

## Discovering Florida's Treasures

**Topic:** Florida's National Parks, State Parks and Recreational Areas

**Grade Level:** middle through high school

**Time to teach lesson:** 1 week

**Social studies concept or theme:** Collecting and organizing research material

**Overview:** Students will use Recreational Guides and other resources to plan trips in their area or around the state.

**Objectives:** Students will:

1. research recreational opportunities on public lands in Florida.
2. design a trip to a recreational site in Florida.

### Materials:

Map of Florida

list of National Park Service sites in Florida

State park and Water Management District resources

resource books from school or public library

websites:

<http://usparks.about.com/blpkfl.htm>

<http://www.np.gov>

<http://www.ehistory.com/local/gulfcoast/escambia>

<http://floridaconservation.org/viewing/landcovers/lndcov.html>

<http://webworldwonders.firn.edu/index.php>

<http://www.dep.state.fl.us/parks>

<http://www.recreation.gov/>

<http://taxonomy.myflorida.com/Taxonomy/Visitor/>

### Procedures:

**Initiating activity:** What can you do in Florida? Which of these can you do on public lands? Students should create a KWL chart about places or activities that can be done in Florida on public land.

### Strategies:

1. Students will contact local and state organizations for resource materials.
2. Students will use maps, Water Management District Resources including Recreational Guides, State Park Guides, and internet resources to locate recreational opportunities.
3. Students will design a trip to a public land site and include a list of regulations, equipment, clothing and food needed.

**Culminating Activities:** Students should return to their KWL and complete. Then class will design a Florida Treasure Map with windows at various recreational sites to showcase student

research students or students can design individually a brochure using Microsoft Publisher advertising their site.

**Extension:** Visit a national or state park in your area and discover the unique features of your area. Students can use GPS and digital cameras to design a virtual field trip at one of our state treasures.

**Evaluation:** Student brochures or Florida treasure maps, written description of their proposed trip.

**Sunshine State Standards:**

SS.B.2: The student understands the interaction of people and the physical environment.

LA.A.2.3.5: The student locates, organizes, and interprets written information for a variety of purposes, including classroom research, collaborative decision making, and performing a school or real-world task

SS.B.2.3.2: The student knows the human and physical characteristics of different places in the world and how these characteristics change over time.

**FCAT benchmarks:**

**Reading Skills:** Students will:

- read and organize information for multiple purposes.
- use reference materials.
- use persuasion techniques.

## Procedures for Planning & Having Environmental Day

**Topic:** Model for planning an environmental or career day on school grounds

**Grade Level:** all levels

**Time to teach lesson:** 4 hours

**Social Studies Concept:** Students will be engaged in a hands-on approach to learning about Florida from experts in various career and environmental fields.

**Overview:** Students will interact with various environmental agencies and learn the importance of maintaining the balance of resources in their environment.

**Materials:**

space outdoors and indoor classrooms  
notebooks or folders for journal entries

**Objectives:** Students will gain an understanding of their environment by interacting with various environmental agencies.

**Procedures:**

One month in advance:

- write the purpose for your project
- decide on presenters
- select date and time
- write up expectations of presenters
- prepare written directions for getting to your school
- phone people to invite them to present
- create a data base of people contacted
- keep a list of people who have committed

Two weeks before:

- contact parents to help you with student rotation
- make a list of procedures that parents need to follow
- set up a tentative schedule and decide where people will present
- call newspaper office and talk with the editor
- if you want to change your students lunchtime, make arrangements with lunchroom manager (we order bag lunches for our students and guests, and eat all together at an convenient time)

One week in advance:

- design an announcement to fax to newspaper offices
- get back in contact with your guest speakers, go over commitments, review directions to school and lunch arrangements
- call parents and confirm, discuss time and lunch arrangements

- train students that will wait in office and escort presenters to their room and explain expectations of a facilitator
- divide students into groups and assign a teacher and parent per group
- set up session times and allow about 5 min per rotation
- write out procedures for students for rotating through sessions and expectations for student behavior
- make a list of rotations, times, and list students that will be in each group

**Procedure:**

1. Review expectations and procedures with students and parents, greet all presents, and have a student helper get needed supplies and help presenter set up.
2. Give each presenter, teacher, and parent a time schedule of rotations.
3. Have a timer for student facilitator or parent to advise presenter of time constraints.
4. Start on time.
5. Students must keep a journal of notes, summaries, illustrations and questions.

**Evaluation:**

Review student’s journal entries, observe students listening, and interviewing skills. Students will use journal entries as tools for writing answers for FCAT prompts, poetry writing, writing thank you notes to presenters and parents. Have a reflection time at end of day. Discuss what took place and do a plus and delta chart about the day. This information will help you for future planning.

**Sunshine State Standards:**

- SS.B.1.3.1: The student uses various map forms and other geographic representations.
- SS.B.2.3.9: The student understands ways the interaction between physical and human systems affects current conditions on Earth.
- LA.B.2.3.1: The student writes to communicate ideas and information effectively
- SC.D.2.3.2: The student knows the positive and negative consequences of human action on the Earth’s systems.
- LA.B.1.3.1: The student organizes information before writing according to the type and purpose of writing.
- LA.C.1.3.1: The student listens and uses information gained for a variety of purposes, such as gaining information from interviews, following directions, and pursuing a personal interest.

**FCAT:**

- Making inferences
- Persuasion techniques
- Cause and effect relationships
- Primary source information

# Reflections

plus +	delta $\Delta$	questions?

## Exploring My Backyard

**Topic:** Schoolyard Exploration

**Grade Level:** 2-7

**Time to teach lesson:**

Total time 2 weeks:

One 30 min block for introduction

Four 15-20 min time slots for strategy building

One week to write and edit final presentation

**Concept:** Student will gain an understanding of various uses for public lands.

**Overview:** Students will explore their school grounds using the geographic model worksheet.

This information will be used as the basis for a final presentation.

**Objectives/Goals:** Students will:

1. investigate the student's environment before learning about other places.
2. apply the Geographic Model Worksheet.
3. make choices on presenting information (ex. collage, diorama, power point, or written project).
4. learn to write note cards.
5. write a report.

**Materials:**

Geographic Model Worksheet

notepad

pencils

markers

tape recorders

resource books

internet sites

maps

cameras

magazines

Global Positioning Systems, if available

**Procedures:**

**Initiating activity:**

After learning about the geographic model, students will break into groups and create a KWL (**Know, Want To Know, Learned**) chart about their school environment. Students will use this information as the basis for their report.

**Strategies:**

1. Fifteen to twenty minutes a day is strategy building time. Work on ways to get information from maps and research materials.
2. Chart various places that can provide research material (Chamber of Commerce, public libraries, internet sites, telephone books, etc.).
3. Discuss and model notetaking skills.
4. Walk the school campus taking notes and pictures.
5. Brainstorm possible ways for presenting information.
6. Emphasize the objectives and explain how creativity can be used in the students final project.

**Culminating activities:**

Students will present their report to the class. This presentation can be in the form of a collage, diorama, power point presentation, or written report. A rubric should be created for students to use as a grading process for their peers. The rubric should include the elements of the geographic model, along with oral presentation skills.

**Evaluation:**

Students will be graded on their use of the geographic model, note taking skills, final presentation and will be graded by their peers using a student generated rubric.

**Sunshine State Standards:**

SS.B.1.3.1: The student uses various map forms and other geographic representations, tools, and technologies to acquire, process, and report geographic information.

SS.A.1.1.1: The student compares everyday life in different places and times and understands that people, places, and things changes.

SS.B.2.3.6: The student understands how the interaction between physical and human systems affects current conditions on Earth.

LA.A.2.2.7: The student recognizes the use of comparison and contrast in a text.

LA.A.2.4.8: The student synthesizes information from multiple sources to draw conclusions.

**FCAT:****Reading skills:**

Drawing conclusions

Reference materials

Read and organize information for multiple purposes

**Math Skills:**

Data analysis and probability

# Geographic Model Worksheet

Application on the Geographic Model to \_\_\_\_\_

I. Location & Physical Characteristics

- 1.
- 2.
- 3.
- 4.

II. Population & Cultural Characteristics

- 1.
- 2.
- 3.
- 4.
- 5.

III. Historical Background

- 1.

