



## English Language Arts

### Guided Reading Questions

1. Before reading the story, what did you know about Jockey's Ridge? Have you ever been there?
2. What is one of the most interesting things you learned about Jockey's Ridge after reading this story?
3. What makes this a nonfiction story?
4. As you were reading the book, what connections were you able to make?  
(Text-to-Text, Text-to-Self, or Text-to-World)
5. What message is the author sending to the reader? What do they want you to take away from this story?
6. List three adjectives that describe Carolista Baum.
7. Choose one of your adjectives and give an example from the text that shows why it describes Carolista.
8. Find an example from the text where the author uses imagery to describe the setting.
9. Can you share a cause-and-effect scenario from the book?
10. Essay Question—Can you think of a time in your life where you used your voice to stand up for what matters to you? If you haven't had the chance to do this yet, what issues, people, or places might you use your voice to stand up for?

### Reading Comprehension Questions

1. Where is the story's setting?
  - a. North Carolina
  - b. The Outer Banks
  - c. A barrier island
  - d. All of the above**D All of the above**
2. True or False: Jockey's Ridge is the most-visited state park in North Carolina.  
**True (as of this book's publication)**
3. What was making the low, rumbling sound that the three children heard on the dune?
  - a. An animal
  - b. The waves
  - c. A bulldozer
  - d. Traffic**C A bulldozer**
4. Short Answer: Why is Jockey's Ridge considered a "living dune"?  
**Jockey's Ridge is considered a living dune because it is always changing and shifting.**
5. According to the text, which of these habitats are found at Jockey's Ridge state park?
  - a. Maritime Thicket and Fresh Water
  - b. Swamp and Woodland
  - c. Estuary and Maritime Thicket
  - d. Fresh Water and Woodland**C Estuary and Maritime Thicket**

(continued on the following page)

6. List five types of plant and/or animal life from the text that are supported by Jockey’s Ridge:

**Plant Life (listed below)**

American Beach Grass  
Pine Tree  
Sweet Gum  
Wax Myrtle  
Cattails  
Black Needle rush

**Animal Life (listed below)**

Fox  
Racoon  
Deer  
Crabs  
Fish  
Coastal birds

7. True or False: Jockey’s Ridge is thought to be 5,000–6,000 years old.  
**False. It is thought to be 3,000–4,000 years old.**
8. What relationship did 16th-century European explorers have to Jockey’s Ridge?  
**Short answer: They used it as navigational tool**
9. In what ways did Carolista’s children help her save Jockey’s Ridge?
- a. They told her about the bulldozer
  - b. They collected donations
  - c. They made phone calls
  - d. All of the above
- D All of the above**
10. In what year did Jockey’s Ridge become a state park? **1975**

**ENGLISH LANGUAGE ARTS STANDARDS ADDRESSED**

*North Carolina Standard Course of Study (Grades 3–5)*

**RL.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

**RL.3.3** Describe characters in a story and explain how their actions contribute to the sequence of events.

**RI.3.2** Determine the main idea of a text; recount the key details and explain how they support the main idea.

**RI.3.3** Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

**W.3.3** Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences

**SL.3.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others’ ideas and expressing their own clearly.

**3.B.1** Understand how values and beliefs of individuals and groups influence communities.

**3.H.1** Understand how various people and historical events have shaped local communities.

**RL.4.1** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

**RL.4.2** Determine a theme of a story, drama, or poem from details in the text; summarize the text.

**RL.4.3** Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text.

**RI.4.2** Determine the main idea of a text and explain how it is supported by key details; summarize the text.

**RI.4.3** Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

**W.4.3** Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences

**W.4.5** Conduct short research projects that build knowledge through investigation of different aspects of a topic.

**W.4.6** Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

**SL.4.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others’ ideas and expressing their own clearly.

**4.H.1** Understand the role of various people, events, and ideas in shaping North Carolina.

**RL.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.

**RL.5.2** Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.

**RL.5.4** Determine the meaning of words and phrases as they are used in a text, recognizing specific word choices that contribute to meaning and tone.

**RI.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.

**RI.5.2** Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.

**RI.5.3** Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

**W.5.3** Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

**SL.5.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others’ ideas and expressing their own clearly.

## Science

Watch this video (<https://www.youtube.com/watch?v=Ba4J1okCglg>) to go on a virtual visit to Jockey's Ridge State Park in Nags Head, N.C. and learn more about its ecology and geography.

