

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 6:

Understand that science sometimes relies on creativity to form explanations and find examples of explanations that used creativity in the Windover site.

Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.

Understand new vocabulary introduced and be able to use it.

Have a basic understanding of the Windover site and demonstrate this knowledge through an essay discussing the importance of the site and what the artifacts tell us about the people that lived here.

Compare and order decimals and find their location on a number line.

Science:

SC.6.N.1.5 Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.

Can you give an example of where the archaeologists used creativity in creating an explanation that fits their evidence?

Social Studies

SS.6.G.2.1 Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.

Titusville may have only been a semi permanent site which the people of Windover lived at during spring and summer but the physical characteristics of the land, natural resources, climate, and location still played an important role. How do you think major physical characteristics, climate, natural resources, and location influenced the Windover people to settle in Titusville?

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.6.1.6.1 The student will use new vocabulary that is introduced and taught directly; What type of work does an archaeologist perform and what is an artifact. Give an example of some of the artifacts found at the Windover site.

What is peat and what role did it play in the Windover site?

LA.6.4.2.3 The student will write informational/expository essays (e.g., process, description, explanation, comparison/contrast, problem/solution) that include a thesis statement, supporting details, and introductory, body, and concluding paragraphs;

Discuss the importance of the Windover site and what the artifacts found tell us about the Windover people.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine that the archaeologists at the Windover site found whole skeletons and fractions of skulls and other bones and recorded their observations:

- A.) 15.4 skulls
- B.) 17.4 tibias
- C.) 14.2 femurs
- D.) 24.6 ribs
- E.) 18.9 metacarpals
- F.) 18.7 metatarsals
- G.) 14.3 fibulas

Draw a number line and place the bones in the appropriate spots.

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:

Sixth Grade:

Recognize that science involves creativity in questions and explanations and come up with your own question and creative explanation.

Utilize the tools geographers use and compare prehistoric Florida with Florida today.

Have a basic knowledge and understanding of new vocabulary.

Compare and order decimals and find their location on a number line.

Science:

SC.6.N.1.5 Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.

After viewing the prehistoric Florida exhibit write down a question you have and come up with a creative explanation that fits with what you have learned today.

Social Studies:

SS.6.G.1.4 Utilize tools geographers use to study the world.

SS.6.G.1.In.d Use tools of geography, such as maps, globes, satellite images, and charts.

Use maps, globes, or any other type of tools geographers use and compare prehistoric Florida with Florida today and write down some differences and similarities.

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.6.1.6.1 The student will use new vocabulary that is introduced and taught directly; What is paleontology and what role did it play in the Prehistoric Florida exhibit.

LA.6.4.2.3 The student will write informational/expository essays (e.g., process, description, explanation, comparison/contrast, problem/solution) that include a thesis statement, supporting details, and introductory, body, and concluding paragraphs; Write an essay comparing and contrasting prehistoric Florida with Florida today, focusing on the environment and the different types of animals that lived in prehistoric and present day Florida.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine that these prehistoric fossils were found in no particular order:

- A.) 24.6 wolf skulls
- B.) 17.9 tapir jaws
- C.) 17.7 camel jaws
- D.) 45.3 horse forelegs
- E.) 89 horse teeth
- F.) 54.3 rhino skulls
- G.) 46.4 mammoth ribs

Put these fossils in order on a number line

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:

Sixth Grade:

Explain how geographical boundaries in the Everglades impacted the Seminoles.

Have an understanding of the causes and effects of the Seminole Wars.

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

Use outside sources for research.

Cite sources.

Compare and order decimals on a # line.

Social Studies:

SS.6.G.2.5 Interpret how geographic boundaries invite or limit interaction with other regions and cultures.

After the third Seminole war the Seminoles moved to the Everglades. What geographic boundaries did the Everglades impose on the Seminoles interactions with other regions and cultures?