IV. Major Economic Activities and Land Use

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

V. Problems and Prospects



Suggested Final Grade Sheet

Class: \_\_\_\_\_

Project: \_\_\_\_\_

Student: \_\_\_\_\_

Team: \_\_\_\_\_

Standard: \_\_\_\_\_

Task: \_\_\_\_\_

The Rubric

Wow: excellent work in that area  
O.K.: adequate work in that area  
Not Yet: still needs work in that area

Indicator 1: \_\_\_\_\_  
Wow O.K. Not Yet  
5-----3-----0

Indicator 2: \_\_\_\_\_  
Wow O.K. Not Yet  
5-----3-----0

Indicator 3: \_\_\_\_\_  
Wow O.K. Not Yet  
5-----3-----0

Indicator 4: \_\_\_\_\_  
Wow O.K. Not Yet  
5-----3-----0

Indicator 5: \_\_\_\_\_  
Wow O.K. Not Yet  
5-----3-----0

Grade: A/21 B/17 C/12 D/7  
(25 possible points)

## **Connections between Geography & Literature: A Geographic Study of the Everglades**

**Topic:** Using Dr. Ed Fernald's "A Geographic Model for Understanding A Place" on a children's book by Jean Craighead George called Everglades (ISBN#0-06-446194-7, Harper Collins Publishers) can be an effective way to teach both FCAT skills and geography literacy at the same time.

**Grade Level:** K-12

**Time:** 2-4 class periods

**Social Studies Concept or Theme:** Understanding a methodology for studying a place and the qualities that make that place unique.

**Objectives:** Students will:

1. develop an understanding of the Everglades by using the model for studying a place.
2. discuss consequences of human development and how it will affect the future of the Everglades using a piece of selected literature.
3. show spatial understanding of the significance of the Everglades.

**Materials:**

Model Handout

Everglades by Jean Craighead George

**Teacher Background:**

I. "Sometimes the spirit of a place is so strong you may think you see its face and glimpse its gamboling over a field or peeking out of forest, but at other times you struggle for words to describe it."- Thomas Moore, 1996.

"Books that provide a unique sense of place are more memorable than those that do not."

"The setting of the story is important in creating mood, authenticity, and credibility."

"Place, time, and people are inextricably bound together."

"Both the time and the place of the story should affect the action, the characters, and the theme."

Source: Huck, Hepler, Hickman, & Kiefer et al. (1997).

### II. Model for Understanding A Place

It is important for authors and illustrators to be able to describe and explain the spatial realm or setting so that it is one of honesty and understanding of that specific place. Books may be used to

dispel negative images, perceptions, and beliefs. This model for understanding place can be used when reading books to “break down” a book by its physical, human, economic, historic phenomena, as well as issues of problems and prospects.

“Geographers are interested in where people and things are located and how they interact.”- Dr. Ed Fernald

\* Geography is the study of place.

\* The Model for Understanding Place was developed by Dr. Ed Fernald in the hopes that it would be used as a “thinking outline” or a “frame of reference” when studying place.

### III. Two Methods Used when Teaching Geography:

1) Areal Distribution: Example: (density)-”to the abundance came the birds; clouds of lacy, white egrets made their home in the Everglades.”

2) Spatial Interaction: Example: “when the Everglades was perfect, people who called themselves Calusas arrived; they lived gracefully on the fish and game and made tools out of sea-shells.”

#### **Procedures:**

##### **Initiating Activity:**

1. Show students the poster of Public Lands and ask them to examine the federal, state and local lands in Florida. Generate a list of things they know about these lands and what makes them special.

2. Ask them to locate the Everglades on the poster, then set up the following role play scenario: You are all Florida ambassadors who will be taking a group of visitors from Russia to our favorite National Park, the Everglades. What would you need to know about the Everglades before you could take them on their tour? Generate a list of questions they may have or think their guests may have on the board. Then ask them to organize their questions by like topics. They may need a little assistance, but categories such as location & physical, population & cultural, economic & land use, historic and problems and prospects should emerge - the Model headings. Tell the students that we will be using the book *The Everglades* to help us explore these questions and get an understanding of how the author shares their knowledge about a place through their work.

#### **Strategies:**

1. Read the story to the class aloud.

2. Have students keep their questions and model handout near by.

3. Remind students to listen to the descriptions that are developed as well as looking at the pictures for clues. The following is an example of how the model can be completed using the book: (Students will have some variation and can talk about what they felt the author was trying to share about the Everglades.)

## **Example:**

Model used for Everglades by Jean Craighead George

### I. Location and Physical Characteristics

1. Location: Relative- “the spill became a river that seeped one hundred miles down the peninsula from Lake Okeechobee to the Florida Bay.”
2. Physiography: “the seashells framed a rock called limestone on the sea bottom.”  
“Florida glistened with green land and blue-green lakes.”
3. Climate: “rain gushed from the storm clouds in summer.”  
“sun bathed the land in winter.”
4. Vegetation: “moss grew, then ferns, then grass and trees.”
5. Soils: “ into the shallow, warm river came tiny one-celled animals and plants; they lived  
and died and made gray-green soil on the bottom of the river, saw grass took root in the soil.”
6. Natural Resources: “one was Lake Okeechobee, round, deep, and as clear as window glass.”

### II. Population and Cultural Characteristics

1. Where People Live: Distribution- “north of Florida, European men pushed the Creek Indians out of the Carolinas; some of them walked south until they came to the silvery Everglades; they poled deep into the saw grass and settled in the islands.”
2. How People Made a Living-
  - a. Urban Occupations: “business people built towns and roads upon it.”
  - b. Rural Occupations: “ they vanished when engineers dug canals in the Everglades and drained the fresh water into the sea to make land.”  
“ farmers tilled the land.”
3. Characteristics of Place  
Racial- “when the Everglades was perfect, people who called themselves Calusas arrived.”  
“the Spanish conquistadors arrived and the Calusa people disappeared.”

### III. Historical Background (sequent occupance)

“the conquistadors were afraid of the flesh-ripping grass and roaring animals of the Everglades, and they moved on.”

### IV. Major Economic Activities and Land Use

1. Agriculture: “farmers tilled the land.”

2. Manufacturing: “the orchid hunters picked gardens and gardens of them (orchids) and sold them to put on ladies’ dresses; practically none can be found.”
3. Transportation- “ five children and a storyteller poled into the Everglades.”
4. Extractive Industries: “and where did the mammals and snails and one-celled and animals go? They vanished when the engineer dug canals in the Everglades and drained the fresh water into the sea to make land.”

#### V. Problems and Prospects

1. Problems: “pesticides and fertilizers flowed into the river waters and poisoned the one celled animals and plants; the snails died, the fish died, the mammals and birds died.”
2. Prospects: “eventually the children grew up and ran the Earth...the clouds of birds returned to an abundance of fish in the water.”

**Culminating Activity:** Once the students feel comfortable with their understandings of the Everglades, ask them to plan a field guide, storybook, song, poem or other tool that they would use with their visitors from Russia to help them explore the Everglades.

**Evaluation:** The notes and materials used in class can be evaluated as well as the final product produced by the students.

#### **National Geography Standards:**

Standard 14: How human’s actions modify the physical environment.

Standard 16: The changes that occur in the meaning, use, distribution, and importance of resources.

Standard 17: How to apply Geography to interpret the past.

#### **Sunshine State Standards:**

SS.B.1.3.1-The student uses various map forms and other geographic representations, tools, and technologies to acquire, process, and report geographic information including patterns of land use, connections between places, and patterns and processes of migration and diffusion.

#### **FCAT:**

LA.A.2.2.7-The student recognizes the use of comparison and contrast in a text.

LA.A.2.4.4-The student locates, gathers, analyzes, and evaluates written information for a variety of purposes, including research projects, real-world tasks, and self-improvement.

LA.A.2.3.5- The student locates, organizes, and interprets written information for a variety of purposes, including classroom research, collaborative decision- making, and performing a school or real-world task.

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- 6.

V. Problems and Prospects

## Find Those Critters!

**Topic:** Looking for Bear Prints

**Grade Level:** 6-10

**Time:** One week

**Social Studies Concept or Theme:** Population of Florida Animals

**Generalization:** Human development has forced the Florida Black Bear into urban/suburban areas to search for food, water, and shelter.

**Objectives:** Students will:

1. map the location of Florida Black Bears.
2. discuss patterns of Florida Black Bear population.
3. discuss consequences of human development and how it will affect future generations of the Florida Black Bear.

