

Windover Site

In 1982 in Titusville, Florida a burial site in a shallow pond was discovered. The pond had turned to peat many years before that which helped preserve the bones and even brain tissue of the ancient people buried in this pond. The bodies were so well preserved due to the peat preventing oxygen in. The people and objects found in this pond were between 7,000 and 8,000 years old. There were over 167 remains of people and artifacts discovered in this pond. The skeletons found were of both adults and children and they were buried wrapped in fabric with valuable artifacts that included bones, carved wooden objects, and tools. The artifacts were often made of wood, bone, and antler. Plants were also buried including prickly pear pads gourds. The fabric wrapped around the bodies is some of the oldest ever found. Making the fabric into something that could be wrapped around a body took a long time. Archaeologists believe that the Windover people probably made Titusville their semi-permanent home, maybe only living here in the spring and summer. These ancient people are thought to be a caring and less nomadic people. It is believed these people cared for the sick and injured. These people were not entirely peaceful however as some skeletons were found with fractures and other wounds.

Objectives:

Grade 4:

Understand the importance of evidence and apply this knowledge to the Windover site.

Discuss physical features of Florida and how these impacted the Windover people.

Understand new vocabulary introduced.

Have a basic understanding of the Windover site and demonstrate this understanding through a written summary of the site.

Compare and order decimals.

Science:

SC.4.N.1.7 Recognize and explain that scientists base their explanations on evidence.

The archaeologists that worked on the Windover site had to use evidence to come up with their explanations for things such as why the Windover people were probably a caring people. What type of evidence did the archaeologists use to come to this conclusion? Can you give another example of something you saw in the exhibit where the archaeologist's provided evidence to come up with an explanation for something?

Social Studies

SS.4.G.1.1 Identify physical features of Florida.

What are some physical features of Florida, how do you think these physical features affected the Windover people?

Reading & Language:

Vocabulary:

Artifacts: 1.any object made by human beings, esp. with a view to subsequent use.

2.a handmade object, as a tool, or the remains of one, as a shard of pottery, characteristic of an earlier time or cultural stage, esp. such an object found at an archaeological excavation.

Peat: 1.a highly organic material found in marshy or damp regions, composed of partially decayed vegetable matter: it is cut and dried for use as fuel.

Archaeology:

Nomad: 1.a member of a people or tribe that has no permanent abode but moves about from place to place, usually seasonally and often following a traditional route or circuit according to the state of the pasturage or food supply.

Archaeology: 1.the scientific study of historic or prehistoric peoples and their cultures by analysis of their artifacts, inscriptions, monuments, and other such remains, esp. those that have been excavated.

Shard: 1.a fragment, esp. of broken earthenware

LA.4.1.6.1 The student will use new vocabulary that is introduced and taught directly? Describe the job of an archaeologist.

LA.4.4.2.1 The student will write in a variety of informational/expository forms (e.g., summaries, procedures, recipes, instructions, graphs/tables, experiments, rubrics, how-to manuals);

After viewing the exhibit and reading about the Windover site write a summary about the Windover site and why you think it is important.

Mathematics:

MA.4.A.2.4 Compare and order decimals, and estimate fraction and decimal amounts in real-world problems. Imagine that a scientist at the Windover site is digging different levels in the peat and takes measurements and records what they find at each level and these are the different measurements they took in no particular order

2.4 feet

1.5 feet

.5 feet

7.3

7.5 feet

2.2 feet

.7 feet

.1 feet

Put the measurements in order from closest to the surface to the farther or deepest.

Prehistoric Fossils

Florida was formed over 200 million years as a result of sand, shell, and sea creatures being deposited on the ocean floor layer by layer. During the Pleistocene Epoch sea levels changed helping to form Florida's East coast. The last Ice Age resulted in lowered ocean levels which led to a broad grassy savannah stretching miles along the coast of Florida. This occurred about 40,000 years ago. Plant eating animals migrated to Florida during this time period. Florida became a winter resort for animals during this epoch and animals advanced south due to ice. The receding ocean resulted in miles of exposed coastal land which became a fertile habitat for many different species. During the Pleistocene Epoch there were more types of animals in Florida than anywhere else in North America.

Objectives:

Fourth Grade:

Understand how Florida's prehistoric animals impacted the environment.

Identify physical features of Florida on a map and compare them with the physical features of prehistoric Florida.

Have a basic knowledge and understanding of new vocabulary.

Find an area of a rectangle by applying the formula for area of a rectangle.

Science:

SC.4.L.17.4 Recognize ways plants and animals, including humans, can impact the environment.

Discuss how some of Florida's prehistoric animals may have impacted the environment.

Social Studies:

SS.4.G.1.1 Identify physical features of Florida.

Identify physical features of Florida today and compare them with the physical features of prehistoric Florida discussed in the exhibit.

Reading and Language Arts:

Vocabulary:

Fossil: any remains, impression, or trace of a living thing of a former geologic age, as a skeleton, footprint, etc.

Paleontology: the science of the forms of life existing in former geologic periods, as represented by their fossils.

