

## *ARTS and SCIENCE INTEGRATION LESSON PLAN*

**GRADE LEVEL:** Fourth Grade

**Teacher Name:**

**Provider Name:** JUPITER INLET LIGHTHOUSE AND MUSEUM

**Date:** April 29, 2016

**UNIT LESSON:**

**Jupiter Inlet Lighthouse: Florida Science and Technology of the 19<sup>th</sup> Century.**

**ESSENTIAL QUESTION(S):**

- Who are the engineers that designed and built the Jupiter Inlet Lighthouse?
- What is the purpose of a “FIRST ORDER” Lighthouse?
- Why was a lighthouse built at Jupiter Inlet?
- How did the Jupiter Inlet Lighthouse create light energy from 1860-1886?
- How did the Jupiter Inlet Lighthouse create light energy from 1886-1928?
- How did the Jupiter Inlet Lighthouse create light energy from 1928-Present?
- How is light energy used to identify a lighthouse?
- How is color used to identify a lighthouse?
- How is “Maritime Math” used in the real world?

**ART STANDARD(S):**

**VA.4.H.1.2-** Identify suitable behavior for various art venues and events.

**VA.4.H.2.3-** Identify reasons to display artwork in public areas.

**VA.4.F.2-** Careers in and related to the arts significantly impact global economies.

**VA.4.F.3.2-** Collaborate with peers in the art room to achieve a common art goal.

**TH.4.H.3.2-** Compare a historical play with actual historical events.

**FLORIDA STANDARD(S) & NGSSS:**

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

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

**SC.4.P.10.1-** Observe and describe some basic forms of energy including light, sound and energy of motion.

**LAFS.4.RI.3.7-** Interpret information presented visually, orally, or quantitatively and explain how information contributes to the text in which it appears.

**LAFS.4.W.3.8-** Recall relevant information from experiences or gather relevant information and provide a list of sources.

**MAFS.4.G.1. -** Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

	MAFS.4.MD.1- Solve problems involving measurement and conversion of measurements.
<p><b>ART CONTENT LEARNING GOAL</b></p> <ul style="list-style-type: none"> <li>• Identify professions/vocations (architect, curator, tour guide, historic re-enactor) related to the arts.</li> <li>• Work with peers to create art that demonstrates understanding of a lighthouse.</li> <li>• Recognize that visual information (artwork, video, photos, text panels) contribute to understanding a topic or text.</li> <li>• Present a historical skit about Jupiter Inlet Lighthouse.</li> </ul>	<p><b>CORE CONTENT LEARNING GOAL:</b></p> <ul style="list-style-type: none"> <li>• Use math to solve real world 19<sup>th</sup> century problems</li> <li>• Identify the natural resources and technology used by lighthouses to create light energy.</li> <li>• Write a narrative about the Jupiter Inlet Lighthouse using facts and details to inform others.</li> </ul>
<p><b>I CAN:</b></p> <ul style="list-style-type: none"> <li>• I can identify the coastal waters of Florida that can be seen from the Jupiter Inlet Lighthouse. (SS.4.G.1.1)</li> <li>• I can identify the US Army engineers that designed and built the lighthouse. (LAFS.4.W.3.8)</li> <li>• I can explain why a lighthouse was built at Jupiter.</li> <li>• I can describe the technology the Jupiter Inlet Lighthouse used to create light energy. (SC.4.P.10.1)</li> <li>• I can identify the elevation (146 ft) of Jupiter Inlet Lighthouse. (LAFS.4.RI.3.7)</li> <li>• I can use “Maritime Math” to solve real world problems. (MAFS.4.MD.1)</li> <li>• I can explain how to identify Jupiter Inlet Lighthouse by its “day mark” and “characteristic.” (LAFS.4.RI.3.7)</li> <li>• I can use geometric shapes (trapezoid, rectangle, triangle, circle) to make a two dimensional artwork of Jupiter Lighthouse. (MAFS.4.G.1)</li> <li>• I can use geometric shapes (cone, cylinder) to make a three dimensional model of Jupiter Lighthouse.</li> <li>• I can present a historic skit about the Jupiter Inlet Lighthouse. (TH.4.H.3.2)</li> </ul>	
<p><b>VOCABULARY:</b></p> <p>bearing: a nautical term used to express the direction to an object.</p> <p>characteristic: a lighthouse’s distinct light signature or flashing cycle.</p> <p>clinometer: a navigation instrument used to measure vertical angle.</p> <p>compass: a navigation instrument used to measure direction or bearing.</p> <p>day mark: a lighthouse’s distinct color scheme.</p>	