**Materials:**

Florida population map  
Florida Black Bear Range Map  
drawing paper  
writing paper  
cameras  
GPS Units

**Procedures:**

**Initiating Activity:**

1. Pass out maps of black bear core areas and a population map of Florida. The black bear map can be found at <http://wld.fwc.state.fl.us/critters/livingwithbears/wherearebears.asp> and the population map can be found in the Atlas of Florida. Each school library in the state of Florida has a copy of this atlas. If one cannot be found, please contact [esmith@admin.fsu.edu](mailto:esmith@admin.fsu.edu).
2. Discuss how these maps overlap. How does this affect the bears? The people? What problems may stem from this overlapping? Other questions to consider: Are there other places we can find bears? What do bears eat? How are humans and bears alike? What kind of habitat is best suited for the Florida Black Bear? (Refer to the Your Land, My Land, Our Florida poster to see a composite map of Florida population and black bear habitats.) A great source of information on the Florida Black Bear can be found at <http://wld.fwc.state.fl.us/bear.default.htm>.

**Strategies:** How to create awareness in you community? One way is to find and record the tracks of bears and other Florida animals, threatened and endangered. Create suggestions on how to live peacefully and safely with the bears. (For more content and great lessons, please visit: <http://www.floridaconservation.org/educator/blkbear.htm>)

Directions on how to make casts of bear prints and other animal prints.

Materials: plaster of paris and a cardboard form.

- 1) The cardboard form should be placed around the print to isolate the print.
- 2) Mix the plaster of paris and pour into the print; not too fast, or the print will be distorted.
- 3) Set for an hour and then carefully place into a garbage bag for the ride home.
- 4) Set it out overnight, outside of the bag.
- 5) Softly clean the plaster cast with an old t-shirt and then set it out for display.

**Culminating Activities:** After finding and making the plaster casts of the black bear prints, have the students take GPS (Global Positioning System) points at the location of the tracks. Students should also draw and take pictures of the tracks and the surrounding area. Have students write a description of the surroundings: describe the vegetation, is there drinking water nearby? Other animals? Signs of humans? For a high-tech project, students could use Arcview (GIS-Geographic Information Systems) to make a map of where they found the tracks. For a low-tech project, students could hand draw a map or place pins on a topographic map to locate where tracks were found.

**Evaluation:** Have students present their findings to the class, their principal, Chamber of Commerce, or City Councilman stressing the importance of living peacefully and safely with the bears.

**National Geography Standards:**

Standard 16: The changes that occur in the meaning, use, distribution, and importance of resources.

**Sunshine State Standards:**

SS.B.1.3.1-The student uses various map forms and other geographic representations, tools, and technologies to acquire, process, and report geographic information including patterns of land use, connections between places, and patterns and processes of migration and diffusion.

**FCAT Statement:**

LA.A.2.2.7-The student recognizes the use of comparison and contrast in a text.

LA.A.2.4.4-The student locates, gathers, analyzes, and evaluates written information for a variety of purposes, including research projects, real-world tasks, and self-improvement.



## Florida State Parks

**Topic:** A study of Florida State Parks.

**Grade Level:** all levels

**Time:** one week

**Concept:** Students will research Florida State Parks.

**Overview:** Students will research two Florida State Parks and compare and contrast the animals, plant life, and activities offered at them.

**Materials:**

Computer with Internet access

chart paper

markers

poster board

Venn Diagram

park brochures/information (available at <http://www.dep.state.fl.us/parks/>)

web sites

notes recorder

2002 Your Land, My Land, Our Florida poster.

**Objectives:** Students will:

1. define state park.
2. describe natural features and animals of the state parks.
3. describe human interaction within the state parks.
4. research on the internet.
5. give an oral report.

**Procedures:**

**Initiating Activities:**

Ask students if they think all state parks are the same. What do they think would be the same in the parks and what would be the difference?

**Strategies:**

1. Divide students into groups of two or three.
2. Tell students they are going to select two state parks. Then they will research the two parks by internet, pamphlets, or personal experience (make sure there are no repetitions).
3. They will take notes on the parks using the notes recorder.
4. The student will draw a Venn Diagram on poster board. In the Venn Diagram, the students will do a comparison and contrast on the parks.

**Culminating Activity:**

Have students report on their parks. Display their posters. Discuss which parks are similar and which ones are different.

**Evaluation:**

1. Teacher observations
2. Venn Diagram Poster
3. Oral Report

**National Geography Standards:**

Standard 1: How to use maps and other geographic representations, tools, and other technologies to acquire, process, and report information from a spatial perspective.

Standard 4: The physical and human characteristics of places.

Standard 14: How human actions modify the physical environment.

**Sunshine State Standards:**

SS.B.1.2.1: The student uses maps, globes, charts, graphs, and geographical tools including map keys and symbols to gather and interpret data and to draw conclusions about physical patterns.

SS.B.1.3.1: The student uses various map forms and other geographic representations to acquire, process, and report geographic information.

SS.B.2.3.6: The student understands the environmental consequences of people changing the physical environment in various world locations.

LA.A.2.3.5: The student locates, organizes, and interprets written information for a variety of purposes.

LA.C.1.3: The student uses listening strategies effectively.

LA.C.3.3: The student uses speaking strategies effectively.

SC.D.2.3.2: The student knows the positive and negative consequences of human action on the Earth's systems.

**FCAT:**

Vocabulary knowledge and strategies

Making inferences

Drawing conclusions

Comparison and contrast

Cause and effect relationships

Read and organize information for multiple purposes

Reference materials

## Notes Recorder

Animals

Plants

Human Interaction

## Florida State Parks Scavenger Hunt

**Topic:** Discovering Florida State Parks

**Grade Level:** all levels

**Time:** one week

**Concept:** Students will be engaged in research through the Florida Almanac, the Florida State Parks Guide, and/or websites.

**Overview:** Students will research Florida State Parks through a scavenger hunt activity in order to identify specific Florida State Parks.

**Objectives:** Students will:

1. search a web site on the Internet.
2. work co-operatively with a partner.
3. participate in oral discussions.

**Materials:**

computer with Internet access

websites:

<http://www.dep.state.fl.us/parks>

[www.dep.state.fl.us/parks](http://www.dep.state.fl.us/parks)

<http://www.floridastateparks.org>

[www.floridastateparks.org](http://www.floridastateparks.org)

scavenger hunt worksheet

overhead

transparency of scavenger hunt worksheet

Florida Almanac

Florida State Parks Guide – available as a PDF or order hardcopy at

[www.dep.state.fl.us/parks/onlineforms/guide.html](http://www.dep.state.fl.us/parks/onlineforms/guide.html)

2002 Your Land, My Land, Our Florida poster

**Procedures:**

**Initiating Activities:**

Ask students if they have ever been on a scavenger hunt. Explain to the students that they will be doing a scavenger hunt for Florida State Parks.

**Strategies:**

1. Divide students into groups of two or three.
2. Put transparency of the scavenger hunt worksheet on the overhead. Pass out hardcopy to students.
3. Discuss the clues.
4. Have students search web sites for the answers to the clues. They can also use Florida Almanac, or Florida State Parks Guide.

5. Write answers to the clues.

**Culminating Activity:**

Have the students share their answers to each clue. See which group found the most answers.

**Evaluation:**

1. Teacher observations
2. Answers to the clues
3. Discussion

**National Geography Standards:**

Standard 1: How to use maps and other geographic representations, tools, and other technologies to acquire, process, and report information from a spatial perspective.

Standard 4: The physical and human characteristics of places.

Standard 14: How human actions modify the physical environment.

**Sunshine State Standards:**

SS.B.1.2.1: The student uses maps, globes, charts, graphs, and geographical tools including map keys and symbols to gather and interpret data and to draw conclusions about physical patterns.

SS.B.1.3.1: The student uses various map forms and other geographic representations to acquire, process, and report geographic information.

SS.B.2.3.6: The student understands the environmental consequences of people changing the physical environment in various world locations.

LA.A.2.3.5: The student locates, organizes, and interprets written information for a variety of purposes.

LA.C.1.3: The student uses listening strategies effectively.

LA.C.3.3: The student uses speaking strategies effectively.

SC.D.2.3.2: The student knows the positive and negative consequences of human action on the Earth's systems.