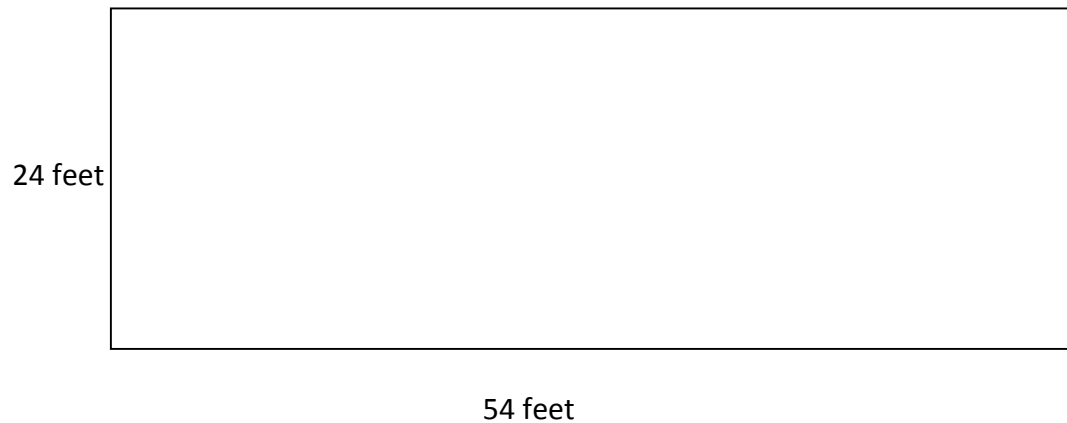
Mammoth: any large, elephant like mammal of the extinct genus

Pleistocene Epoch: from two million to 11 thousand years ago; extensive glaciations of the northern hemisphere; the time of human evolution

LA.4.1.6.1 The student will use new vocabulary that is introduced and taught directly; What was the Pleistocene Epoch? Compare how Florida looked during the Pleistocene Epoch with how it looks today.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height". Imagine that 10 mammoths were found within a rectangle with a length of 54 feet and a height of 24 feet. What is the area of the rectangle? _____



Florida Seminoles

Indians from Georgia and Alabama migrated to Florida with the encouragement of Spain. The Indians were wanted to work in the fields, build Spanish towns, and to join the Spaniards as allies. The Indians that migrated to Florida became known as the Seminoles. Escaped black slaves joined the Seminoles and the slaves helped translate for the Seminoles.

There were three undeclared wars against the Seminoles. The First Seminole War occurred in 1817 when General Andrew Jackson fought the Seminoles in North Florida. In 1830 Andrew Jackson, who was then the President, signed the Indian Removal Act. All Indians were to be moved to a specific Indian Territory west of the Mississippi. The Seminole's did not want to move and refused.

The Second Seminole War was between 1835 and 1842, and was known as the bloodiest and most expensive Indian War. Many of the Seminole's who had previously refused to be moved to the Indian Territory west of the Mississippi were captured and forced onto steamboats and moved to what is now known as Oklahoma. The Seminoles that were not captured remain in South Florida in the Everglades.

The Third Seminole War began in 1885 because Billy Bowlegs garden in the Everglades was destroyed. This war lasted three years and around 123 Seminoles gave up and moved to the Indian Territory. The remaining Seminoles in Florida stayed in the Everglades and had to learn to adapt to the harsh conditions. They built chickees which allowed breezes to blow through and they kept insects and snakes away.

Objectives:

Fourth Grade:

Recognize how the Seminole's impacted their environment.

Understand how the Seminole tribe formed.

Understand the purpose of the migration of the Seminoles.

Understand the causes and effects of the Seminole Wars.

Write an essay discussing the causes and effects of the Seminole Wars.

Demonstrate knowledge of finding the area of a rectangle.

Science:

SC.4.L.17.4 Recognize ways plants and animals, including humans, can impact the environment.

How do you think the Seminole's impacted the environment in which they lived?

Social Studies:

SS.4.A.3.10 Identify the causes and effects of the Seminole Wars.

What are the causes and effects of the Seminole Wars?

SS.4.A.3.8 Explain how the Seminole tribe formed and the purpose for their migration.

Reading and Language Arts:

Vocabulary:

Chickee: a shelter supported by posts, with a raised floor, a thatched roof and open sides.

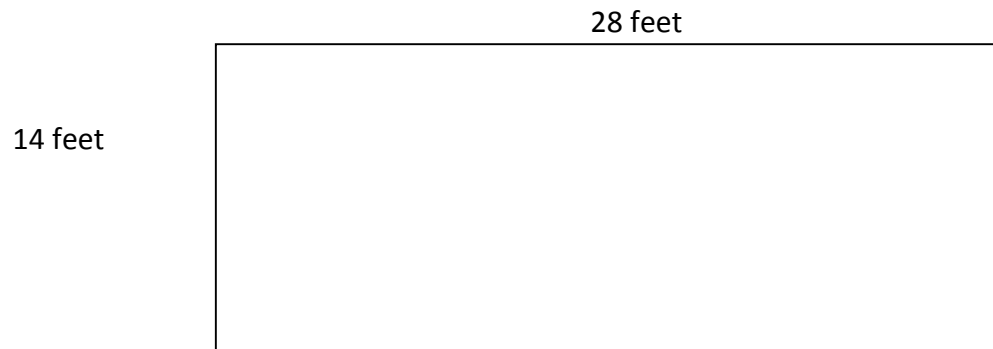
LA.4.4.2.3 The student will write informational/expository essays that contain introductory, body, and concluding paragraphs;

Write an essay discussing the causes and effects of the Seminole war.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height".

