

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:

Third Grade:

Understand the role of the archaeologists and the importance of questions, discussing, & checking evidence.

Understand the role the environment played in the Windover people settling in Titusville.

Understand new vocabulary introduced.

Demonstrate knowledge of the Windover site through an expository/informational paragraph.

Construct and analyze a bar graph.

Science:

SC.3.N.1.5 Recognize that scientists question, discuss, and check each others' evidence and explanations.—Many archaeologists worked on digging up the graves and researching this site. Why is it so important that these archaeologists question, discuss, and check each other's evidence and explanations?

Social Studies

SS.3.G.4.1 Explain how the environment influences settlement patterns in the United States, Canada, Mexico, and the Caribbean.

What role did the environment play in the Windover people settling where they did?

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.3.1.6.1 The student will use new vocabulary that is introduced and taught directly;
What were some of the artifacts found at the Windover site and why were they important?

LA.3.4.2.3 The student will write informational/expository essays that contain at least three paragraphs and include a topic sentence, supporting details, and relevant information;
What was the Windover site and discuss why this site was important using the information you learned from the exhibit.

Mathematics:

MA.3.S.7.1 Construct and analyze frequency tables, bar graphs, pictographs, and line plots from data, including data collected through observations, surveys, and experiments.

Let's imagine that one of the scientists of the Windover site found 3 skulls, 10 femur bones, 18 ribs, and 12 tibias. Make a bar graph representing this data. Write down three observations about your bar graph.

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:

Third Grade:

Raise questions about the natural world and explore answers to these questions individually and in teams.

Explain how the physical features of prehistoric Florida affected the settlement patterns of prehistoric animals.

Have a basic knowledge and understanding of new vocabulary.

Have a basic understanding about the different time periods of prehistoric Florida and the animals that lived during these time periods.

Understand how the fractional part is related to the whole.

Measure objects using fractional parts.

Science:

SC.3.N.1.1 Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.

Explore the pre-historic fossils through touch and sight. Write down any questions you have about these fossils and discuss them with other students and write down possibly explanations for your questions.

Social Studies:

SS.3.G.4.1 Explain how the environment influences settlement patterns in the United States, Canada, Mexico, and the Caribbean.

SS.3.G.4.In.a Identify major ways environmental influences contribute to settlement patterns in the United States, such as settlement near water for drinking, bathing, and cooking; and settlement near land for farming.

How do you think the physical features in prehistoric Florida affected the settlement patterns of the prehistoric animals?

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.3.1.6.1 The student will use new vocabulary that is introduced and taught directly; What was the Pleistocene Epoch and what types of animals lived in prehistoric Florida during the Pleistocene Epoch?

LA.3.4.2.3 The student will write informational/expository essays that contain at least three paragraphs and include a topic sentence, supporting details, and relevant information; Write at least three paragraphs about the time periods in prehistoric Florida and the different animals that lived in prehistoric Florida during these time periods.

Mathematics:

MA.3.A.2.2 Describe how the size of the fractional part is related to the number of equal sized pieces in the whole.

Draw a picture of a bone and draw a line through it that represents the fraction $\frac{1}{2}$.

$$\frac{1}{2} + \frac{1}{2} = \underline{\hspace{2cm}}$$

MA.3.G.5.2 Measure objects using fractional parts of linear units such as $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{10}$. Measure the tapir jaw using units such as $\frac{1}{2}$, $\frac{1}{4}$, & $\frac{1}{10}$ and write down your measurement here _____

Also measure the horse foreleg and write down your measurement here _____

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:

Third Grade:

Understand the importance of a chickee.

Understand how the environment influenced where the Seminoles settled.

Use new vocabulary.

Compare a chickee to their home.

Summarize what they learned about Seminoles in a paragraph.

Solve addition facts with sums to 18.

Science:

SC.3.N.1.6 Infer based on observation.

A chickee is a shelter supported by posts, with a raised floor, a thatched roof and open sides.

What do you think the benefits of the chickee were based on your observations? Can you think of a situation where a shelter with a raised floor, thatched roof, and open sides would be useful?

Social Studies:

SS.3.G.4.1 Explain how the environment influences settlement patterns in the United States, Canada, Mexico, and the Caribbean.

How did the environment influence Seminoles to settle in Florida?

Reading and Language Arts:

Vocabulary:

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

LA.3.1.6.1 The student will use new vocabulary that is introduced and taught directly; What is a chickee and how is it different from your house?