**FCAT:**

Vocabulary knowledge and strategies

Making inferences

Drawing conclusions

Comparison and contrast

Cause and effect relationships

Read and organize information for multiple purposes

Reference materials

## Florida State Parks Scavenger Hunt Clues

1. One of the world's largest and deepest freshwater springs is located at this Florida State Park.
2. The third largest lake gives its name to this state park. You can go back in time while here.
3. This state park is located at LORAN coordinates 24 degrees 51.802'N 80 degrees 40.795'W in 18 feet of water.
4. This state park is on the National Register of Historic Sites. Part is managed by DEP's Division of Recreation and Parks while the remaining part is managed by Alachua County Parks and the University of Florida.
5. Numerous springs are found at this state park. Could one be the Fountain of Youth?
6. First underwater sea park in the U.S.
7. This is a monument for a famous battle that kept Tallahassee safe from Union hands.
8. This state park has twenty distinct biological communities. The first people to inhabitants this area came around 10,000 BC
9. There is an authentic farm complex at this state park. It presents a living history working farm.
10. A state park separated from the mainland by mangrove swamps.
11. This preserves the site of the state's largest Civil War battle.
12. This one is dedicated to the long-leaf pine and the 5,000 products manufactured from them.
13. The only surviving antebellum plantation house.
14. Where the Second Seminole War began.
15. This park is a limestone plain.
16. You can see "Florida's Largest Waterfall."
17. The headspring at this park was declared a National Natural Landmark.
18. There are 236 steps, waterfalls, and lush green ferns.
19. Stalactites, stalagmites, soda straws, columns, rimstones, flowstones, and draperies are at this park.
20. Once this was known as the "Cigar Capital of the World."

## **Florida State Parks Scavenger Hunt**

(answer key)

1. Edward Ball Wakulla Springs State Park
2. Kissimmee State Park
3. San Pedro Underwater Archaeological Preserve State Park
4. Marjorie K. Rawlings Historic State Park
5. Ponce de Leon Springs State Park
6. John Pennekamp Coral Reef State Park
7. Natural Bridge Battlefield Historic State Park
8. Paynes Prairie Preserve State Park
9. Dudley Farm Historic State Park
10. Delnor-Wiggins Pass State Park
11. Olostee Battlefield Historic State Park
12. Forest Capital Museum State Park
13. Gamble Plantation Historic State Park
14. Dade Battlefield Historic State Park
15. Fakahatchee Strand Preserve State Park
16. Falling Waters State Park
17. Ichetucknee Springs State Park
18. Devil's Millhopper Geological State Park
19. Florida Caverns State Park
20. Ybor City Museum State Park

## Introduction To Public Lands

**Grade Level:** Secondary

**Time:** 1-5 days

### **Introduction and Teacher Background:**

Public lands are owned and managed by a government agency. Ownership may be the federal government or it could be either a state or local body. When we think of public lands, most of us usually think about a national park or a national forest. Public lands are much more extensive: they include land used for government buildings, for highways, for military bases, for wildlife management, for water management, and for a host of other uses.

Public land may be defined as government owned and managed land that is used for any public purpose. Governments are assigned the tasks of providing transportation, education, administration, health and police protection to name just a few governmental responsibilities. Each of these activities requires a place, or some land, upon which to complete these tasks. As stated earlier, public land is required for a national park or forest. On a less spectacular level, most governments also need land called rights-of-way, or easements upon which to locate roads, water and electric lines, and sewage mains. How do you suppose the various levels of government got ownership of these lands? At the national level, all land not owned by an individual at the time of independence from England became public land. On the state and local levels, when these governments were created, they too received ownership to those areas in their jurisdiction that were not owned by some individual or group such as a church or a military organization.

In 1845, when Florida became a state, it was already the owner of many acres of land that had been allotted to the state when it was a territory. In 1823, an act of congress stated that an entire township was to be given to the state to be used to establish a “seminary of learning.” In the same law all rivers and navigable waters were to “remain public highways.” The land under those water bodies was to be owned by the state. In 1845 lands were provided to establish a “seat of government” and two seminaries, one east and one west of the Suwannee River. Of course, these became the Florida State University and the University of Florida. This very important act followed the policy of the federal government that gave section 16 of every township in the state to be used or sold for the support of public schools.

As we might guess, much of the unused and publicly owned land was of very poor quality. On the other hand, land that was located far from developed areas may have been of high quality but it lacked access, or an easy way for people to get to it. When the nation, state, or community grew, many times the governments used these lands to encourage occupation and development. For example, in 1862 the Congress of the United States passed the Morrill Act, a law that, among other things, allowed each state to receive 30,000 acres of land for each senator and representative they had in the legislative branch of the government. These lands could be sold or donated in order to generate money to establish schools of agriculture and engineering. About 90 schools over the country are called Morrill Act or Land Grant Schools because they were created due to this act. In Florida, Florida A and M and the University of Florida are Land Grant schools.

In that same year, 1862, congress passed the Homestead Act, which, among other things, gave 160 acres to any family that lived, or “homesteaded,” on a parcel and developed it for five



years. If a family didn't want to wait five years, they could purchase the land for \$1.25 an acre. Be assured, \$1.25 in the 1860s was worth a lot more than it is in the 2000s. In either case, the Homestead Act encouraged people to move south and west (particularly west) to turn idle, public land into production. Ownership and land production were very important because they translated into needed tax money for the local and state governments.

Today every level of government has large holdings of land. Some of it is used for purposes mentioned above and purchased through state programs and tax money. Some, however, is needed for a valid purpose and must be taken from a landowner through a process called "eminent domain." That is when an evaluation is made of the land and the owner is given fair value for the land by a government. If the owner thinks the value is more than the government offers, he/she can go before a board of citizens to try to get more value. Sometimes they get what they ask for and sometimes the citizen board feels the state offer is adequate. There are other ways a government acquires land such as receiving it as a gift through outright donation or through a will upon a person's death. A very interesting relatively new process is for the public to acquire land through a purchase in cooperation with a non-profit group set up for that purpose. Examples of that kind of organization are the Trust for Public Land and The Nature Conservancy.

This is a general description of how governments in our country first received their public land. More description can be found by writing or e-mailing the Bureau of State Land Management, in the Department of Environmental Protection in Tallahassee, or from the Property Appraiser's office in your county courthouse.

**Materials:** Background information provided and a variety of maps provided by property appraiser's office (<http://sun6.dms.state.fl.us/dor/property/appraisers.html>)

**Objectives:**

**Cognitive:**

To understand:

- the nature of public lands.
- the various characteristics of public lands.
- the many uses of public lands.
- the purpose of rights-of-way, easements, etc.
- various terms used in discussing public lands.
- the different ways each level of government has come into possession of their land.
- some of the aspects of the history of public lands and how they have been used.
- the general intent of both the Morrill and Homestead Acts of the U. S. Congress.
- the process and purposes of the "eminent domain" procedure.

**Psychomotor:**

Be able to :

- interpret a map of Florida's Conservation Lands.
- construct a map of selected public lands in your town.
- use data from the Property Appraiser's office to identify local public land.

-plan and implement a field trip to observe several parcels of public land.

**Affective:**

To appreciate:

- the need for a society to have public spaces.
- the relationships of public land to the support of education.
- the importance of good management of public land.
- the use of tax money to implement good land and water management.

**Concepts:**

Public Land- Government-owned and managed land that is, or could be, used for public purposes.

Right-of-way- Land over which a person has the right of passage. It can be the land on which a road is built. It can be the land that contains water, electric, sewer, phone or other utility services. Such lands can be owned by private companies like power companies.

Easement- Legal permission to limited use or enjoyment on land that is owned by another person or company.

Jurisdiction- The power, or right to exercise power, or control over land.

Township- A division of territory in surveys of public land containing 36 sections (each section is a square mile).

Morrill Act- An 1862 Act of Congress that provided for grants of land to the various states for the purpose of establishing agricultural colleges. Later, it was used to support other educational objectives. Many states identified the section 16 in every township to be used, or sold, for education purposes.

Homestead Act- An 1862 Act of Congress that encouraged westward agricultural expansion by giving land to families who met specified rules.

Land Grant Schools- Agricultural schools that were established through the implementation of the Morrill Act. (In Florida, Florida A&M and the University of Florida).

Eminent Domain- A right of a government to take private property for public use with just compensation.

**Suggested Teaching Strategies:**

**Planning for the lesson:**

Obtain local and state maps to be used in these exercises. Local maps may be obtained (sometimes free), but always inexpensively (less than \$5.00) from the local planning agency. Other sources are possible: banks, real estate agencies, the Property Appraiser's office, and the Chamber of Commerce.

County and regional maps may be obtained from the County Agricultural agent, the regional planning office, the water management district office or the district office of the Florida Department of Transportation.

State of Florida maps can also be acquired at the Department of Transportation office or at a regional tourist agency.

Note: If only one or just a small number of maps are available, place a sheet of tracing paper or vellum over the map and make a simple outline map of the area under study. By making a classroom set of the simple maps it is possible to have the students fill in major roads, lakes, and other identifying points as a part of the exercise.