Imagine a chickee in rectangle with the length and width given below, what is the area?



The Citrus Industry

The Indian River environment is ideal for growing citrus fruits due because the soil contains more organic matter and holds nutrients better than other areas of Florida where the soil is sandier. Citrus growers established groves in the center of Florida and the railroads gave easy access to these areas.

All citrus except the grapefruit is native of the Orient. The citrus fruits came to Florida through trade and expansion that was carried westward and eventually ended up in the Americas. Native Americans helped to disperse the seeds inland on their travels around the Peninsula.

The Indian River Citrus industry dates to the 1830 with Douglas Dummitt who planted an orange on Merritt Island. The worst freeze in the state hit on Feb. 8th 1835 and killed almost all citrus in trees in the states. Douglas Dummitt's groves were one of the only ones to survive. Dummitt's oranges became prized throughout the world. In December of 1894 and in 1895 Florida suffered two more devastating freezes and Dummitt's groves survived once again.

The Florida Citrus Exchange was formed in 1910 and later became the Florida Citrus Commission. The FCE had advertising campaigns and formed national and international sales organizations along with other tasks.

Objectives:

Fourth Grade:

- Recognize how citrus groves impact the environment.
- Describe the economic development of Florida's citrus industry in an essay.
- Record bibliographic information
- Use outside sources appropriately
- Understand how to find the area of a rectangle using the $\text{area} = \text{base} \times \text{height}$ formula.

Science:

- SC.4.L.17.4 Recognize ways plants and animals, including humans, can impact the environment.
- How do you think the citrus groves impact the environment?

Social Studies:

- SS.4.A.6.1 Describe the economic development of Florida's major industries.
- LA.4.6.2.2 The student will apply evaluative criteria (e.g., readability, currency, accuracy) for selecting and using a variety of appropriate resources, gather and record information, noting the difference between opinions and fact;
- LA.4.6.2.3 The student will communicate information in a report that includes main idea(s) and relevant details, with visual supports; and

LA.4.6.2.4 The student will record basic bibliographic data and present quotes using ethical practices (e.g., avoids plagiarism).

Write an essay discussing the economic development of the citrus industry, use other resources to gain more information, record bibliographic data and use quotations when necessary.

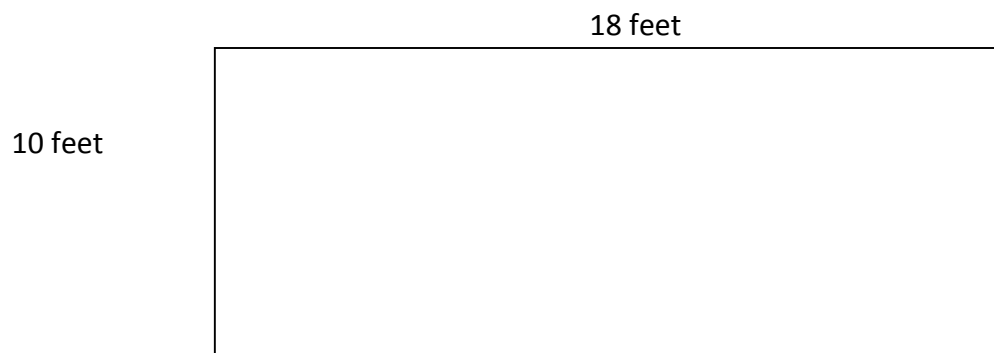
Reading and Language Arts:

Grade 4: Refer to the science section where science and reading/language arts are combined.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height".

Imagine a citrus grove in a rectangle with the length and width given below, what is the area?



Turpentine in Florida

The turpentine industry was a lucrative business that predates the Civil War, continuing through the Great Depression and post World War II eras. During the Civil war ships were made of wood, turpentine, pitch, and rosin to waterproof ships. Turpentine industry later turned to creating household products such as soap, paint, solvents, adhesives, polishes, etc.

Turpentine has been used medically since ancient times for treatments such as lice or when combined with animal fat it can be rubbed on the chest for nasal and throat ailments.

Charles Henry created the process called the “cat face cut” in 1903. This technique was created because many regions in the Carolinas and Georgia were becoming tapped out due to the methods used to gather sap and trees were dying prematurely. The “cat face cut” involved cutting two diagonal slices in the trees followed by attaching drip trays with a pot to collect sap.

The turpentine industry also has an ugly side. Originally turpentine and rosin created dangerous toxic fumes as a result of them being separated by high heat fires. The industry also has harsh working conditions and it greatly impacts the environment. The early methods killed forests and the distilling process left hazardous residues. Today turpentine is used mostly as a solvent but it is still considered a hazardous and flammable material.

Objectives:

Fourth Grade:

Recognize how the turpentine industry impacted the environment.

Use primary and secondary sources to research the turpentine industry.

Identify primary and secondary sources

Write at least a 2 minute speech about the turpentine exhibit.

Give an oral presentation maintaining proper eye contact, body movement, and voice.

Listen to classmates speeches and write down one thing each classmate talked about.

Understand how to find the area of a rectangle using the area = base x height formula.

Science:

SC.4.L.17.4 Recognize ways plants and animals, including humans, can impact the environment.

How did the turpentine industry impact the environment?

Social Studies:

SS.4.A.1.1 Analyze primary and secondary resources to identify significant individuals and events throughout Florida history.