Reading and Language Arts:

Vocabulary:

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

LA.6.6.2.2 The student will collect, evaluate and summarize information using a variety of techniques from multiple sources (e.g., encyclopedias, websites, experts) that includes paraphrasing to convey ideas and details from the source, main idea(s) and relevant details;

LA.6.6.2.3 The student will write an informational report that includes a focused topic, appropriate facts and relevant details, a logical sequence, a concluding statement, and list of sources used; and

LA.6.6.2.4 The student will explain and demonstrate an understanding of the importance of ethical research practices, including the need to avoid plagiarism, and know the associated consequences.

Write an essay discussing the causes and effects of one of the Seminole wars. Research the war using other resources and any cite any sources you use in your essay.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine that numerous chickees were found:

- A.) 14.5 chickees
- B.) 12.5 chickees
- C.) 78.4 chickees
- D.) 64.3 chickees
- E.) 54.1 chickees
- F.) 99.4 chickees
- G.) 36.2 chickees

Put the chickees in order on a number line.

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:

Sixth Grade:

Distinguish science from other areas of thought.

Use different types of scales to measure the distance between your hometown and the Indian River.

Write directions from your hometown to Winter Park.

Create a map that matches direction to Winter Park.

Compare and order decimals and find their location on a # line.

Science:

SC.6.N.2.1 Distinguish science from other activities involving thought.

Is process of growing oranges a science? Why or why not?

Social Studies:

SS.6.G.1.5 Use scale, cardinal, and intermediate directions, and estimation of distances between places on current and ancient maps of the world.

Using scale, cardinal, and intermediate directions estimate the distance between various points of the Indian River to your hometown and estimate the distance of the entire Indian River using a current map.

Reading and Language Arts:

LA.6.4.2.5 The student will write directions to unfamiliar locations using cardinal and ordinal directions, landmarks, and distances, and create an accompanying map.
Write directions from your hometown to a Winter Park, Florida (home of the Temple Orange) using cardinal and ordinal directions, landmarks, and distances, and create an accompanying map.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine that you found 7 baskets of oranges with different numbers of oranges in each:

- A.) 14.5 oranges
- B.) 22.5 oranges
- C.) 29.6 oranges
- D.) 84.2 oranges
- E.) 14.6 oranges
- F.) 94.3 oranges
- G.) 34.8 oranges

Put the baskets of oranges in order on a number line.

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:

Sixth Grade:

Explain the difference between an experiment and other types of scientific investigation and discuss the limitations of each.

Estimate the distance between places on a current map.

Understand the ugly side of turpentine and write an essay on it.

Essay should have a thesis statement, supporting details, introductory, body, and concluding paragraphs.

Use additional resources to gather appropriate information.

Record bibliographic data appropriately

Compare and order decimals and locate them on a number line.

Science:

SC.6.N.1.3 Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.

Regions in the Carolinas and Florida became tapped out due to the methods used to gather sap. Charles Henry patented the process called the “cat face cut” in 1903. Do you the “cat face cut” was the result of an experiment or another type of scientific investigation and why? What is the difference between an experiment and other types of scientific investigation and what are the limitations of each?

Social Studies:

SS.6.G.1.5 Use scale, cardinal, and intermediate directions, and estimation of distances between places on current and ancient maps of the world.

In the panel discussing the Ugly Side of Turpentine what happened in Osceola County? Use a map and estimate the distance from any town in Brevard County to any town in Osceola County.

Reading and Language Arts:

LA.6.4.2.3 The student will write informational/expository essays (e.g., process, description, explanation, comparison/contrast, problem/solution) that include a thesis statement, supporting details, and introductory, body, and concluding paragraphs; Write an essay discussing the ugly side of turpentine. Use additional resources to gather more information. Your essay should include a thesis statement, supporting details, and introductory, body, and a concluding paragraph. Also, record all bibliographic date and use quotes when necessary.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine that you found 8 containers of turpentine with different numbers amounts of turpentine in each:

- A.) 12.4 lbs. of turpentine
- B.) 20.3 lbs. of turpentine
- C.) 17.2 lbs. of turpentine
- D.) 82.1 lbs. of turpentine
- E.) 36.7 lbs. of turpentine
- F.) 91.2 lbs. of turpentine
- G.) 67.4 lbs. of turpentine
- H.) 54.9 lbs. of turpentine

Put the containers of turpentine in order from lightest to heavies on a number line.

