1.2 The student will continue to expand and use listening and speaking vocabularies.
- 2.1 The student will demonstrate an understanding of oral language structure.

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The Mystery of the Missing Hummingbirds

Virginia Science Standards

- K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- K.7 The student will investigate and understand basic needs and life processes of plants and animals.
- 1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- 1.7 The student will investigate and understand weather and seasonal changes.
- 2.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- 2.7 The student will investigate and understand that weather and seasonal changes affect plants, animals, and their surroundings.
- 3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- 3.4 The student will investigate and understand that adaptations allow animals to satisfy life needs and respond to the environment.
- 3.8 The student will investigate and understand basic patterns and cycles occurring in nature.
- 4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

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The Scoop on Soils

Virginia Science Standards

K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

K.4 The student will investigate and understand that the position, motion, and physical properties of an object can be described.

- a) color of objects
- c) textures and feel of objects

1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

2.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

3.3 The student will investigate and understand that objects are made of materials that can be described by their physical properties.

3.7 The student will investigate and understand the major components of soil, its origin and its importance to plants and animals including humans.

- c) rock, clay, silt, sand, and humus are components of soils

4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

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