Use primary and secondary sources and research the Florida turpentine industry. Keep track of what sources you used by writing them down and label them as primary and secondary sources and include what you learned from each source.

Reading and Language Arts:

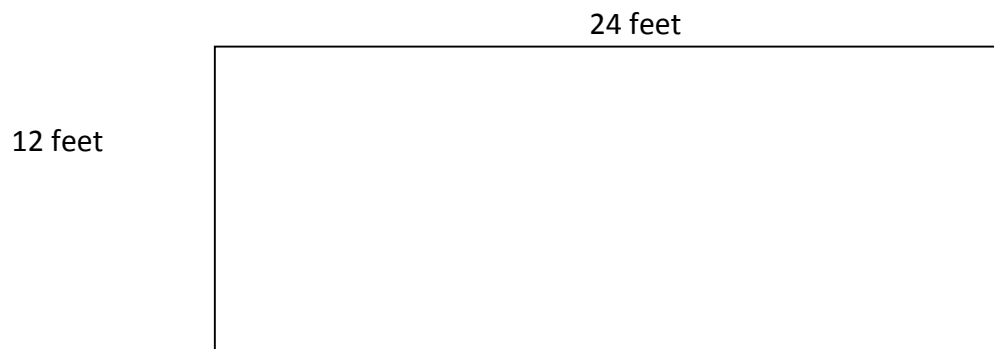
LA.4.5.2.1 The student will listen to information presented orally and show an understanding of key points;

LA.4.5.2.2 The student will plan, organize, and give an oral presentation and use appropriate voice, eye, and body movements for the topic, audience, and occasion; Write at least a 2 minute speech about your favorite part of the turpentine exhibit and what you learned from this exhibit. Give an oral presentation to your class using proper eye contact, body movement, and voice. Also listen to your other classmates give their presentations and write down one thing each student talked about.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height".

Imagine that you have a rectangular area of trees that you plan on extracting turpentine from and the area has the given measurements, what is the area?



Cracker Exhibit

The Cracker cowmen were known as America's first cowmen and in 1605 the first working ranches were established in St. Augustine or "La Florida." During the 1800's the Crackers were drawn to the cow hunter lifestyle and its rugged lonely existence. Some of the problems that Cracker cowmen faced were stealing or rustling cattle which often led to violence.

Cracker horses were very important to the Cracker cowmen and they have always been a tough low maintenance horse known for their ability as cow herders. Ponce de Leon brought the first horses to Florida in 1521. Cracker horses got their names from Cracker cowmen's whips that made a loud cracking sound.

Crackers ate a varied cuisine that includes tortoise, opossums, squirrels, raccoons, rattlesnakes, bears, fish, snails, frogs, crayfish and a variety of edible wild plants such as collards, turnip greens, and mustard.

Crackers built their houses out of logs and had different styles known as the Single Pen or Double Pen, Saddle, Dog Trot, and Shotgun.

Cracker music was described in the post civil war day as music played by Crackers and listened to by Crackers. Cracker music was not written down and was all sung from memory and each region of Florida had its own unique Cracker music.

Objectives:

Fourth Grade:

Understand how Cracker people and horses impacted the environment.

Have an understanding of pioneer life in Florida.

Write a narrative about life as a Cracker.

Include events, observations, setting, and plot and follow logical sequence of events in narrative.

Understand how to find the area of a rectangle using the area = base x height formula.

Science:

SC.4.L.17.4 Recognize ways plants and animals, including humans, can impact the environment.

Can you come up with some possibly ways that the Cracker people or horses have impacted the environment?

Social Studies:

SS.4.A.4.2 Describe pioneer life in Florida.

Write a paragraph about what you think life as a Cracker in Florida must have been like.

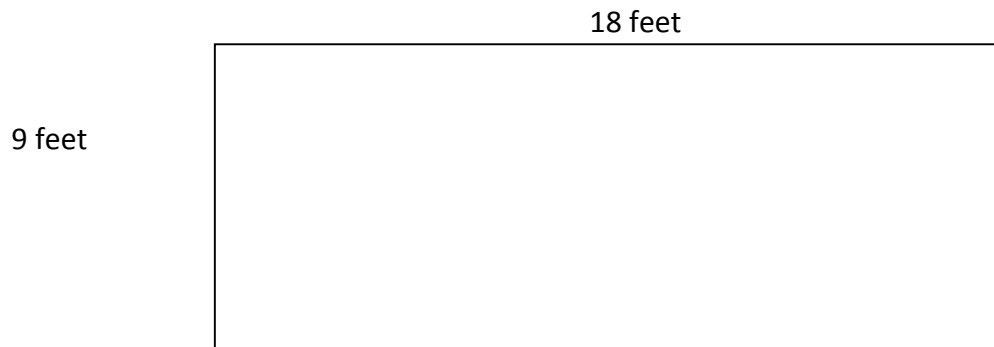
Reading and Language Arts:

LA.4.4.1.1 The student will write narratives based on real or imagined ideas, events, or observations that include characters, setting, plot, sensory details, a logical sequence of events, and a context to enable the reader to imagine the world of the event or experience; Using your imagination write a narrative about life as a Cracker. Imagine that you are a Cracker; discuss a day in your life starting with what you had for breakfast, what you did for the day etc., up until you go to bed that night. Be creative and be sure to include events, observations, setting, plot, and follow a logical sequence of events.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height".

