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| Summary |
| \*Lesson Title (create a title for your lesson):Florida: Rich in Resources |
| \*Lesson Summary (1-3 sentence summary):The students will learn about the terms “Natural Resources” and “Natural Environment.” They will then examine maps indicating the various distributions of natural resources in the state of Florida. Finally, they will individually select a natural resource of their own that they will research and then depict its distribution in the state of Florida, by creating their own thematic/resource map. |
| \*Subject (e.g. Language Arts, Math, Science, Social Studies/History, Art, Music, etc.):Social Studies, Science |
| \*Intended Audience/Grade Level: 4th Grade  | \*Time Frame (designate whether this lesson will compose a series of lessons or a single lesson and approximate time frame):2 days |
| Standards and Purpose |
| \*Standards (link appropriate Common Core State Standards, Next Generation Sunshine State Standards, or other standards below ):Social Studies

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

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| SS.4.G.1.2 | Locate and label cultural features on a Florida map.  |

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| SS.4.G.1.3 | Explain how weather impacts Florida.  |

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| SS.4.G.1.4 | Interpret political and physical maps using map elements (title, compass rose, cardinal directions, intermediate directions, symbols, legend, scale, longitude, latitude).  |

Science

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| SC.4.N.1.1 | Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.\*Cognitive Complexity:* Level 3: Strategic Thinking & Complex Reasoning |
| SC.4.L.16.4 | Compare and contrast the major stages in the life cycles of Florida plants and animals, such as those that undergo incomplete and complete metamorphosis, and flowering and nonflowering seed-bearing plants.Cognitive Complexity: Level 2: Basic Application of Skills & Concepts |
| SC.4.L.16.2 | Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment.Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning |
| SC.4.L.17.4 | Recognize ways plants and animals, including humans, can impact the environment.Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning |
| SC.4.E.6.6 | Identify resources available in Florida (water, phosphate, oil, limestone, silicon, wind, and solar energy).Cognitive Complexity: Level 1: Recall |

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| \*UFDC Resources (Identify and permalink for documents utilized from the UFDC here):Geology and waste disposal in Florida: <http://ufdc.ufl.edu/UF90000365/00001>Geologic map of the state of Florida (2011): <http://ufdc.ufl.edu/UF00015087/00002>Freshwater withdrawals and water-use trends in Florida (1985): <http://ufdc.ufl.edu/UF90000376/00001>Transmissivity and well yields of the upper Floridan Aquifer in Florida(1990): <http://ufdc.ufl.edu/UF00015036/00001>Geological highway map and geoscience resource guide(2007): <http://ufdc.ufl.edu/UF00094061/00001> Sulfate Concentration in Florida (1964): <http://ufdc.ufl.edu/UF00015053/00001> Conservation lands and trails Mapping and GIS Database Project for the Florida Greenways Commission(1994): <http://ufdc.ufl.edu/UF00015176/00001> |
| Guiding Question (s) (What are the guiding questions for this lesson? Guiding questions are broad questions that students and the teacher can come back to throughout the learning experience. A good guiding question is (a) thought-provoking, counterintuitive, and/or controversial, (b) requires students to draw upon content knowledge and personal experience, and (c) can be revisited throughout the lesson to engage students in an evolving discussion.):What natural resources are found in Florida?How are natural resources distributed in Florida?How does the natural environment affect the natural resources in Florida?How does the distribution of humans affect the natural resources and natural environment of Florida? | \*Objectives (What should students know and be able to do as a result of this lesson? What are the learning objectives for this lesson? What will students know and be able to do as a result of this lesson? Try to make the objectives measurable and specific.):Students will be able to identify prominent natural resources in Florida.Students will be able to depict the distribution of natural resources throughout the state of FloridaStudents will draw conclusions to the affect that the environment and human population have on natural resources in the state of Florida.Students will create their own maps of natural resource distribution in the state of Florida. |
| Assessment (how will data be collected on student performance?) |
| \*Formative (Describe how and when the students will get feedback about their performance or understanding during the lesson. How and when will they have an opportunity to use this feedback to improve their performance?):The students will be shown maps from the UFDC resource database and will answer the following questions with their partner:1. What is being depicted on the map?
2. How is it being depicted on the map?
3. Where is the most concentration of the item in the state?
4. Where is the least concentration of the item in the state?
5. For questions 3 & 4, what role do you think the natural environment played in the distribution?
6. For questions 3 & 4, what role do you think humans played in the distribution?
7. If your map is old, do you think what is depicted may be different today? Why or why not?
 | \*Summative (Describe how the teacher will determine if the students have reached the learning targets for this lesson. How will the teacher measure the impact of this lesson on student learning?):The final map that the students create individually will be assessed by the following criteria:1. Is it labeled clearly and accurately?
2. Is it neat and easy to follow?
3. Is the resource depicted accurately?
4. Are the sources for the information clearly cited in the corner of the map?
5. Did the student provide a sufficient answer on the back of the map to why they chose that natural resource, and why they believe it is distributed in the way that it is?
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| Teaching Phase (step by step narrative guide to instruction) |
| \*Activate/Build Prior knowledge (Describe how the teacher will gather information about student understanding and prior knowledge before the lesson or at the beginning of the lesson. How and when can the teacher use this information during the lesson?):The teacher will begin class by giving a brief overview of the different type of maps and the geography of Florida:[Excerpts]:* 1. A map is a representation of an area of land or sea showing physical features, cities, roads, etc.
	2. A globe is a 3D representation of the world and it is used by turning it and looking for specific places.
	3. The students’ hometown is -------------; it is located southeast of ---------------.
	4. Florida is located on the southeastern most point of the United States. It is surrounded by water on all three sides.
	5. North America is just north of South America, just west of Europe/Africa, and just east of Asia/Australia. It consists of Canada, United States, Mexico, and the Caribbean Islands.
	6. Tallahassee is the capital of Florida. It is located in the panhandle of the state; north of Gainesville/Hawthorne, west of Jacksonville, and east of Pensacola.
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| \*Direct Instruction (How will the teacher present the concept or skill to students?):The teacher will then show the following videos from YouTube that describe natural resources and natural environments:<http://www.youtube.com/watch?v=DNILTr2-whQ><http://www.youtube.com/watch?v=nF2bMrSSVFU>  |
| \*Guided Practice (What activity or exercise will the students complete with teacher guidance?):The students will then be placed into partner groups and given 3-4 map handouts printed from the University of Florida Digital Collections Database. They will need to then answer the following questions for each map:1. What is being depicted on the map?
2. How is it being depicted on the map?
3. Where is the most concentration of the item in the state?
4. Where is the least concentration of the item in the state?
5. For questions 3 & 4, what role do you think the natural environment played in the distribution?
6. For questions 3 & 4, what role do you think humans played in the distribution?
7. If your map is old, do you think what is depicted may be different today? Why or why not?