LA.3.4.2.1 The student will write in a variety of informational/expository forms (e.g., rules, summaries, procedures, recipes, notes/messages, labels, instructions, graphs/tables, experiments, rubrics);

Write a summary on what you learned about the Seminoles today.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

$$13 \text{ chickees} + 5 \text{ chickees} =$$

$$4 \text{ chickees} - 3 \text{ chickees} =$$

$$9 \text{ Seminole Indians} + 9 \text{ Seminole Indians} =$$

$$12 \text{ Seminole Indians} + 5 \text{ Seminole Indians} =$$

$$8 \text{ Seminole Indians} + 7 \text{ Seminole Indians} =$$

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:

Third Grade:

Understand how the freezes of 1835, 1894, & 1895 affected the citrus groves in Florida.

Use a map to locate the Indian River.

Measure the distance from your hometown to the Indian River.

Describe what the Florida Citrus Exchange is an essay.

Solve addition facts with sums to 18 and related subtraction one digit fact families.

Science:

SC.3.L.17.1 Describe how animals and plants respond to changing seasons.

How did the freezes in February 1835, December 1894, and February 1895 affect the citrus groves in the state of Florida? How did it affect Dummitt's citrus grove?

Social Studies:

SS.3.G.1.6 Use maps to identify different types of scale to measure distances between two places.

Locate the Indian River on a map and your hometown, measure the distance from a certain point on the Indian River to your hometown using the map scale.

Reading and Language Arts:

LA.3.4.2.3 The student will write informational/expository essays that contain at least three paragraphs and include a topic sentence, supporting details, and relevant information; Using what you learned today write an essay on the Florida citrus industry and what the Florida Citrus Exchange is. Make your essay three paragraphs long and be sure your essay has a topic sentence and supporting details.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

$$12 \text{ oranges} + 5 \text{ oranges} =$$

$$5 \text{ oranges} - 3 \text{ oranges} =$$

$$12 \text{ oranges} + 8 \text{ oranges} =$$

$$5 \text{ oranges} + 3 \text{ oranges} =$$

$$7 \text{ oranges} + 7 \text{ oranges} =$$

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 fact 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:

Third Grade:

Raise questions about the natural world and investigate them in teams-write down 2 questions about the turpentine industry and discuss possible answers to questions in teams.

Use different technology sources to gather information about the turpentine industry.

Use primary and secondary sources

Identify primary and secondary sources

Use the internet and go to different websites to gather additional information about the turpentine industry.

Use Microsoft Word to type a one page report on what you learned from the websites you went to about the turpentine industry.

Solve addition facts with sums to 18 and related subtraction one-digit fact families.

Science:

SC.3.N.1.1 Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.

Explore the turpentine exhibit and write down at least two questions that you have about the turpentine industry. Get into teams and come up with answers to your questions.

Social Studies:

SS.3.A.1.2 Utilize technology resources to gather information from primary and secondary sources.

Using different technology sources gather more information about the turpentine industry. Use both primary and secondary sources when gathering information write down what sources you use, whether they were primary or secondary, and what you learned from them.

Reading and Language Arts:

LA.3.6.4.1 The student will use appropriate available technologies to enhance communication and achieve a purpose (e.g., video, websites); and

LA.3.6.4.2 The student will use digital tools (e.g., word processing, multimedia authoring, web tools, graphic organizers) to present and publish in a variety of media formats.

Research the turpentine industry using different websites and type at least one page discussing the websites and what additional information your learned about the turpentine industry.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

14 lbs. of turpentine + 4 lbs. of turpentine =

9 lbs. of turpentine – 6 lbs. of turpentine =

8 lbs. of turpentine - 4 lbs. of turpentine =

9 lbs. of turpentine + 7 lbs. of turpentine =

13 lbs. of turpentine + 2 lbs. of turpentine =

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:

Third Grade:

Understand how Cracker horses adapted to changing seasons.

Use maps to measure the distance between two places.

Write song lyrics about the Cracker way of life.

Solve addition facts with sums to 18 and related subtraction one digit fact families.

Science:

SC.3.L.17.1 Describe how animals and plants respond to changing seasons.

Do you think Cracker horses had to adapt to changing seasons, why or why not?

Social Studies:

SS.3.G.1.6 Use maps to identify different types of scale to measure distances between two places.

The first working ranches in Florida were established near St. Augustine, Florida. Using a map's scale measure the distance between your hometown and St. Augustine Florida.

Reading and Language Arts:

LA.3.4.1.2 The student will write a variety of expressive forms (e.g., chapter books, short stories, poetry, skits, song lyrics) that may employ, but not be limited to, figurative language (e.g., simile, onomatopoeia), rhythm, dialogue, characterization, plot, and appropriate format. Cracker songs can be about a variety of topics such as swamps, survival, and a Cracker way of life. Use your imagination and write song lyrics about the Cracker way of life based on what you learned today.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

$$13 \text{ Cracker horses} + 4 \text{ Cracker horses} =$$

$$9 \text{ Cracker horses} - 7 \text{ Cracker horses} =$$

$$8 \text{ Cracker horses} - 6 \text{ Cracker horses} =$$

$$10 \text{ Cracker horses} + 7 \text{ Cracker horses} =$$

$$14 \text{ Cracker horses} + 4 \text{ Cracker horses} =$$

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:

Third Grade:

Have a basic understanding of how trains work.