**degree:** 1. A standard unit of measure used to express vertical angle.

2. A standard unit of measure used to express the direction or bearing to a point.

**elevation:** the height above sea level of a specific point.

**First Order Fresnel Lens:** the most powerful lighthouse lens. A First Order Lighthouse warns ships that they are getting too close to land, shoals or reefs that can cause a shipwreck.

**focal plane:** the height above sea level of the FRESNEL LENS.

**fuel:** a combustible form of liquid energy used to produce light and heat.

**illuminating apparatus:** technical equipment that creates light energy from an energy source; oil lamps, electric lamps, and light bulbs are examples of technical equipment that create light energy.

**kerosene:** a fuel produced from crude oil.

**landfall:** a nautical term used to describe a ship that is approaching the shallow waters of a land mass. When a ship is "making landfall" it is in danger of being shipwrecked.

**lard oil:** a fuel that is produced from animal fat.

**mil:** 1. A metric unit of measure used to express vertical angle.

2. A metric unit of measure used to express direction or bearing to a point.

**technology:** equipment designed for a specific task. Creating light energy is an example of a specific task.

**vertical angle:** the vertical measurement in degrees or mils from sea level to a specific point in elevation.

#### **TECHNOLOGY & MATERIALS:**

- Computer
- LCD projector and screen
- Internet map of Florida, The Bahamas, and Cuba (The Straits of Florida)
- Markers, crayons, colored pencils
- Craft paper or chart paper for murals and drawings
- Scratch paper
- 4 function calculator
- 12 inch ruler
- #2 pencils
- Behavior Standards and Student Etiquette (attached to this lesson plan).
- Museum video "The Jupiter Inlet Lighthouse."
- Museum two dimensional life sized drawing of a Meade Hydraulic Illuminating Apparatus.
- Jupiter Inlet Lighthouse Carlisle and Finch electric Illuminating Apparatus.
- Jupiter Inlet Lighthouse First Order Fresnel Lens.
- MUSEUM EXHIBIT RESEARCH SHEET (attached to this lesson plan)
- HISTORIC SITE RESEARCH SHEET (attached to this lesson plan)

#### **LESSON :**

##### **PRE-VISIT CLASSROOM ACTIVITIES**

- Go to [jupiterlighthouse.org](http://jupiterlighthouse.org)
  1. Click "Education"
  2. Click "Teacher Resources"
  3. Click "Jupiter Inlet Lighthouse: Florida Science and Technology of the 19<sup>th</sup> Century" to open the Lesson Plan.
- Print the MUSEUM RESEARCH and HISTORIC SITE RESEARCH sheets attached to this lesson plan.

- **Repro a copy of the MUSEUM RESEARCH and HISTORIC SITE RESEARCH sheets for each student.**
- **Teach and review vocabulary. (ESOL STRATEGY “Vocabulary Development”)**
- **Using the LCD projector and screen project a map of Florida, The Bahamas, and Cuba.**
- **Identify Florida, The Bahamas, and Cuba to the students.**
- **Using the map of Florida, The Bahamas, and Cuba identify the Atlantic Ocean, Straits of Florida, and Gulf of Mexico.**
- **Review the MUSEUM RESEARCH and HISTORIC SITE RESEARCH questions with the class to gain prior knowledge and familiarize the class with the questions.**
- **Collect the MUSEUM RESEARCH and HISTORIC SITE RESEARCH sheets after review. You will redistribute these sheets for use at the Museum the day of the Field Trip Experience.**
- **Review the “Behavior Standards and Student Etiquette for the Jupiter Inlet Lighthouse and Museum” that is attached to this lesson plan.**