Imagine that you a Cracker house sits on a rectangular piece of land with the following measurements, what is the area?



Railroad Exhibit

In the 1880s paddle steamboats helped move freight and passengers along the Indian River. Henry Flagler ran several steamboat lines to help support the construction of his railroads. People along the Indian River convinced Flagler to extend the railroad south to Daytona. By 1892 Flagler's Jacksonville, St. Augustine, and Indian River Railway Company reached New Smyrna and Titusville, and Cocoa and Rockledge in 1893. In 1908 Flagler became tired of maintaining his railway from the East Coast Railways mainline to Rockledge and tried to buyout the owners of the hotels who refused. On a Sunday morning when no judges were available Flagler sent a crew of workers to removed .6 miles of the track.

Flagler extended his railroad system farther south to Miami due to the severe freezes of 1894 and 1895. In 1895 the expanding of the rail line was renamed the Florida East Coast Railway before the completion of the rail construction south of Palm Beach. The hotels in Palm Beach became the winter resorts for the wealthy.

Flagler first visited Florida in 1878 and he saw the potential for a winter resort in Florida. In 1885 Flagler's first venture was the construction of the grand hotel Ponce De Leon in St. Augustine. His first major railway acquisition was the Jacksonville, St. Augustine, and Halifax railroad. Piece by piece Flagler acquired and joined existing lines.

Objectives:

Fourth Grade:

Record observations and raise appropriate questions about trains.

Describe the contributions of Henry Flagler.

Summarize impact of Flagler's railroads on Florida.

Understand how to find the area of a rectangle using the base x height = area formula.

Science:

SC.4.N.1.6 Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.

Write down observations you make and questions you have about trains after running the model train along the track.

Social Studies:

SS.4.A.6.3 Describe the contributions of significant individuals to Florida.

Describe the contributions of Henry Flagler.

Reading and Language Arts:

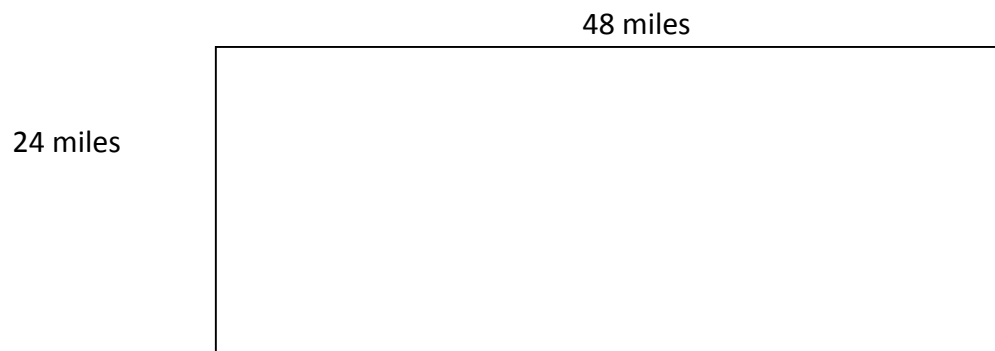
LA.4.4.2.1 The student will write in a variety of informational/expository forms (e.g., summaries, procedures, recipes, instructions, graphs/tables, experiments, rubrics, how-to manuals);

Summarize the impact that Flagler's railroads had on Florida.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height".

Imagine that a railroad track is in the shape of a rectangle with the given dimensions. What is the area of the rectangle?



Manatee Sanctuary Area

What is a manatee sanctuary? A manatee sanctuary area is area that is off limits to human activity.

How is a manatee sanctuary created? A manatee sanctuary is created through scientific research. Scientists consider what areas are vital to manatee survival based on water temperature and areas where they can feed and rest without being disturbed.

What is the best way for you to view manatees? In order to ensure that the manatees stay undisturbed and safe you should look but never touch manatees.

Where can you find manatees? Manatees can be found in shallow, slow-moving rivers, estuaries, saltwater bays, canals, and coastal areas. In the winter months you are more likely to find manatees in Florida and in the summer months they are most commonly sighted in Alabama, Georgia, and South Carolina.

What type of behavior can you expect from a manatee? Manatees are known as gentle, slow moving animals that spend a lot of time resting, eating, and traveling as they are migratory animals.

What types of legal protection is there for manatees? Manatees located in the United States are protected under federal law by the Marine Mammal Protection Act of 1972, and the Endangered Species Act of 1973. Harassing, hunting, capturing, or killing any marine mammals are illegal due to these laws.

How long do manatees live? The average lifespan of a manatee is 60 years or more.

What are some of the dangers manatees face? Deadly collisions with watercrafts, swallowing fish hooks or liter, and loss of habitat.

Objectives:

Fourth Grade:

Understand how scientists use evidence to designate areas as manatee sanctuaries.

Locate a manatee sanctuary on a map.

Describe some of the physical features that are important when designating an area a manatee sanctuary.

Write a short story or poem about manatees including facts from today, appropriate format, and figurative language.

Understand how to find the area of a rectangle using the base x height = area formula.

Science:

SC.4.N.1.7 Recognize and explain that scientists base their explanations on evidence. How do you think scientists used evidence in order to determine what areas should be designated manatee sanctuaries?

Social Studies:

SS.4.G.1.1 Identify physical features of Florida. Use a map and identify some of the physical features of Florida such as oceans, lakes, swamps, etc. Also locate a manatee sanctuary and describe some of the physical features that are important when determining if an area is a manatee sanctuary.