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:

Sixth Grade:

Be able to classify animals into different groups.

Use maps to estimate distances between places of Florida.

Write a short play about a day in the life of a Cracker using figurative language, rhythm, dialogue, characterization, and appropriate format.

Compare and order decimals and find location on a # line.

Science:

SC.6.L.15.1 Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains.

SC.6.L.15.In.a Classify animals into major groups, such as insects, fish, reptiles, mammals, and birds.

The Cracker people ate a variety of animals such as gopher tortoise, soft shelled tortoise, opossums, squirrels, raccoons, rattlesnakes, bears, frogs, crayfish, and snails for example. Put the animals in their proper groups such as insects, fish, reptiles, mammals, or birds.

Social Studies:

SS.6.G.1.5 Use scale, cardinal, and intermediate directions, and estimation of distances between places on current and ancient maps of the world.

Using a map estimate the distance between your hometown and an important area of Florida in regards to Crackers. Why is the area or town you picked important?

Reading and Language Arts:

LA.6.4.1.2 The student will write a variety of expressive forms (e.g., short play, song lyrics, historical fiction, limericks) that employ figurative language, rhythm, dialogue, characterization, and/or appropriate format.

Write a short play about a day in the life of a Cracker. Use your imagination; this does not have to be a real event. Also, be sure to include figurative language, rhythm, dialogue, characterization, and appropriate format.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine that you are a Cracker and you are building your house using logs and you have the following logs, some are partials

- A.) 8.4 logs
- B.) 19.2 logs
- C.) 14.7 logs
- D.) 35.6 logs
- E.) 41.6 logs
- F.) 89.2 logs
- G.) 74.1 logs
- H.) 18.9 logs

Put the logs in order on a number line.

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:

Sixth Grade:

Measure and graph distance versus time for the model train.

Understand how geographical boundaries limit the interaction of regions and culture, specifically in Florida.

Understand how the railroad helped to eliminate geographical boundaries.

Write a summary on Flagler abandoning the E. Coast Railway mainline to Rockledge and the effects it had on Rockledge.

Compare and order decimals and find their approximate location on a number line.

Science:

SC.6.P.12.1 Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship.

Measure and graph the distance versus time for the model train and interpret the relationship between distance and time. **(HOW LONG IS THE MODEL TRACK)**

Social Studies:

SS.6.G.2.5 Interpret how geographic boundaries invite or limit interaction with other regions and cultures.

Explain how geographic boundaries invite or limit interaction with other regions and cultures in Florida then explain how the railroads helped to eliminate some of these boundaries.

Reading and Language Arts:

LA.6.4.2.1 The student will write in a variety of informational/expository forms (e.g., summaries, procedures, instructions, experiments, rubrics, how-to manuals, assembly instructions);

Write a summary discussing how Henry Flagler abandoned the E. Coast Railways mainline to Rockledge. How did this effect Rockledge?

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine that you have numerous railroad tracks that are each different lengths:

- A.) 23.2 miles
- B.) 17.1 miles
- C.) 16.2 miles
- D.) 29.1 miles
- E.) 19.2 miles
- F.) 7.1 miles
- G.) 11.4 miles

Draw a number line and place the railroad tracks in the appropriate spots based on length.

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:

Sixth Grade:

Explain the difference between an experiment and scientific investigation and the benefits and limitations of each.

Understand what types of questions scientists ask when researching possible manatee sanctuaries.

Locate a manatee sanctuary using latitude and longitude.

How do you think people affect the environment especially manatee sanctuaries.

Write a short story or limerick about manatees using appropriate format and figurative language.