#### **MUSEUM AND HISTORIC SITE VISIT ACTIVITIES**

- **Divide the class into 2 groups. Groups will rotate between the Museum and Historic Site.**
- **Group 1 will tour the MUSEUM first.**
- **Group 2 will tour the HISTORIC SITE first.**
- **Distribute the MUSEUM RESEARCH and HISTORIC SITE RESEARCH Sheets to the students. Museum will provide additional copies if needed.**

#### **MUSEUM GALLERY ACTIVITIES**

- **Review the questions on the MUSEUM RESEARCH SHEET before entering the museum.**
- **Enter the Museum Lobby and view the video that is on the screen to get a “bird’s eye view” of the Jupiter Inlet Lighthouse Outstanding Natural Area.**
- **Follow the tour guide to the Lighthouse exhibit and video room.**
- **View the video titled “The Jupiter Inlet Lighthouse” to gather additional relevant information about the historic site.**
- **After interpreting the video, depart the museum and assemble the class on the shoreline by the river.**
- **Discuss the MUSEUM RESEARCH SHEET questions to assess student ability to recall relevant information and “fill in the blank” from memory.**

**Answers:**

- 1. Reefs, shoals**
- 2. 20, 6**
- 3. 48**
- 4. 3**
- 5. Clean, paint, refuel**
- 6. First**
- 7. First**
- 8. Oldest**

#### **HISTORIC SITE ACTIVITIES**

- **Follow the tour guide into the Historic Site.**
- **Follow the tour guide to the Seminole Chickee.**

- Locate the kiosk titled “The New Peace” to interpret and gather information relevant to the Lighthouse Keepers and the Seminoles.
  1. Ask the students why the Seminoles visited the Lighthouse Keepers. (To establish trade)
  2. Ask the students to identify the Assistant Lighthouse Keeper that photographed the Seminoles. (Assistant Keeper Melville Spencer photographed the Seminoles)
- Follow the tour guide to the east end of the Pioneer paver brick pathway.
- Stop and observe the lighthouse. Ask the students if they can recognize the geometric shapes that could be used to make a two dimensional drawing of the lighthouse:
  1. Tower is a trapezoid.
  2. Lantern room is a rectangle.
  3. Roof is a triangle.
  4. Lantern storm panes are triangles.
  5. Watch room is a rectangle.
  6. Watch room port holes are circles.
  7. Tower windows are rectangles.
- Follow your tour guide to the blue Jupiter Inlet Lighthouse historic marker. Look up at the lighthouse.
- Listen as the tour guide identifies:
  1. The elevation of the Jupiter Inlet Lighthouse. (146 feet above sea level)
  2. The “day mark” of the lighthouse. (Red tower/Black lantern)
  3. The “characteristic” of the lighthouse. (2 flashes every 30 seconds)
- Follow the tour guide to the Keepers Workshop.
- Enter the Keepers Workshop with the tour guide. Look as the tour guide identifies the life size two dimensional drawing of the “1853 Meade Hydraulic Illuminating Apparatus” used from 1860-1886.
- Listen as the tour guide identifies the natural resources this 19<sup>th</sup> century technology used to create light energy:
  1. The illuminating apparatus used LARD OIL from 1860-1886.
  2. The illuminating apparatus used KEROSENE from 1886-1900.
  3. It burned 2 ½ gallons of fuel per night.
- Follow your tour guide to the deck by the lighthouse.
- Listen as the tour guide describes the 20<sup>th</sup> century technology that the lighthouse has used to create light energy from 1928-present:
  1. The illuminating apparatus is a Carlisle and Finch electric lamp.
  2. It is powered by 120 volt A/C electrical current.
  3. It uses a 1000 watt bulb to produce light energy.
- Follow the tour guide up the steps and into the base of the lighthouse.
- Find the large silver “oil butt” that was used to store lard oil and kerosene.
- Examine the oil butt and determine its capacity. (100 gallons)
- Follow your tour guide up the spiral staircase to the watch room.
- Walk out on to the gallery deck of the lighthouse.