### **Initiating Activity:**

There are many ways to open this study. One is to display a map, with significant reference points, of the city, county, or state that shows selected public lands without identifying titles or uses. These areas would include sites such as parks, recreation fields, major public buildings, and, possibly a wildlife management area, etc. Use a different color or symbol for each use.

### **Teaching Strategies:**

1. Have students identify these sites as to their use and then ask “Who owns these parcels of land?” Develop the concept “public land.”
2. As stated above, another way to begin this unit of work is to place the concept “public lands” on the board and then have students brainstorm the possible meanings as you hand out maps for them to locate “public lands.”
3. If blank, or outline, maps are available have the students (2-4 to a map) label the public lands identified in discussion and then add lands they can think of. These can include schools, fire and police stations, public hospitals, airports, and other government buildings. The teacher may have to suggest lands such as public beaches, access points to water areas such as beaches, lakes and rivers. Military lands may include major bases as well as National Guard and Reserve Armories. In addition, garbage disposal sites, water treatment plants, and public power plants are important cultural infrastructure land uses in our society. While not necessary to map, roads need to be mentioned as a public land use that makes up a large part of our public land.

### **Culminating Activities:**

1. Have a representative or the planning department come to the class to discuss the “Role of Public Lands In Our Society.” Of course this may be accomplished by having the teacher, or a group of students, go to the person’s office and tape (audio or video) an interview. Since there are many different types of public lands, the teacher has a variety of ways to cover this material such as interviews, student reports, teacher presentation, or role-playing.
2. Teacher or student presentations may be prepared to cover the various types of public lands mentioned above. Possibly the librarian would be a big help organizing library research on the topic.
3. Reviewing this resource guide’s introduction will suggest several map and research activities depending on what strategies the teacher has already chosen.
4. Exercises can be developed with other teachers, such as looking at the history of the Homestead and Morrill acts, examining the biology of national or state parks, forests, etc. A project with the math teacher could cover the Section-Township-Range system for

showing public land locations and other geography lessons could deal with the location of any of the types of land uses.

5. Several exercises such as these suggested are included in the following sections of this resource guide.
6. Depending on the availability of computers in the classroom, some of the maps and much of the content covered in this lesson can be obtained in electronic form.

**National Geography Standards:**

Standard 14-Environment and Society-How human's actions modify the physical environment.

Standard 16-Environment and Society- The changes that occur in the meaning, use, distribution, and importance of resources.

Standard 17-The Uses of Geography-How to apply Geography to interpret the past.

**Sunshine State Standards:**

SS.B.1.3.1-The student uses various map forms and other geographic representations, tools, and technologies to acquire, process, and report geographic information including patterns of land use, connections between places, and patterns and processes of migration and diffusion.

**FCAT Statement:**

LA.A.2.2.7-The student recognizes the use of comparison and contrast in a text.

LA.A.2.3.5- The student locates, organizes, and interprets written information for a variety of purposes, including classroom research, collaborative decision-making, and performing a school or real-world task.

MA.A.1.3.2-understands the relative size of integers, and decimals; numbers expressed as percents; numbers with exponents; numbers in scientific notation; radicals; absolute value; and ratios.

MA.B.3.3.1-solves real-world and mathematical problems involving estimates of measurements including length, time, weight/mass, temperature, money, perimeter, area, and volume, in either customary or metric units.

## Land Use Field Exercise

**Topic:** Land Use: historic to commercial, in your hometown.

**Grade Level:** Secondary

**Time:** One Week

### **Introduction and teacher Background:**

To many students, geography is a study of foreign countries, or at least of states and other larger scale places. People must understand that geography also includes the investigation of places right where we live. This exercise will help students gain an understanding of local land use, land use change and how each parcel of land in our town or city is identified by local government and what information is available for citizens' use in researching land and its uses.

Students will gain some experience in observing specific parcels of land, judging the use of that land, evaluating whether the land is in its "best and highest" use, and taking part in an exercise in land use planning. Teachers can get a good understanding of the lesson by going to the local planning office, explaining the exercise to a planner and letting her suggest a small area of town to serve as the study area. By small area it is suggested, at a minimum, four blocks which would include several of the following uses: residential, commercial, vacant, park, office, and utility (water, power or telephone).

**Materials:** Website of property appraisers (<http://sun6.dms.state.fl.us/dor/property/appraisers.html>)

### **Concepts:**

**Parcel-** A block of land, large or small, that has specific boundaries.

**Ownership-** The person, agency or business that controls the land through legal title.

**Land use-** The use to which the land is being put. Examples of land use are given at the end of the introduction.

**Land use change-** What takes place when one use of the land is changed to another use.  
For example, when a house is built on a vacant parcel.

**Quarter section map-** A map at the local Property Appraiser's office that shows the roads, land parcels, parcel numbers, and distance measurements in feet of the parcel size. This maps may be of different scales, but a good scale for classroom work is 1"=100' (one inch equals one hundred feet)

**Vacant parcel-** A parcel which has been put to no use.

**Highest and best use-** The use which, under reasonable circumstances, will best serve the purpose of meeting the objectives of the owner but not penalize adjacent land owners or society at large.

**Property Appraiser-** An elected county official who is charged with the responsibility of identifying and keeping records on every parcel of land in the county and its legal characteristics such as ownership, dimensions, value, legal description, recent sales information and all tax data, etc.

**Site-** A description of the physical and cultural characteristics of the piece of land

**Situation-** Any information about the piece of land relating to its location in relation to any physical or cultural characteristic that might affect the desirability or value of the parcel.

**Legal description-** The notes describing the official identification of the parcel, which may include the surveyor's measurements as well as the identification numbers and symbols given the parcel by the property appraiser's office.

### **Teaching Strategies:**

#### **Preparing to teach:**

1. Identify, if necessary with the help of a local planning official, an area of several blocks (four would be good) to use as the study area. Selecting an area that is designated as a historic district or new commercial district may allow you to take advantage of materials prepared for walking tours or advertising. This would increase the chances that the students will be able to get information about the area that you are studying. Be sure the area includes several different land uses as suggested in the introduction. Another consideration might be to include an area that contains some very old, dilapidated structures that may just be an eyesore, or could even be potentially dangerous.
2. With the help of the local planning office, acquire the planning maps of the area, including land use, zoning, transportation, flood prone areas and other pertinent planning maps. In addition, it will be helpful to acquire an aerial photograph of the area for the students to analyze.

#### **Initiating Activity:**

Have the students discuss the study area in terms of the present land use and to suggest any changes the area might need to improve the living or working conditions of those who live and work there.

#### **Teaching Strategies:**

1. If possible, have the students visit the study area as a class or as an assignment. Have them make a rough, but useable map of the area on which to make notes regarding parcel condition, structures, quality of structures, any changes due to the age of the map.
2. Return to class and have a discussion about both the present land conditions and uses and any suggested changes they might make.
3. Invite a person from the property appraiser's office to show the students the Appraiser's Database and describe how it is used to assess property for tax purposes. (If available, the database can be brought up in class as it is computer accessible).

#### **Culminating Activity:**

Lead the class in a discussion of the necessity of the government to have such a tax base data system to assess property taxes.

**Evaluation:** As an evaluation step, students could either present a forum giving the pros and cons of having more or less data in the property database or, they might write a paper summarizing the quality of the study area noting changes that might be reasonable to be considered by the planning department.

**Enrichment:** On the Florida Geographic Alliance website you can find a series of lesson plans titled Florida's History Through Its Places (<http://fga.freac.fsu.edu/places/index.html>). Here you will find local land use activities as suggested by our Teacher Consultants around the state. Each of the lesson plans include the necessary handouts and materials for completing the History Through Its Places lessons.

**National Geography Standards:** The geographically informed person knows and understands:

1. How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.
14. How human actions modify the physical environment
16. The changes that occur in the meaning, use, distribution and importance of resources

**Sunshine State Standards:**

SS.B.1.3.1-The student uses various map forms and other geographic representations, tools, and technologies to acquire, process, and report geographic information including patterns of land use, connections between places, and patterns and processes of migration and diffusion.

**FCAT :**

LA.A.2.2.7-The student recognizes the use of comparison and contrast in a text.

LA.A.2.3.5- The student locates, organizes, and interprets written information for a variety of purposes, including classroom research, collaborative decision- making, and performing a school or real-world task.

## Light Up! With Florida Lighthouses

**Topic:** locating Florida Lighthouses

**Grade Level:** 6-8

**Time:** One to two days

**Social Studies Concept or Theme:** Environment & Society

**Generalization:** Lighthouses can be a reflection of human responses to variations in physical systems.

**Objectives:** The student:

1. understands the world in spatial terms.
2. understands the interactions of people and the physical environment.