Compare and order decimals and find their approximate location on a number line.

Science:

SC.6.N.1.3 Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.

Explain the difference between an experiment and other types of scientific investigation and explain the benefits and limitations of each. In order to determine what areas should be designated manatee sanctuaries scientists use scientific research. What types of questions do you think scientists ask themselves when researching possible manatee sanctuaries?

Social Studies:

SS.6.G.1.1 Use latitude and longitude coordinates to understand the relationship between people and places on the Earth.

Use latitude and longitude to find a manatee sanctuary and write down some of your observations about the location of the sanctuary and how people could affect where these sanctuaries are located; how do humans impact the environment, specifically manatee sanctuaries?

Reading and Language Arts:

LA.6.4.1.2 The student will write a variety of expressive forms (e.g., short play, song lyrics, historical fiction, limericks) that employ figurative language, rhythm, dialogue, characterization, and/or appropriate format.

Write a song lyric or limerick about manatees using the information you learned today, appropriate format, and figurative language.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine that you have numerous manatee sanctuaries that all have different areas.

- A.) 21.1 miles
- B.) 12.3 miles
- C.) 19.4 miles
- D.) 6.4 miles
- E.) 4.1 miles
- F.) 1.2 miles
- G.) 11.4 miles

Draw a number line and place the manatee sanctuaries in the appropriate spots based on length.

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:

Sixth Grade:

Understand what erosion is and why it resulted in the lighthouse having to be moved.
Use a map scale to estimate the distance between your hometown and the lighthouse.
Create a narrative about the lighthouse that includes a main idea, characters, and pictures.
Compare and order decimals and find their approximate location on a number line.

Science:

SC.6.E.6.1 Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition.

The lighthouse had to be moved from 1892-1894 due to erosion. What is erosion? Why did erosion result in the lighthouse being moved?

Social Studies:

SS.6.G.1. 5 Use scale, cardinal, and intermediate directions, and estimation of distances between places on current and ancient maps of the world.

Use a map scale to estimate the distance between your hometown and the Cape Canaveral Lighthouse.

Reading and Language Arts:

LA.6.4.1.Su.a Write narratives about persons, objects, and events that include a main idea and characters by creating stories supported by pictures.

Create a narrative about the lighthouse that includes a main idea, characters, and is supported by pictures.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine that you have boats that are being guided by the lighthouse and each boat is a different distance from the lighthouse

- A.) 26.1 miles
- B.) 14.4 miles
- C.) 13.2 miles

- D.) 6.1 miles
- E.) 5.2 miles
- F.) 1.1 miles
- G.) 11.4 miles

Draw a number line and place the boats in the appropriate spots based on length.

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:

Sixth Grade:

Recognize that travelling longer distances takes more time.

Use a map scale to determine the distance between two places.

Select a topic about the Taylor family to research using primary and secondary sources and write an information essay with a focused topic, appropriate facts, relevant data, logical sequence, and concluding statement.

Record bibliographic data and use quotes when necessary.

Compare and order decimals and find and locate on a number line.

Science:

SC.6.P.12.Pa.a Recognize that traveling longer distances takes more time, such as going to the cafeteria takes longer than going across the classroom.

Albert Taylor was born in New York then moved to Michigan then moved to Wyoming. Look at a map; do you think it would have taken him longer to travel from New York to Michigan or from Michigan to Wyoming.

Social Studies:

SS.6.G.1.5 Use scale, cardinal, and intermediate directions, and estimation of distances between places on current and ancient maps of the world.

Use a map scale to determine how far Cheyenne, Wyoming is from Cocoa, Florida. What year did Albert Taylor live in Cheyenne, Wyoming?