Understand what would have happened to the transportation of goods and services if the railroad did not exist.

Come up with ideas of how goods and services would have been transported without the railroad.

Write a short essay on Henry Flagler and his accomplishments.

Include a topic sentence, supporting details, and relevant information in short essay.

Solve addition facts with sums to 18 and related subtraction one-digit fact families.

Science:

SC.3.N.3.2 Recognize that scientists use models to help understand and explain how things work.

How does the model train help you understand how trains work? Write down some observations you make after running the model train along the track.

Social Studies:

SS.3.E.1.3 Recognize that buyers and sellers interact to exchange goods and services through the use of trade or money.

Buyers and sellers interact with one another in order to exchange goods and services through the use of trade or money. The railroad helped to transport some of these goods and services. What would have happened if the railroad had not existed? How do you think some of these goods and services would have been moved from one place to another instead?

Reading and Language Arts:

LA.3.4.2.3 The student will write informational/expository essays that contain at least three paragraphs and include a topic sentence, supporting details, and relevant information; Write a short essay on Henry Flagler and his accomplishments with the Florida railroad. Your essay should be at least 3 paragraphs long, have a topic sentence, supporting details, and relevant information.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

14 trains + 4 trains =

8 trains – 7 trains =

8 trains – 1 trains =

11 trains + 4 trains =

13 trains + 3 trains =

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:

Third Grade:

Understand how manatees respond to changing seasons.

Use a map and locate your hometown and a manatee sanctuary.

Measure the distance between your hometown and a manatee sanctuary using the maps scale.

Write a short story, poem, or song lyric about manatees including facts you learned today.

Solve addition facts with sums to 18 and related subtraction one-digit fact families.

Science:

SC.3.L.17.1 Describe how animals and plants respond to changing seasons.

How do manatees respond to the changing seasons?

Social Studies:

SS.3.G.1.6 Use maps to identify different types of scale to measure distances between two places.

Use a map and locate your hometown and the location of a manatee sanctuary. After locating these two places measure the distance between the two places using the maps scale.

Reading and Language Arts:

LA.3.4.1.2 The student will write a variety of expressive forms (e.g., chapter books, short stories, poetry, skits, song lyrics) that may employ, but not be limited to, figurative language (e.g., simile, onomatopoeia), rhythm, dialogue, characterization, plot, and appropriate format. Write a short story, poem, or song lyrics about manatees. Your short story, poem, or song lyric should include facts you learned today about manatees.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

12 manatees + 4 manatees =

9 manatees – 7 manatees =

4 manatees – 2 manatees =

12 manatees + 1 manatee =

8 manatees + 7 manatees =

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:

Third Grade:

Understand what type of energy the lighthouse exhibits.

Describe if the exhibit is about history, geography, or both and why.

Record the different sources the lighthouse used for light.

Solve addition facts with sums to 18 and related subtraction one-digit fact families.

Science:

SC.3.P.10.1 Identify some basic forms of energy such as light, heat, sound, electrical, and mechanical.

SC.3.P.10.In.a Recognize forms of energy, such as light, heat, electrical, and energy of motion.

SC.3.P.10.In.b Recognize examples of the use of energy, such as electrical (radio, freezer) and energy of motion (bowling, wind).

SC.3.P.10.In.c Identify that light may come from different sources, such as the Sun or electric lamp.

What type of energy does the lighthouse exhibit?

Social Studies:

SS.3.A.1.3 Define terms related to the social sciences.

SS.3.A.1.Su.c Recognize that history is about events from the past and geography is about places.

Does the exhibit about the Cape Canaveral Lighthouse discuss history, geography, or both and why?

Reading and Language Arts:

LA.3.4.2.2 The student will record information (e.g., observations, notes, lists, charts, map labels, legends) related to a topic, including visual aids as appropriate;

While viewing the Cape Canaveral Lighthouse exhibit record the different sources of light the lighthouse used over time.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

$$12 \text{ boats} + 5 \text{ boats} =$$

$$8 \text{ boats} - 7 \text{ boats} =$$

$$7 \text{ boats} - 2 \text{ boats} =$$

$$13 \text{ boats} + 3 \text{ boats} =$$

$$2 \text{ boats} + 7 \text{ boats} =$$

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:

Third Grade:

Identify ways the Taylor family used energy in their daily lives.

Use technology resources to gather information about the Taylor family and identify primary and secondary sources.

Produce a narrative about the Taylor family using pictures with dictated words and phrases.

Solve addition facts with sums to 18 and related subtraction one-digit fact families.