### Guided Viewing and Comprehension Questions to accompany video:

1. At the time this video was made, what was the height of Jockey's Ridge? **70 feet tall**
2. What is one way that the rangers try to keep some of the sand in place?  
**They construct sand fencing, but other than this, they don't interfere much with its natural movement.**
3. Jockey's Ridge is considered a living dune because it is always moving and shifting. In what direction is it moving? What natural occurrence is causing it to migrate in that direction?  
**The dune is shifting to the Southwest, caused by the strong Northeast winds that frequently occur in the area.**
4. On average, how deep is the Roanoke Sound that borders the park? **8 feet deep**
5. How does the vegetation in Jockey's Ridge State Park help the dune system?  
**It helps to hold the dune in place.**
6. Park Ranger Austin says there is a freshwater aquifer under the park that supplies the town of Nags Head with fresh water. He then digs down into the sand to show how soon you hit moisture under the surface. Based on his description, what do you think an aquifer is? How do you think it might work?  
**Resource for teachers and/or extended learning: <https://education.nationalgeographic.org/resource/aquifers/>**
7. There are three different North Carolina minerals found in the sand that makes up Jockey's Ridge. What are they?  
**90% Quartz, 10% Magnetite & Biotite**
8. How did these minerals from the North Carolina mountains make their way to the coast to form Jockey's Ridge?  
**Over millions of years of erosion, the minerals from the mountains made their way through our state's river system and into the sounds. Storm surges and hurricanes caused the sandy minerals to be deposited and accumulate to form Jockey's Ridge.**
9. What are some ways that the sand on Jockey's Ridge is different from the sand at the nearby beaches?  
**The sand grains are shaped differently than those on the beach; there are no shells within the park/on the dune; the color of the sand is different than on the beach.**
10. The sand on Jockey's Ridge gets very hot in the summer months. What temperature does Ranger Austin say it can reach? **140 degrees Fahrenheit**
11. Animal Adaptations—Ranger Austin names the *Six-lined Racerunner* as one of the species of wildlife that can thrive in the hot sandy environment on Jockey's Ridge. How does it do this? What are some ways it adapts?  
**It moves quickly across the surface of the hot sand (hence the name, racerunner!) and it can stay cool by seeking the shade of the vegetation.**
12. How do the rangers "read" what types of wildlife have been roaming the park at dusk and dawn?  
**Because it is a sand based park, they can easily see and identify the animals' tracks in the sand.**

*Fun Fact!* About how many hang-gliding flights take place at Jockey's Ridge each year?  
**12,000**

### SCIENCE STANDARDS ADDRESSED

#### North Carolina Standard Course of Study (Grades 3–5)

- PS.3.2 Understand motion and factors that affect motion.
- LS.3.2 Understand how plant structures aid in survival.
- LS.3.3 Understand how environmental factors aid in the survival of plants.
- LS.4.1 Understand the effects of environmental changes, adaptations, and behaviors that enable organisms to survive in changing habitats.
- ESS.4.2 Understand patterns of change in the Earth's surface over time.
- LS.5.2 Understand the interdependence of plants and animals within their ecosystem.
- ESS.5.1 Understand how Earth systems (hydrosphere and atmosphere) impact patterns of weather and climate.

# Project Based Learning

Visit [ncparks.gov](http://ncparks.gov) and scroll down to the map (“Find a State Park”).

- Choose/click on a state park (represented by circles on the map)
- Research the state park you have chosen and create a visual presentation (poster, slide presentation, video, etc. . . .) to present the following information:
  - Name of the park
  - Location of the park (Be sure to also include what region of N.C. it is in. Is it Coastal, Piedmont or Mountains?)
  - What is this state park known for? What activities do people enjoy there?
  - History–Write a brief history of the park and/or area
  - Ecology–List and briefly describe some of the plants and animals that live in the park
  - Visuals–you can include a map of the park, photos or illustrations of the park, including its landforms, plants and animals.

## PROJECT BASED LEARNING STANDARDS ADDRESSED

### *North Carolina Standard Course of Study (Grades 3–5)*

**W.3.5** Conduct short research projects that build knowledge about a topic.

**W.3.6** Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

**SL.3.4** Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly in complete sentences at an understandable pace.

**SL.4.4** Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; adjust speech as appropriate to formal and informal discourse.

**W.5.5** Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

**W.5.6** Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work and provide a list of sources.

**4.G.1** Understand the role geography has played in the development of North Carolina.