- Observe the coastal waters that can be seen from the gallery deck of the Jupiter Inlet Lighthouse:
  1. Look NORTH and view the ATLANTIC OCEAN.
  2. Look EAST and view the northern end of the STRAIT of FLORIDA.
  3. Listen as the tour guide identifies the distance to the horizon (14 miles).
- Follow your tour guide back into the watch room to climb down the lighthouse.
- Before descending the tour guide will direct students to:
  1. Look up into the FIRST ORDER LENS and observe the prisms and lenses.
  2. Look at the Carlisle and Finch electric lamp on the brass tripod in the center of the lens that creates the light energy used today.
  3. Look for evidence of the spectrum of light (ROY G BIV) on the floor, walls, or stairs inside the lighthouse. (This “chromatic effect” is created by sunlight passing through the prisms when the sun is at the correct position in the sky.)
- Upon reaching the base of the lighthouse, assemble on the deck at the base of the stairs.
- Follow your tour guide to the Museum.

#### POST –VISIT CLASSROOM ACTIVITIES

- Review the MUSEUM and HISTORIC SITE research questions as a class.
- Ask the class to recall:
  1. The engineer and architect that designed the Jupiter Inlet Lighthouse. (Lt George G. Meade)
  2. The engineer that built the Jupiter Inlet Lighthouse. (Capt. Edward Yorke)
  3. The elevation of the Jupiter Inlet Lighthouse. (146 feet above sea level)
  4. The amount of lard oil or kerosene the Meade Hydraulic Illuminating Apparatus burned each night. (2 ½ gallons)
  5. The capacity of the “oil butt” at the base of the lighthouse that stored lard oil and kerosene. (100 gallons)
  6. The colors of the day mark of the Jupiter Inlet Lighthouse. (Red tower/Black lantern)
  7. The characteristic of the Jupiter Inlet Lighthouse. (2 flashes every 30 seconds)
  8. Why the lighthouse was built at Jupiter Inlet. (To warn ships away from landfall as they enter the northern end of the Strait of Florida)
  9. The energy sources the lighthouse used to create light energy from 1860 to present. (Lard oil was used from 1860-1886. Kerosene was used from 1886-1928. Electricity was used from 1928-Present)
  10. Discuss how lighthouse technology affected ships transiting the coast of Florida. Lighthouse technology prevented shipwrecks in Florida by:
    - a. Warning ships away from reefs and shoals that cause shipwrecks.
    - b. Provided a reference point to compute a ship’s location.
- EXTRA CREDIT: Go with your family to the Lighthouse Park athletic fields to observe the Lighthouse after sunset or before sunrise. Observe and describe the light energy that is being emitted by the Jupiter Inlet Lighthouse. (Notice the four focused beams that sweep the sky.)

- Using the computer, LED projector, and screen review the map of Florida, The Bahamas, and Cuba.
- Review the location of the coastal waters around Florida, The Bahamas, and Cuba. (ATLANTIC OCEAN, STRAITS of FLORIDA, GULF of MEXICO)
- Teach the formula used to compute “distance to horizon.” The distance to horizon is computed by multiplying the square root of the elevation of the lighthouse by the constant 1.17.

**Example of DISTANCE TO HORIZON FORMULA**

- Elevation of Jupiter Inlet Lighthouse is 146 feet.
  - Square root of elevation is 12.075.
  - $12.075$  (square root of 146)  $\times$  1.17 (constant) = 14.1 miles to horizon.
- Teach the formula to compute DISTANCE FROM A KNOWN POINT using “vertical angle.” Distance is computed by dividing the “tan” of the vertical angle of the lighthouse into the elevation of the lighthouse.

**Example of how to compute DISTANCE FROM A KNOWN POINT using vertical angle:**

1. A clinometer is used to measure “vertical angle” in degrees.
2. Using the clinometer, the navigator on a ship measures the vertical angle of the Jupiter Inlet Lighthouse and records a reading of 2 degrees.
3. Each degree of vertical angle equates to a “tan” on a “Table of Tan.”
4. 2 degrees equals .0349 on the “Table of Tan.”
5. The elevation of the Jupiter Inlet Lighthouse is 146 feet.
6. Divide the elevation of the lighthouse (146 feet) by the tan of 2 degrees (.0349).
7. 146 feet divided by .0349 equals 4183 feet.
8. You are a distance of 4183 feet from the Jupiter Inlet Lighthouse.