Science:

SC.3.P.10.1 Identify some basic forms of energy such as light, heat, sound, electrical, and mechanical.

SC.3.P.10.In.b Recognize examples of the use of energy, such as electrical (radio, freezer) and energy of motion (bowling, wind).

How do you think the Taylor family used energy in their daily lives?

Social Studies:

SS.3.A.1.2 Utilize technology resources to gather information from primary and secondary sources.

SS.3.A.1.In.b Use technology resources to gather information about a historical person or event.

Use technology resources to gather information about the Taylor family. Make a list of your sources and label them primary and secondary sources.

Reading and Language Arts:

LA.3.4.1.Su.a Produce a narrative by creating a picture that tells a story about familiar persons, objects, or actions with dictated words and phrases.

Produce a narrative about the Taylor family using pictures with dictated words and phrases.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

Grace Taylor also liked to paint and sketch.

12 paintings + 4 paintings =

8 paintings – 7 paintings =

4 paintings – 2 paintings =

12 sketches + 6 sketches =

14 sketches + 2 sketches =

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:

Third Grade:

Make observations about Florida's early inhabitants in a group.
Use technology resources and gather information about one of Florida's early inhabitants.
Record your observations about the exhibit.
Solve addition facts with sums to 18 and related subtraction one-digit fact families.

Science:

SC.3.N.1.In.b Work with a group to make observations and identify results.
Work in a group and make observations about the early inhabitants of Florida.

Social Studies:

SS.3.A.1.In.b Use technology resources to gather information about a historical person or event.
Use technology resources and gather information about one of Florida's early inhabitants.

Reading and Language Arts:

LA.3.4.2.2 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 about the Early Inhabitants Exhibit.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

The Timucua's were one of the largest groups of Native Americans in Florida. Each village had as many as 200 round/wooden huts covered with palm fronds and mud.

$$14 \text{ huts} + 2 \text{ huts} =$$

$$9 \text{ huts} + 9 \text{ huts} =$$

$$12 \text{ huts} + 3 \text{ huts} =$$

$$9 \text{ huts} - 3 \text{ huts} =$$

$$8 \text{ huts} - 7 \text{ huts} =$$

$$3 \text{ huts} - 1 \text{ hut} =$$

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:

Third Grade:

Make inferences in regards to the Florida horse conch shell based on observation.

Analyze primary and secondary sources to learn more about the Florida horse conch.

Understand that the Florida horse conch is significant to the state because it is the Florida state shell.

Use digital tools to produce a picture of your favorite shell.

Solve addition facts with sums to 18 and related subtraction one-digit fact families.

Science:

SC.3.N.1.6 Infer based on observation.

What can you infer on Florida's state shell, the Florida horse conch, based on observation?

Social Studies:

SS.3.A.1.1 Analyze primary and secondary sources.

Analyze primary and secondary sources to learn more about the Florida horse conch. Why is the Florida horse conch significant in the state of Florida?

Reading and Language Arts:

LA.3.6.4.In.b Use digital tools (e.g., writing, drawing software) to produce pictures, letters, and words.

Use digital tools to produce a picture of your favorite shell from the shell collection.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

14 scallops + 3 scallops =

9 cone shells + 2 cone shells =

13 Florida horse conchs + 3 Florida horse conchs =

7 scallops – 3 scallops =

4 scone shells – 2 cone shells =

8 Florida horse conchs – 5 Florida horse conchs =

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

Third Grade:

List the animals that live in each habitat and classify them into major groups.

Understand the difference between geography and history and economics.

Pick a favorite habitat and write down resources you could use to learn more information about this habitat.

Solve addition facts with sums to 18 and related subtraction one-digit fact families.

Science:

SC.3.L.15.1 Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors.

Observe the habitats and different animals that live in each habitat. Make a list of the animals and classify them into major groups: mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs.

Social Studies:

SS.3.A.1.In.c Relate the term “history” to events from the past, “geography” to locations, and “economics” to money.

Imagine that the beach habitat represents Cocoa Beach. Is this an example of history, geography, or economics and why?

Reading and Language Arts:

LA.3.6.2.In.b Use resources (e.g., pictures, nonfiction books) to obtain information.

Use resources to obtain more information about your favorite habitat. Write down what resources you use and one fact you learned from each source. Find three resources.

Mathematics:

MA.3.A.1.In.b Solve addition facts with sums to 18 and related subtraction one-digit fact families using the formal algorithm with numerals and signs (+, -, =).

12 Bald Eagles + 5 Bald Eagles =

8 Brown Pelicans + 7 Pelicans =

16 Ghost Crabs + 2 Ghost Crabs =

9 Diamondback Rattle Snakes – 3 Diamondback Rattle Snakes =

7 Great Blue Herons – 2 Great Blue Herons =

4 Sea horses – 3 Sea horses =