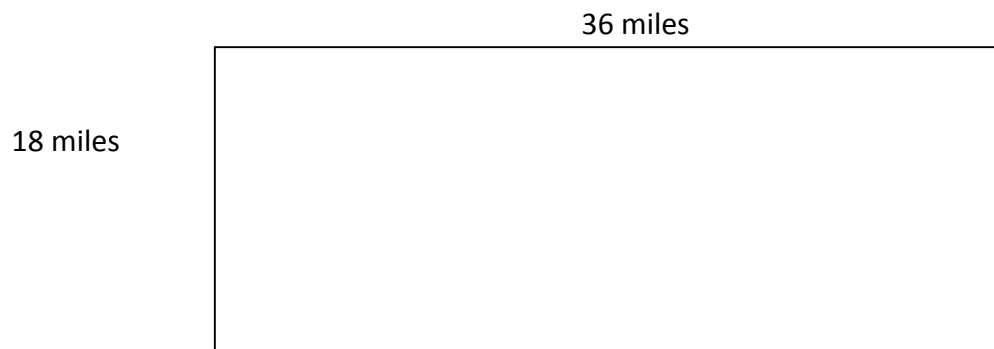
Reading and Language Arts:

LA.4.4.1.2 The student will write a variety of expressive forms (e.g., short story, poetry, skit, song lyrics) that employ figurative language (e.g., simile, metaphor, onomatopoeia, personification), rhythm, dialogue, characterization, plot, and/or appropriate format. Write a short story or poem about manatees. Include facts that you learned today about manatees, use appropriate format and figurative language such as similes, metaphors, or personification.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height".

Imagine that a manatee sanctuary is in the shape of a rectangle with the given dimensions. What is the area of the rectangle?



The Cape Canaveral Lighthouse

In 1848 the Cape Canaveral Lighthouse was constructed. It used 15 whale oil lamps to help produce light but mariners complained that the light was too dim. In 1868 a First Order Revolving Fresnel Lens was installed but the lens was fragile and had to be protected from the strong Florida sun. In 1885 the lighthouse used kerosene and in 1920 it went to electricity. From 1892 through 1894 the lighthouse had to be moved one mile inland due to erosion.

Objectives:

Fourth Grade:

Describe the type of energy the lighthouse uses.

Describe how technological advances have affected the lighthouse.

Tell the story of the lighthouse through a picture with dictated words or phrases.

Understand how to find the area of a rectangle using the base \times height = area formula.

Science:

SC.4.P.10.1 Observe and describe some basic forms of energy, including light, heat, sound, electrical, and the energy of motion.

Observe and describe the form of energy the lighthouse exhibits.

Social Studies:

SS.4.A.4.1 Explain the effects of technological advances on Florida.

How did technological advances affect the Cape Canaveral Lighthouse?

Reading and Language Arts:

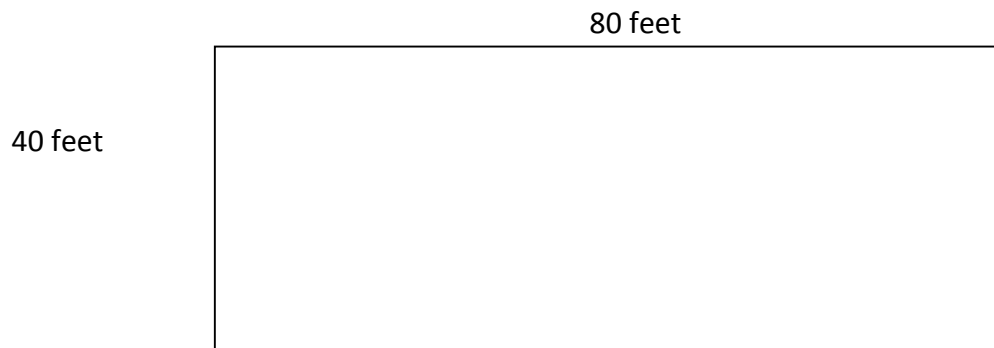
LA.4.4.1.Su.a Produce narratives by creating pictures that tell a story about familiar persons, objects, or events with dictated phrases or sentences.

Tell the story of the lighthouse through pictures with dictated phrases or sentences.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base \times height".

Imagine that a lighthouse sits on a square piece of land with the given dimensions, what is the area of the land?



Taylor Exhibit

Albert Taylor was born in New York, moved to Michigan, then Wyoming, back to Michigan, then back to Wyoming, then back to Michigan, then Texas, and in 1886 moved to Cocoa, Florida. In 1889 Albert Taylor established the Brevard County State Bank. Albert Taylor also became the 2nd mayor of Cocoa. He had two wives: Carrie Taylor and later Grace Taylor. Grace liked to play the piano, paint, and sketch, and write poetry. Albert Taylor had one daughter with Carrie Taylor also named Carrie but Albert and Grace were estranged from Carrie because she eloped and did not marry the man they wanted her to.

Objectives:

Fourth Grade:

Identify ways the Taylor family used energy in their daily lives and compare and contrast with how you use energy in your daily life.

Analyze primary and secondary sources to gather information about the Taylor family.

Write an informational essay that contains an introduction, body, and concluding paragraph about the Taylor family

Understand how to find the area of a rectangle using the area = base x height formula.