## ASSESSMENT: (Formative)

- **Divide the class into teams of 3 students each:**
  1. **Distribute the following materials to each team:**
    - a. **Markers, crayons, colored pencils**
    - b. **Sheets of craft paper or chart paper**
    - c. **A ruler**
    - d. **#2 pencils**
  2. **Instruct each team to draw a two dimensional lighthouse using geometric shapes:**
    - a. **The tower is a red trapezoid**
    - b. **The tower windows are black rectangles.**
    - c. **The lantern is a black rectangle.**
    - d. **The lantern windows are small triangles.**
    - e. **The roof is a black triangle.**
  3. **Instruct each team to draw an outline map of Florida, The Florida Keys, The Bahamas, and Cuba. (These are the land masses along the Straits of Florida)**
  4. **Instruct each team to label the Atlantic Ocean, Straits of Florida, and The Gulf of Mexico on their outline map.**
  5. **Instruct each team to write a historic narrative using facts about the Jupiter Inlet Lighthouse. Narrative should include:**
    - a. **Who designed the Jupiter Inlet Lighthouse? (Lieutenant George Meade)**
    - b. **Who constructed the Jupiter Inlet Lighthouse? (Captain Edward Yorke and a 20 man crew)**
    - c. **How many months it took to build the Lighthouse. (6 months)**
    - d. **Why the lighthouse was built at Jupiter Inlet. (To warn ships that they are making landfall. If they get too close to the reefs and shoals off Jupiter Inlet they will shipwreck)**
    - e. **The elevation of the Jupiter Inlet Lighthouse. (146 feet above sea level)**
    - f. **The order of the Jupiter Inlet Light. (A FIRST ORDER LIGHT- the most powerful)**
    - g. **The day mark of the Jupiter Inlet Lighthouse. (Red tower, Black lantern)**
    - h. **The characteristic of the Jupiter Inlet Lighthouse. (2 flashes every 30 seconds)**
    - i. **When the Jupiter Inlet Lighthouse was first lit. (July 10, 1860)**
    - j. **The first technology and energy source (fuel) used to create light energy in 1860. (1853 Meade Hydraulic Illuminating Apparatus used lard oil)**
    - k. **The amount of fuel the lighthouse used each night. (2 ½ gallons)**
    - l. **How far the lighthouse reaches to the horizon to warn ships away from landfall. (14 miles)**
- **Have each team present a historic skit about the Jupiter Inlet Lighthouse.**

**Teams will:**

  1. **Present their skit as Lieutenant George Meade and Captain Edward Yorke. (Give extra credit if presented in costume!)**
  2. **Use the facts of their narrative to develop a script.**



3. Use the drawing of the outline map of FLORIDA, The BAHAMAS, and CUBA as a prop to identify the ATLANTIC OCEAN and STRAITS OF FLORIDA.
4. Use their two dimensional lighthouse drawing as a prop to identify the day mark of the Jupiter Inlet Lighthouse.
5. Identify the characteristic of the Jupiter Inlet Lighthouse.  
(2 flashes every 30 seconds)
6. Compare the information presented in the historic skits to the facts of the historic narratives.

#### MARITIME MATH

- Distribute calculators, scratch paper and pencils to each student.
- Read the following word problem to the class. As you read the word problem students must record:
  1. Who is computing the distance from the Jupiter Lighthouse to the S.S. Victor?  
(The navigator)
  2. The instrument he is using to measure vertical angle. (A clinometer)
  3. The vertical angle of the lighthouse. (3 degrees)
  4. The tan of 3 degrees. (.0524)
  5. The elevation of the Jupiter Inlet Lighthouse. (146 feet)

#### MARITIME MATH WORD PROBLEM #1

"It is night. The navigator on the S.S. Victor sees the characteristic of the Jupiter Inlet Lighthouse as he enters the Straits of Florida. He needs to compute his distance from the lighthouse to avoid landfall. He measures the vertical angle of the lighthouse using his clinometer. He records a clinometer reading of 3 degrees. The tan of 3 degrees is .0524. He looks at his map and records the elevation of the Jupiter Inlet Light. The elevation is 146 feet."