Reading and Language Arts:

LA.6.6.2.1 The student will select a topic for inquiry, formulate a search plan, and apply evaluative criteria (e.g., relevance, accuracy, organization, validity, currentness) to select and use appropriate resources;

LA.6.6.2.2 The student will collect, evaluate and summarize information using a variety of techniques from multiple sources (e.g., encyclopedias, websites, experts) that includes paraphrasing to convey ideas and details from the source, main idea(s) and relevant details;

LA.6.6.2.3 The student will write an informational report that includes a focused topic, appropriate facts and relevant details, a logical sequence, a concluding statement, and list of sources used; and

LA.6.6.2.4 The student will explain and demonstrate an understanding of the importance of ethical research practices, including the need to avoid plagiarism, and know the associated consequences.

Select a topic about the Taylor family and research it while recording your sources systematically and identifying primary and secondary sources. Using the information you have gathered write an informational report that includes a focused topic, appropriate facts and relevant details, a logical sequence, a concluding statement, and list of sources used. Also, record bibliographic data and use quotes when necessary to avoid plagiarism.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Albert Taylor moved many times and lived in many different states. Imagine that he travelled the following distances.

- A.) 8.1 miles
- B.) 19.4 miles
- C.) 14.2 miles
- D.) 35.1 miles
- E.) 41.9 miles
- F.) 89.7 miles
- G.) 74.6 miles
- H.) 18.3 miles

Put the miles in order from smallest to greatest on a number line.

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:

Sixth Grade:

Explain the different landforms of Florida and how they may have changed over time.
Explain how the physical characteristics, natural resources, climate, and absolute and relative location impacted the settlement and interaction of Florida's early inhabitants.
Write an essay on one of Florida's early inhabitants.
Essay should include a thesis, supporting details, introduction, body, and concluding paragraph.
Compare and order decimals and find their approximate location on a number line.

Science:

SC.6.E.6.2 Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.
How do the different landforms apply to Florida? Have these landforms changed over time?

Social Studies:

SS.6.G.2.1 Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.
Explain how major physical characteristics, natural resources, climate, and absolute and relative locations impacted the settlement & interactions of some of Florida's early inhabitants.

Reading and Language Arts:

LA.6.4.2.3 The student will write informational/expository essays (e.g., process, description, explanation, comparison/contrast, problem/solution) that include a thesis statement, supporting details, and introductory, body, and concluding paragraphs;
Write an essay about one of the early inhabitants of Florida. Include a thesis statement, supporting details, and introductory, body, and concluding paragraphs.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine that a Timucua village has 100 huts that are all different distances from the center hut each as shown below.

24.2 feet
14.1 feet
94.2 feet
84.7 feet
61.9 feet
2.8 feet
31.3 feet
54.5 feet
46.8 feet
74.6 feet

Put the huts in order from closest to farthest on a number line.

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:

Sixth Grade:

Classify animals into major groups
Use latitude and longitude to locate places and to identify climate
Record information related to habitats
Compare and order decimals and find their location on a number line

Science:

SC.6.L.15.In.a Classify animals into major groups, such as insects, fish, reptiles, mammals, and birds.

Make a list of the animals in the different habitats and classify them into major groups such as insects, fish, reptiles, mammals, and birds.

Social Studies:

SS.6.G.1.In.a Use lines of latitude and longitude to locate places and to identify climate and time zones.

Use latitude and longitude to locate places to identify a potential habitat, identify the climate of this habitat and the time zone it is in.

Reading and Language Arts:

LA.6.4.2.In.b Record information (e.g. observations, notes, lists, labels, charts) related to a topic.

Make a list of the different animals and plants in your favorite habitat. Write down one fact or characteristic about 10 of the animals or plants.

Mathematics:

MA.6.A.5.2 Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.

Imagine you have multiple groups of hermit crab shells, some are in pieces:

Collection A: 22.6 shells

Collection B: 18.1 shells

Collection C: 94.3 shells

Collection D: 89.9 shells

Collection E: 60.4 shells

Collection F: 8.5 shells

Collection G: 36.4 shells

Collection H: 50.7 shells

Collection I: 44.4 shells

Collection J: 77.8 shells

Put the shells in order from smallest to largest on a number line.