**Materials:**

topographic maps of Florida  
bathymetric maps  
notebooks  
pencils

**Procedures:**

**Initiating Activity:** Start the lesson by asking students if they have ever visited a lighthouse. Then ask “where are lighthouses located and why?” “What was/is the function of a lighthouse?” “Is there a daytime function of lighthouses?” (Lighthouses are also called “Daymarks.” They were painted different colors and patterns so that sailors could use them for a navigation reference during the daytime.)

**Strategies:**

1. Pair students and then pass out topographic and bathymetry maps of coastal areas in Florida. The students will use the map to find lighthouses along the coast of Florida.
2. Have each pair write down the physical characteristics where lighthouses are found. Have them describe the relief of the land (contour lines). Is there deep water nearby? (Lighthouses serves two functions: beware of rocks and deep channels for good navigation). Are the lighthouses close together? Why or why not? How many lighthouses are in Florida?

**Culminating Activities:** Though lighthouses are automated now and maritime technology has caused the lighthouses to become outdated, seamen still use them for navigation references. Have each pair, using topographic and bathymetry maps, select a new location for a lighthouse. Each pair must describe the physical characteristics of their new location and how it helped them to choose this new location. Each pair must also choose a color for their lighthouse and draw the pattern in which they paint their lighthouse and explain.



**Background Information:**

This is a list of Florida Lighthouses within the National Park Service-Maritime Heritage Program:

- 1) Alligator Reef Light
- 2) Amelia Island Light
- 3) American Shoal Light
- 4) Anclote Key Light
- 5) Cape Canaveral Light
- 6) Cape Florida (Bill Baggs) Light
- 7) Cape San Blas Light
- 8) Cape St. George Light
- 9) Carysfort Reef Light
- 10) Cedar Keys (Seahorse Key) Light
- 11) Crooked River (Carrabelle) Light
- 12) Dry Tortugas (Loggerhead Key) Light
- 13) Egmont Key Light
- 14) Fowey Rocks Light
- 15) Gasparilla Island (Boca Grande) Light
- 16) Hillsboro Inlet Light
- 17) Jupiter Inlet Light
- 18) Key West Light
- 19) Pensacola Light
- 20) Ponce De Leon (Mosquito) Inlet Light
- 21) Sand Key Light
- 22) Sanibel Island Light
- 23) Sombrero Key Light
- 24) St. Augustine Light
- 25) St. Johns River (Mayport) Light
- 26) St. Joseph Point Range Rear Light
- 27) St. Marks (Range Rear) Light
- 28) Tortugas Harbor (Ft. Jefferson) Light

\* For a complete inventory of Historic Light Stations, please visit <http://www.cr.nps.gov/maritime/ltinv.html>.

\* An excellent history of lighthouse function, location, building materials, patterns, glossary, and bibliography can be found at [http://www.uscg.mil/hq/g-cp/history/WEBLIGHTHOUSES/lighthouse\\_curriculum.html](http://www.uscg.mil/hq/g-cp/history/WEBLIGHTHOUSES/lighthouse_curriculum.html).

\* For a map of the locations of Florida Lighthouses, please refer to the 2002 Your Land, My Land, Our Florida poster, or to the Blackline Masters section of this curriculum guide.

**Evaluation:** Each pair of students will give a class presentation on the location of their lighthouses; this will include their reasoning for the chosen location: depth of water, hazardous rocks, and flat land available to build the lighthouses.

\* for another lesson plan on lighthouses please visit:<http://fga.freac.fsu.edu/places/lighthou.htm>. You may download this lesson for free!

**National Geography Standards:**

Standard 14: How human's actions modify the physical environment.

Standard 17: How to apply Geography to interpret the past.

**Sunshine State Standards:**

SS.B.1.3.1- The student uses various map forms and other geographic representations, tools, and technologies to acquire, process, and report geographic information including patterns of land use, connections between places, and patterns and processes of migration and diffusion.

**FCAT Statement:**

LA.A.2.3.5- The student locates, organizes, and interprets written information for a variety of purposes, including classroom research, collaborative decision-making, and performing a school or real-world task.

## Protecting a Little Corner of Your World

**Topic:** A virtual field trip to the Osceola Environmental Center.

**Grade Level:** K-12

**Time:** one week

**Concept:** Students will explore an environmental center through a virtual field trip.

**Overview:** Students will understand the need to be stewards of public land. They will realize that visiting an environment center to study local plants and animals and human interaction with the area is one way to protect their land heritage.

**Objectives:** Students will:

1. define state park.
2. describe natural features of the Osceola Environment Center.
3. describe human interaction with the Osceola Environment Center.
4. draw a map of the environmental center.
5. implement a field trip (virtual) to observe the environmental center.
6. appreciate the need for good management of public lands.

### **Materials:**

website: <http://webworldwonders.firn.edu/cameras/osceola>

chart paper

markers

Virtual Field Trip Journal (VFTJ)

computers with Internet access

overhead and transparencies

question sheet

notebook paper

downloaded color sheets of The Reedy Creek Swamp Coloring Book

Teacher can create handouts of history and background, and plants and animals of the Osceola Environmental Center, if desired

### **Procedures:**

#### **Initiating Activity:**

1. Brainstorm- "What is a public land?"
2. List public lands in their area.
3. Tell students they are going to be studying a public land: the Osceola Environmental Center at Reedy Creek in Kissimmee, Florida.
4. Make a Virtual Field Trip Journal (VFTJ). Put notebook paper in a folder to record information, illustrations, answers to questions, and color sheets.

**Strategies:**

1. Tell students that the Osceola School District who owns the environmental center is protecting this public land for the students and the community.
2. Divide students into groups. (Internet access will determine how groups are made.)
3. Have the students read the history and background on the center at <http://webworldwonders.firn.edu/cameras/osceola> or in handouts. In their VFTJ write a paragraph on why the district would want to protect the land.
4. Read the descriptions for the animals and plants found at the environmental center. In the VFTJ, list some animals and plants you might see on a virtual field trip of the center.
5. Put transparency of question sheet on overhead. Hand hard copy to students. Discuss the questions with students. Have them answer these questions as they take the virtual field trip.
6. Take the virtual field trip. Go to ([http://webworldwonders.firn.edu/cameras/osceola/cool/field\\_walk](http://webworldwonders.firn.edu/cameras/osceola/cool/field_walk)) and begin the trip. Click on the yellow dots to see the pictures. Answer the questions as you tour the environmental center.
7. Download a coloring page from “The Reedy Creek Swamp Coloring Book” at <http://webworldwonders.firn.edu/cameras/osceola/sa> and add to the VFTJ.

**Culminating Activities:**

1. After the virtual field trip, have students discuss their answers to the questions. Then discuss:
  - a. What would happen to the area if development was allowed?
  - b. Does this public land need to be protected?
2. In VFTJ, write about the field trip and discussions.
3. Label a map of the environmental center.
4. Explore the other non-camera sites at Web World Wonders. Which ones are public lands? Make a list in the VFTJ.
5. Do a Venn Diagram that compares and contrasts the Osceola Environmental Center to another non-camera site at <http://webworldwonders.firn.edu>

**Evaluation:**

1. Teacher observation
2. Map
3. Virtual Field Trip Journal
4. Illustrations
5. Writings
6. Venn Diagram

**National Standards:**

Standard 1: How to use maps and other geographic representations, tools, and other technologies to acquire, process, and report information from a spatial perspective.

Standard 3: How to analyze the spatial organization of people, places, and environments of earth’s surface.

Standard 4: The physical and human characteristics of places.

Standard 14: How human actions modify the physical environment.

**Sunshine State Standards:**

SS.B.1.2.1: The student uses maps, globes, charts, graphs, and geographical tools including map keys and symbols to gather and interpret data and to draw conclusions about physical patterns.

SS.B.1.3.1: The student uses various map forms and other geographic representations to acquire, process, and report geographic information.

SS.B.2.3.6: The student understands the environmental consequences of people changing the physical environment in various world locations.

LA.A.2.3.5: The student locates, organizes, and interprets written information for a variety of purposes.

LA.C.1.3: The student uses listening strategies effectively.

LA.C.3.3: The student uses speaking strategies effectively.

SC.D.2.3.2: The student knows the positive and negative consequences of human action on the Earth's systems.