Science:

SC.4.P.10.1 Observe and describe some basic forms of energy, including light, heat, sound, electrical, and the energy of motion.

How do you think the Taylor family used energy in their daily lives? Compare and contrast this with how you use energy.

Social Studies:

SS.4.A.1.1 Analyze primary and secondary resources to identify significant individuals and events throughout Florida history.

Analyze primary and secondary resources to identify information about the Taylor family and label your sources primary and secondary. Name one important event involving the Taylor family.

Reading and Language Arts:

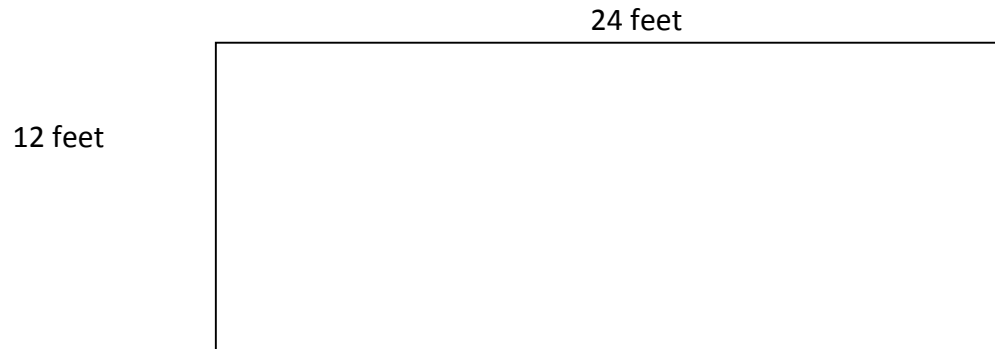
LA.4.4.2.3 The student will write informational/expository essays that contain introductory, body, and concluding paragraphs;

Write an informational essay that contains an introductory, body, and concluding paragraph about the Taylor family.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height".

Imagine that Grace Taylor's piano sat in a rectangular room with the given dimensions, what was the area of the room?



Florida's Early Inhabitants

Florida's Early Archaic Period 7,500 – 5,000 BC:

Florida's climate was changing and the weather was becoming warmer with more rainfall. The Paleo Indians became less nomadic.

Florida's Paleo Indian Period 10,000 BC – 7,000 BC:

Florida had lower sea levels which increased the land area by twice its current size.

Florida was arid and cool.

Paleo Indians hunted and gathered anything edible and useful.

Hunted mammoths, bison, giant land tortoise, etc...

Florida's Middle Archaic Period 5,000 BC – 3,000 BC:

Florida became wetter, developing more wetlands, with abundant fish and shellfish.

Natives continued to hunt deer and other animals especially fish, oysters, snails, alligators etc...

Human settlements grew at this time developing into long term habitations.

Middle Archaic Indians of Florida lived during this time and they were known for developing a new type of stone point.

Florida Late Archaic Period 3,000 BC - 500 BC:

Increase in vegetation.

The Florida Indians built settlements, maintain their homes in villages along with camps for hunting or for collecting sea turtle eggs, shellfish, and acorns.

Late Archaic Indians created fired clay pottery for cooking and storage.

The Florida Indians on the St. John River became experts at catching fish, hunting, and collecting other animals.

Florida's Woodland and Mississippian Period:

Florida Indians made changes in their pottery, in their methods to gather food, and in their settlements.

Many villages would unite and form alliances.

Different Indian settlements developed and produced a variety of types of pottery.

Florida Indians became skilled at growing different crops.

Florida Major Indian Tribes:

Calusa: Lived on the southwestern coast of Florida from Charlotte Harbor to 10,000 Islands.

They did little farming and hunting, they preferred fishing and gathering shellfish from the Gulf of Mexico or the rivers.

Known for discarding their shells from shellfish onto mounds, some of these mounds reached 30 feet high and were used to build dwellings and for protection.

Tequesta:

Maintained ties with the Calusa on the Gulf Coast through marriage between the chief families.
Hunted and fished for food using bows and arrows.
Traded with other tribes

Apalachee:

50,000 Apalachee Indians lived in N. Florida.
They were good farmers and warriors.
Hunted bear, deer, fox, opossum, and raccoon

Ais:

Lived in Central Florida and Brevard County from Cape Canaveral south to Fort Pierce
Relied on hunting and fishing for food, they did not farm.
The Ais became wealthy from collecting gold and silver
Main village was near the Indian River Inlet.

Timucua:

One of the largest groups of Native Americans in Florida
Lived throughout northeast Florida from Tampa to Jacksonville
Men would fish and hunt while the women planted and harvested crops of beans, corn, and squash.

Objectives:

Fourth Grade:

List what types of resources you think Florida's early inhabitants might have used and whether they were renewable or nonrenewable.
Analyze primary and secondary sources to gather information about one of Florida's early inhabitants.
List your sources as primary or secondary.
Record your observation about the exhibit.
List the different early inhabitants of Florida and write down one characteristic of each.
Understand how to find the area of a rectangle using the base x height = formula.

Science:

SC.4.E.6.3 Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable.

What types of resources found on Earth do you think the early inhabitants of Florida used?
Label the resources renewable or nonrenewable.

Social Studies:

SS.4.A.1.1 Analyze primary and secondary resources to identify significant individuals and events throughout Florida history.

Analyze primary and secondary resources to identify some of Florida's early inhabitants. List your sources and identify as either primary or secondary.