Solve this DISTANCE FROM A KNOWN POINT problem using the data in the word problem # 1.

Round your answer to the nearest foot.

1. How far is the S.S. Victor from the Jupiter Inlet Lighthouse?

Solution: 146 feet (elevation of lighthouse) divided by .0524 (tan of 3 degrees) = 2786 feet

#### MARITIME MATH WORD PROBLEM #2

"The oil butt in the lighthouse holds 100 gallons of lard oil. The 1853 Meade Hydraulic Illuminating Apparatus uses 2 ½ gallons of lard oil each night."

Solve this UNIT OF MEASURE problem using the data in word problem # 2.

2. How many nights of fuel is in the oil butt?

Solution: 100 gallons divided by 2.5 gallons per night = 40 nights.

**TEST TAKING STRATEGIES:**

- Read each question carefully to make sure you understand what it is asking.
- Study any artwork, pictures, or captions on text panels and exhibits.
- Plan to include **EXAMPLES** and **DETAILS** in your responses.

**ESOL STRATEGIES:**

- Cooperative and collaborative learning with group projects.
- Vocabulary development.
- Use of realia, artwork, pictures and drawings to reinforce understanding.

## MUSEUM RESEARCH

Instructions: Follow your tour guide into the lobby of the Museum. View the video that is on the screen in the lobby to get a “bird’s eye view” of the Jupiter Inlet Lighthouse Outstanding Natural Area.

After viewing the video in the lobby, follow the tour guide into the museum video room. View the video “The Jupiter Inlet Lighthouse” to learn interesting facts about the lighthouse. Recall this information from memory to complete the following sentences:

1. The Jupiter Inlet Lighthouse warns ships away from the \_\_\_\_\_ and \_\_\_\_\_ of Florida that can cause shipwrecks.
2. Captain Edward Yorke and his \_\_\_\_\_ man crew built the lighthouse in \_\_\_\_\_ months.
3. The Jupiter Inlet Lighthouse is built on a hill that is \_\_\_\_\_ feet high.
4. \_\_\_\_\_ keepers were required to run the light.
5. The keepers daily tasks were to \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ the lighthouse.
6. A \_\_\_\_\_ Order Fresnel Lens is the most powerful.
7. The Jupiter Inlet Lighthouse is a \_\_\_\_\_ Order Lighthouse.
8. Jupiter Inlet Lighthouse is the \_\_\_\_\_ First Order Lighthouse in Florida.

## HISTORIC SITE RESEARCH

Instructions: Follow the tour guide to the Seminole Chickee. Find the kiosk titled "The New Peace." Use the text and images to answer questions 1 and 2.

1. Why did the Seminoles visit the Lighthouse Keepers?
2. Name the Assistant Light Keeper that photographed the Seminoles.

Instructions: Follow the tour guide to the end of the Pioneer Paver Pathway. Observe the lighthouse before answering question 3.

3. Identify the geometric shapes that could make a two dimensional drawing of a lighthouse. (Hint: Think about a trapezoid, rectangle, triangle, square)

Instructions: Follow the tour guide to the blue Jupiter Inlet Lighthouse Historic marker. Listen to the tour guide for answers to questions 4, 5, and 6.

4. What is the elevation of the Jupiter Inlet Lighthouse?
5. What is the day mark of the Jupiter Inlet Lighthouse?
6. What is the characteristic of the Jupiter Inlet Lighthouse?

Instructions: Follow the tour guide to the Keepers Workshop. Listen to the tour guide for answers to question 7.

7. How many gallons of fuel did the 1853 Meade Hydraulic Illuminating Apparatus use each night?

Instructions: Follow the tour guide to the base of the lighthouse. Study the large silver "oil butt" at the base of the tower to answer question 8.

8. How many gallons of fuel can be stored in the oil butt?

Instructions: Climb the lighthouse with your tour guide. Step out onto the gallery deck. Observe the surrounding bodies of water to answer question 9 through 11.

- a. Look NORTH and view the ATLANTIC OCEAN.
- b. Look EAST and view the northern end of the STRAITS of FLORIDA.