After about 15-20minutes, the teacher will then put the maps on the overhead or SmartBoard and will go around the class asking students to provide their answers for each map. |
| \*Independent Practice (What activities or exercises will the students complete to reinforce the concepts and skills developed in the lesson?):The students will then be given a large (legal size) blank Florida outline map and will be instructed to use remaining class time and homework time to research a natural resource in Florida, and depict the distribution on the blank map. They will be encouraged to search the internet for their information, especially the UFDC resource site.  After they create the maps, they will be expected to answer the following on the back:Why do you choose this natural resource? Why did you believe it is distributed in the way that it is? |
| \*Closure (How will the learning from the lesson be reinforced over time?):Students will be asked to display their maps around the room when they are finished. Teacher will take the time to highlight some of them in front of the entire class.* The science content throughout the year highlights various natural materials. The teacher can use this time to refer back to the maps.
* 4th grade Social Studies focuses on Florida history so the teacher will have many opportunities to reference how natural resources may have influenced the development and settlement of Florida.
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| Reading strategies (describe strategies in detail):Students will have to utilize map reading skills that they have been taught in previous grades. | Writing strategies (describe strategies in detail):Students will need to work on their writing skills by answering a number of questions about the map with a written response. | Speaking and listening strategies (describe strategies in detail:Students will need to listen to the teacher’s instruction and the videos to become informed about natural resources.They may be asked to respond to questions during the guided practice portion. |
| \*Accommodations(Describe how to accommodate students with special needs and how to differentiate instruction.) |
| * Students are placed in partner groups
* Students are given visual depictions of the tasks that they are assigned to do
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| \*Extensions(Describe possible extensions of this lesson.) |
| Re-Teaching:* The science content throughout the year highlights various natural materials. The teacher can use this time to refer back to the maps.
* 4th grade Social Studies focuses on Florida history so the teacher will have many opportunities to reference how natural resources may have influenced the development and settlement of Florida.
 | Enrichment:* The science content throughout the year highlights various natural materials. The teacher can use this time to refer back to the maps.
* 4th grade Social Studies focuses on Florida history so the teacher will have many opportunities to reference how natural resources may have influenced the development and settlement of Florida.
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| \*Materials |
| Special materials/preparation needed (Describe what special materials or preparations are needed for this lesson.):* Copies of various maps (links provided at beginning of lesson plan)
* Large blank maps of the state of Florida
* Coloring materials such as crayons, markers, etc.
 | Suggested technology (What are the suggested technology requirements to use this lesson?):Computers with Internet accessSmartBoard or Digital Projector |
| Notes and Additional Recommendations (Provide recommendations concerning the preparation or implementation of your lesson):Your choice whether to create a rubric for the final assessment activity and/or a question sheet for the guided practice portion. The guided practice portion can also be completed individually, with the final project completed with partners. |
| Reflection (Questions to stimulate reflection on the process of teaching with primary sources for the implementing teacher – not for completion by the lesson developer) |
| Teacher learning:* How did my students respond?
* What would I do differently next time?
* What would I keep the same?
* How will I use primary sources in the future?
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| Attachments(Attach or imbed worksheets and additional documents below) |
| All links provided within this lesson plan document |