Reading and Language Arts:

LA.4.4.2.2 The student will record information (e.g., observations, notes, lists, charts, map labels, legends) related to a topic, including visual aids as appropriate;

Record your observations the Early Inhabitants Exhibit. List the different early inhabitants of Florida and write down one characteristic of each.

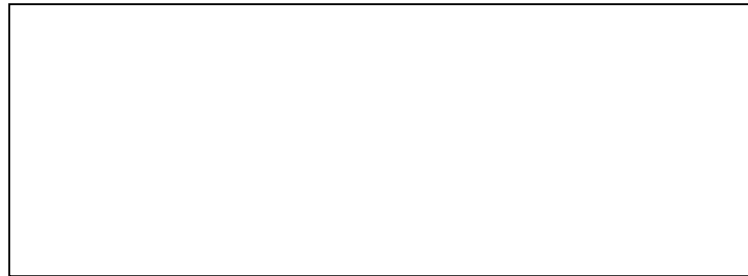
Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height".

Imagine that a Timucua village has 200 round wooden huts in a rectangular area with the given dimensions. What is the area of the village using the formula area = base x height?

12.6 miles

6.1 miles



Shell Collection

Scallops are a worldwide group of several hundred species. In the early 1980s scalloping was a big industry at Port Canaveral. Scallops snap their shells together to propel themselves rapidly through the water in a zig-zag direction. Most scallops have a series of brightly colored eyes along their mantle.

The Florida state shell is the Florida horse conch which is carnivorous and grows up to 18 inches in length.

There are about 400 species of cone shells and they are mostly found in warm tropical waters. Cone shells are carnivorous and feed on worms and small fish.

Objectives:

Fourth Grade:

Record observations about the shell collection

Distinguish actual observations from ideas and inferences about the observations.

Use technology to learn more about the popular shells in Florida.

Identify the Florida state shell.

Use digital tools to produce a picture of the Florida state shell and write a one paragraph summary on the shell.

Understand how to find the area of a rectangle using the base x height = area formula.

Science:

SC.4.N.1.6 Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.

Keep records of your observation about the shell collection. Distinguish observations from ideas and inferences about the observations.

Social Studies:

SS.4.A.1.Pa.b Use technology to access information about Florida.

Use technology to learn more about the most popular shells in Florida. What is Florida's state shell?

Reading and Language Arts:

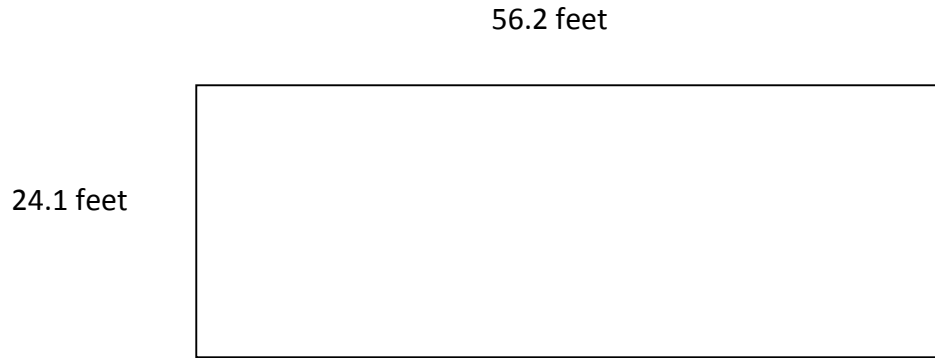
LA.4.6.4.Su.b Use digital tools (e.g., writing, drawing software) to produce pictures, letters, or words.

Use digital tools to produce a picture of the Florida state shell. Write a one paragraph summary describing the Florida state shell which may involve additional research.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height".

Imagine that you are searching in a rectangular area for shells. Find the area of the rectangle with the given dimensions using the base x height = area formula.



Florida's Habitats

Mangrove Swamp:

Wood Storks
Great Egrets
Anhinga
Sparrow Hawk
Mangroves

Saltwater Marsh:

Great Blue Heron
Osprey
Bald Eagle
Alligator

The Dunes:

Gopher Tortoise
Brown Pelican
Diamondback

Beach:

Herring Gull
Hermit Crab
Ghost Crab
Sand Flea

Reef:

Bony Fish
Cartilaginous Fish
Coral
Crustaceans
Sponges
Echinoderms
Mollusks

Objectives:

Fourth Grade:

Recognize that plants and animals impact their habitats.
Use a map to identify physical features of Florida.
Record information about the habitats and plants and animals that live in each
Find the area of a rectangle using the area = base x height formula.

Science:

SC.4.L.17.4 Recognize ways plants and animals, including humans, can impact the environment.

List one animal or plant in each habitat and give one way you think they might impact their environment.

Social Studies:

SS.4.G.1.1 Identify physical features of Florida.

Use a map to identify physical features of Florida. What types of habitats do you think you would find based on the physical features?

Reading and Language Arts:

LA.4.4.2.In.b Record information (e.g., lists, labels, charts) related to a topic.

Make a list of the different habitats and the different animals and plants that live in each.

Mathematics:

MA.4.G.3.2 Justify the formula for the area of the rectangle "area = base x height".

Imagine that you are searching in a rectangular area for gopher turtles. Find the area of the rectangle with the given dimensions using the base x height = area formula.