9. Do you see any ships in the STRAITS of FLORIDA?
10. Is the ship traveling NORTH or SOUTH?
11. How far away do you think the ship is from the lighthouse?

(Hint: The horizon is 14 miles away. If the ship is half way between the lighthouse and the horizon it is about 7 miles away.)

## PREPARING FOR YOUR VISIT

### Scheduling Information:

Download Performance Curriculum and Group Tour Form at  
[http://www.jupiterlighthouse.org/jupiter-lighthouse\\_teacher.php](http://www.jupiterlighthouse.org/jupiter-lighthouse_teacher.php)

To book and confirm a group tour date and time, contact:  
Katrina Heller at 561-747-8380 x101 or email [tours@jupiterlighthouse.org](mailto:tours@jupiterlighthouse.org)  
Please use subject line **School Tour Booking**  
Your tour is not booked until you receive confirmation from us.

### Gift Shop Experience

Many students look forward to visiting our gift shop which carries affordable history & nature-related items. To ensure that our staff can provide the best assistance to students, we ask the following:

1. Please have a chaperone bring in only 10 students at time.
2. Please use this as an opportunity to teach the math of sales tax on an item so that students are prepared for their purchases.  
(Example - Item cost: \$4.00 x 6% = .24 cents, then the item will be \$4.24.)

### BEHAVIOR STANDARDS and STUDENT ETIQUETTE

1. Do not climb on any exhibits, trees, railings, or structures.
2. No running is allowed anywhere on the site or in any buildings.
3. No food candy, chewing gum, or beverages are allowed on the historic site or in any buildings.
4. Children must be 48 inches tall to climb the lighthouse.
5. Groups/Students and chaperones must stay together while on the site.
6. To ensure safety and supervision, 1 chaperone for every 6 children under the age of 12 is required.
7. Never leave students unsupervised anywhere on the site.
8. Group size is limited to a maximum of 32 people climbing the lighthouse at one time.
9. Use a moderate voice (indoor) and respect other visitors on site.
10. Do not touch objects in the museum, Tindall Pioneer Homestead, Lighthouse, or Keepers Workshop unless instructed by Museum Staff.
11. NO PHOTOGRAPHY IN THE MUSEUM.
12. Busses must park at the north end of the parking lot. Busses must shut down the engine (NO IDLE) after discharging passengers.
13. Silence or turn off all cell phones during the tour.
14. All groups must stay with the tour guide for the duration of the tour.

## **Directions to the Jupiter Inlet Lighthouse and Museum**

Jupiter Inlet Lighthouse and Museum  
500 Captain Armour's Way, Jupiter, FL 33469  
Phone: 561-747-8380x101  
Email: [tours@jupiterlighthouse.org](mailto:tours@jupiterlighthouse.org)  
Internet: [jupiterlighthouse.org](http://jupiterlighthouse.org)

### **Directions**

From I-95, exit at Indiantown Road east. Follow Indiantown Road east to US Hwy 1.  
Turn north (left) onto US Hwy 1. Follow US Hwy 1 to Alt A1A/Beach Road.  
Turn east (right) onto Alt A1A/Beach Road.  
Immediately turn right onto Captain Armour's Way and into Lighthouse Park.  
Follow Captain Armour's Way to the Jupiter Inlet Lighthouse and Museum.

For a printable map go to:  
[Jupiterlighthouse.org](http://Jupiterlighthouse.org)  
Click Map/Directions  
Scroll down to Map  
Click printable map

### **Transportation Funding**

If School Board Transportation funding for busses is not available or has been canceled contact our bookkeeper at 561-747-8380 extension 103.

### **Onsite Restroom Facilities**

There are four restrooms in the museum building. They are located in the museum gallery, gift shop, and café. THERE ARE NO RESTROOMS BY THE LIGHTHOUSE. Please use the restroom before going on the tour to the lighthouse.

### **Picnic Area**

There is NO PICNIC TABLES ON THIS SITE. If you plan to eat lunch during the field trip, please bring a blanket or tarp for students to sit on. Another option is to have each student bring a beach towel to sit on.