**FCAT:**

Vocabulary knowledge and strategies

Making inferences

Drawing conclusions

Comparison and contrast

Cause and effect relationships

Read and organize information for multiple purposes

Reference materials

## Observation Data Collection Sheet

Date \_\_\_\_\_

Observer's Name \_\_\_\_\_

Location and comments \_\_\_\_\_

General Topography \_\_\_\_\_

Land Use:

Human Alterations \_\_\_\_\_

Nearby Uses \_\_\_\_\_

Disturbances \_\_\_\_\_

Birds/comments \_\_\_\_\_

Animals/comments \_\_\_\_\_

Vegetation/comments \_\_\_\_\_

Water/comments \_\_\_\_\_

## Questions for Osceola Environmental Center Virtual Field Trip

1. Do you see any evidence of vegetation?
2. Do you see any evidence of animals? What evidence is it?
3. Do you see any evidence that the water level may have been higher at some time? Do you see any water marks on the trees or shrubs? Do you see any leaves or other debris up against the trunks of trees?
4. Do you see any evidence that humans have affected the area?
5. Are there any good places for nests, dens, or homes? (sketch the location)
6. Do you see any evidence of animal feeding, such as holes in the trees?
7. Do you see animal constructions, such as spider webs?
8. What other things do you observe?
9. Pick one of the pictures and sketch it. What does it show about this environment?
10. What animals do you think would live in this environment?
11. What do you think would happen if all the water in Reedy Creek disappeared during a drought?

## Public Lands Timeline

**Topic:** Public Lands Timeline

**Grade Level:** middle to high school

**Time to teach lesson:** 2-3 days

**Social studies concept or theme:** Enable students to acquire and organize information about the history of public lands.

**Overview:** Students will research major events in the history of public lands in the US including acquisition, land grants, and history of the park service.

**Objectives/ Goals:** Students will:

1. understand events and their relationships in time.
2. summarize information from a variety of sources.

### **Materials:**

Butcher paper

art supplies

resource books from school or public library

websites:

<http://usparks.about.com/blpkfl.htm>

<http://www.np.gov>

### **Procedures:**

**Initiating Activity:** Create a graphic organizer of what land is public land? Ask students how and when this land became public and who were the people involved in the creation of national parks, etc.

### **Strategies:**

1. Divide students into groups. Give the class a list of historical events to research and create a timeline. (suggested list attached)
2. Events should be divided amongst the group with each student responsible for looking up the date of an event and writing a brief synopsis of the event and how it relates to public lands including people and forces that led to the event and create an icon or graphic for the timeline.
3. As a group, students should sequence their events laying out a timeline. Students should draw a timeline on butcher paper and glue event synopsis paragraphs chronologically. Illustrations should be added for each event.

**Culminating Activity:** Two groups should pair and share their timelines by lining up holding their timelines and facing each other. Each student should present the event he/she researched and ask comments of the other group's presentation.



**Evaluation:** Student synopsis paragraphs, timelines and student presentations.

**Sunshine State Standards:**

- SS.B.2.4.1: The student understands how social, cultural, economic and environmental factors contribute to the dynamic nature of regions.
- SS.B.2.4.3: The student understands how the allocation of control of the Earth's surface affects interactions between people in different regions.
- SS.B.2.4.6: The student understands the relationships between resources and the exploration, colonization, and settlement of different regions of the world.
- SS.A.5.4.8: The student knows significant political events and issues that have shaped domestic policy decisions in contemporary America.
- SS.A.1.4.4: The student uses chronology, sequencing, patterns, and periodization to examine interpretations of an event.
- SS.C.1.4.4: The student understands the role of special interest groups, political parties, the media, public opinion, and majority/minority conflicts on the development of public policy and the political process.
- LA.B.2.4.1: The student writes text, notes, outlines, comments, and observations that demonstrate comprehension and synthesis of content, processes, and experiences from a variety of media.

**FCAT benchmarks:**

**Reading Skills:** Students will:

- read and organize information for multiple purposes.
- use reference materials.
- cause and effect relationships

**Possible Dates to Explore:**

- Lands of public domain west of the Appalachians (1781)
- Yosemite National Park (1872)
- The Antiquities Act of 1906
- Organic Act (1916)
- 1823 Act of Congress providing the state townships for learning and ownership of water bodies.
- 1845 lands provided for a seat of government Section 16 of townships
- Tea Pot Dome Scandal 1924
- Civilian Conservation Corps (1930s)
- Morrill Act (1862)
- Homestead Act (1862)
- Land and Water Conservation Fund Act of 1965 (1964)
- Wilderness Act (1964)
- National Historic Preservation Act (1966)
- Federal Land Policy and Management Act of 1976
- Alaska wilderness legislation 1980
- California Desert Protection Act 1994

## Touring Wakulla Springs State Park

**Topic:** A tour of a state park.

**Grade Level:** K-12

**Time:** one week

**Concept:** Students will be engaged in a virtual field experience through the use of technology.

**Overview:** Students will explore a state park through a virtual field experience and a live on-site camera.

**Objectives:** Students will:

1. define public state park.
2. describe natural features of Wakulla Springs State Park.
3. describe human interaction with the Springs area.
4. make a dodecahedron ball for recording information.
5. implement a field trip (virtual) to observe Wakulla Springs.
6. observe the Springs through the use of the live camera.

**Materials:**

website: <http://webworldwonders.firn.edu/cameras/wakulla>

chart paper

markers

Virtual Field Trip Journal (VFTJ)

computers with Internet access

overhead and transparencies

question sheet

notes recorder

notebook paper

12 dodecahedron patterns

**Procedures:**

**Initiating Activity:** Ask students –“What is a state park?” Can they name any state parks in their area? Tell the students that they will be studying the Wakulla Springs State Park that is near Tallahassee, Florida. It is owned by the state of Florida and is public land. They will keep all the information they gather from the research of Wakulla in a Virtual Field Trip Journal (VFTJ) that they will make. To make the Virtual Field Trip Journal, put notebook paper in a folder to record information, illustrations, and answers to questions.

**Strategies:**

1. Divide students into groups. (Internet access will determine how groups are made.)
2. Put transparency of question sheet on overhead. Hand hard copy to students. Discuss the questions with students. Have them think about these questions as they take the virtual field trip and view the Springs by the camera.

3. Have the students read the history and background, and cool things on the Springs found at <http://webworldwonders.firn.edu/cameras/wakulla> in their VFTJ, write a summary on each section.
4. Read the descriptions for the animals and plants found at Wakulla Springs. In the VFTJ on the notes recorder, list some animals, plants and human interaction you might see on a trip to Wakulla Springs.
5. Take the virtual field trip. Go to <http://webworldwonders.firn.edu/cameras/wakulla> to view through the camera or to <http://webworldwonders.firn.edu/cameras/wakulla/cool/> to view the fieldwalk. In the field walk, click on the yellow dots to see the pictures. Answer the questions as the students tour Wakulla Springs using the virtual field walk and by using the web camera. Also, visit in the Student Activities of the web site the “More than Meets the Eye” game to see the unseen.

### **Culminating Activities:**

1. After the virtual field trip, have students discuss their answers to the questions. Then discuss:
  - a. What would happen to the area if development were allowed?
  - b. Does this public land need to be protected?
2. Do a Venn Diagram that compares and contrasts Wakulla Springs State Park to another camera site at Web World Wonders.
3. Using 12 dodecahedron patterns, make a geographical ball about Wakulla Springs. One should be for the title, one for name, and 10 facts or pictures of the state park.
4. Go to the Student Activities section at the web site and play “More than Meets the Eye.”

### **Evaluation:**

1. Teacher observation
2. Geographical Ball (dodecahedron)
3. Virtual Field Trip Journal
4. Illustrations
5. Writings
6. Venn Diagram

### **National Standards:**

Standard 1: How to use maps and other geographic representations, tools, and other technologies to acquire, process, and report information from a spatial perspective.

Standard 3: How to analyze the spatial organization of people, places, and environments of earth’s surface.

Standard 4: The physical and human characteristics of places.

Standard 14: How human actions modify the physical environment.

### **Sunshine State Standards:**

SS.B.1.2.1: The student uses maps, globes, charts, graphs, and geographical tools including map keys and symbols to gather and interpret data and to draw conclusions about physical patterns.

- SS.B.1.3.1: The student uses various map forms and other geographic representations to acquire, process, and report geographic information.
- SS.B.2.3.6: The student understands the environmental consequences of people changing the physical environment in various world locations.
- LA.A.2.3.5: The student locates, organizes, and interprets written information for a variety of purposes.
- LA.C.1.3: The student uses listening strategies effectively.
- LA.C.3.3: The student uses speaking strategies effectively.
- SC.D.2.3.2: The student knows the positive and negative consequences of human action on the Earth's systems.

**FCAT:**

- Vocabulary knowledge and strategies
- Making inferences
- Drawing conclusions
- Comparison and contrast
- Cause and effect relationships
- Read and organize information for multiple purposes
- Reference materials

## **Wakulla Springs**

1. What vegetation do you see?
2. Are there any animals? If so, what kind?
3. Do you see any evidence of water level fluctuating?
4. Do you see any evidence that humans have affected the area?
5. Are there any good places for nests, dens, or homes?
6. Do you see animal constructions, such as spider webs?
7. Is there any evidence of animal feeding, such as holes in the trees?
8. What other things do you observe?
9. What did you observe when you used the live camera?

## Notes Recorder

Animals

Plants

Human Interaction

# Geographical Ball

## Materials:

12 construction paper Dodecahedron shapes

scissors

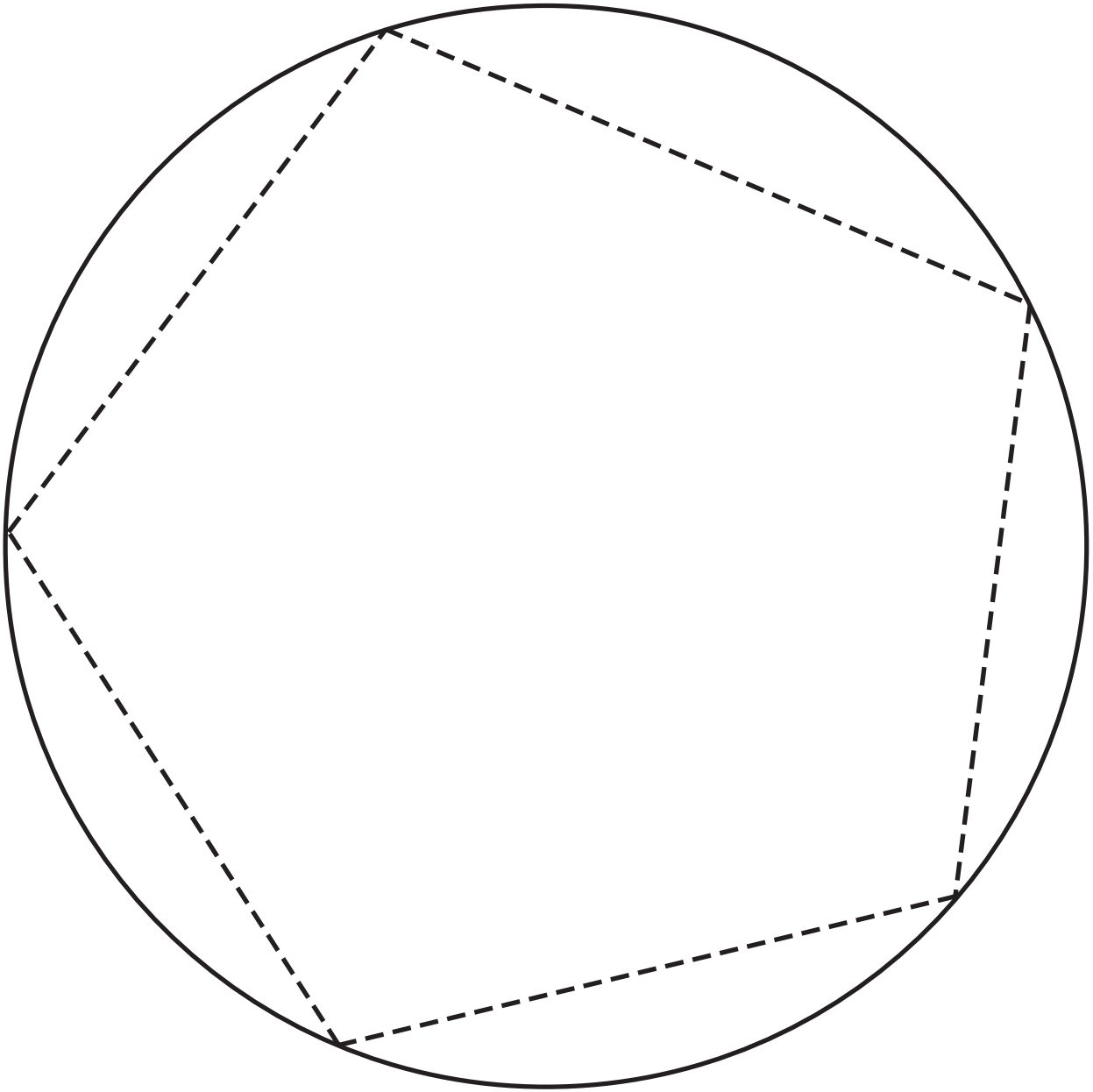
glue

colored pencils, markers, or crayons

pencil

## Directions:

1. On one dodecahedron write the title.
2. On ten of the remaining patterns, add facts or pictures of the state park.
3. Write a statement to go with each pattern.
4. On the last pattern, the student should write his/her name.
5. Cut out each of the 12 patterns.
6. Fold on dotted lines toward the picture.
7. Glue or staple the 12 shapes into a ball by gluing or stapling the flaps together.
8. Can attach string to the balls and hang or they can sit on table.





## Why is This Place a National Park?

**Topic:** Florida's National Parks

**Grade Level:** middle through high school

**Time to teach lesson:** 2-3 days

**Social studies concept or theme:** Enable students to acquire and organize information about the National Park system.

**Overview:** Students will use the Geographic model to research and organize information about National Parks.

**Objectives/ Goals:** Students will:

1. label the National Parks on a map of Florida.
2. distinguish the type of site each national park services.
3. describe human features of a national park.
4. describe natural features of a national park.

**Materials:**

Map of Florida

list of National Park Service sites in Florida

Geographic Model worksheet

resource books from school or public library

websites:

<http://usparks.about.com/blpkfl.htm>

<http://www.np.gov>

**Procedures:**

**Initiating activity:** Ask the class if they have ever visited a national park. Pose the following question: Why should we set aside some of our public land under the jurisdiction of national park service?

**Strategies:**

1. Have students label the eleven sites in Florida under the jurisdiction of the national park service.
2. Have students brainstorm why places are set aside for protection. Have students include human and natural features. Ex: What type of plants and animals are located there? Did a famous event take place there? Did a famous person live there?
3. Divide students into eleven groups to research the eleven National Park sites in Florida. Students should use the geographic model to research location and physical characteristics, cultural characteristics and the history of the park's designations.
4. Each group will design a campaign poster describing the significance their park site and why it should be preserved.
5. Group posters should be placed around the room allowing students to inspect the posters

in a “walking tour.” Students should take notes individually about each site.

6. Teacher will lead students in a whole group discussion on the merits of each site and allow groups to defend the value of their site and why it should be preserved.

**Culminating Activities:** Students will write an essay ranking Florida’s national parks according to their significance and defend their rankings.

**Evaluation:** Student posters, note taking, student generated rubric for walking tour and essay.

**Sunshine State Standards:**

SS.B.2: The student understands the interaction of people and the physical environment.

LA.A.2.3.5: The student locates, organizes, and interprets written information for a variety of purposes, including classroom research, collaborative decision making, and performing a school or real-world task

SS.B.2.3.2: The student knows the human and physical characteristics of different places in the world and how these characteristics change over time.

SS.B.2.3.3: The student understands how cultures differ in their use of similar environments and resources.

**FCAT benchmarks:**

**Reading Skills:** Students will:

- read and organize information for multiple purposes.
- use reference materials.
- use persuasion techniques.

**National Park Service sites in Florida:**

- Big Cypress National Preserve
- Biscayne National Park
- Canaveral National Seashore
- Castillo de San Marcos National Monument
- De Soto National Memorial
- Dry Tortugas National Park
- Everglades National Park
- Fort Caroline National Memorial
- Fort Matanzas National Monument
- Gulf Islands National Seashore
- Timucuan Ecological and Historical Preserve

**Extensions:** Visit a national or state park in your area and discover the unique features of your area. Invite a park ranger or city planner to visit your classroom, students can conduct interviews on public land use in their county. Adopt a Park- design a project to assist a park in your area through litter pick up, etc.

# Geographic Model Worksheet

Application on the Geographic Model to \_\_\_\_\_

I. Location & Physical Characteristics

- 1.
- 2.
- 3.
- 4.

II. Population & Cultural Characteristics

- 1.
- 2.
- 3.
- 4.
- 5.

III. Historical Background

- 1.

IV. Major Economic Activities and Land Use

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

V. Problems and Prospects