Teacher(s): Kelli Carter
Grade(s): K-5
Subject(s): Science Lab

Idea 1 - 5th Grade: Human Impacts/Florida’s Resources Turpentine Industry

Review of 4th grade standards for FSA Test prep. Integrate turpentine industry of FL into lessons of FL resources. Sarasota also took part in turpentining, so I will search for additional local resources to tie in.

- Oral history turpentine in Sarasota: https://www.youtube.com/watch?v=X_D1pLKeWOI
- https://daysgoneby.me/turpentine/
- http://www.sarasotahistoryalive.com/history/articles/turpentine-from-pine-woods/
- https://www.heraldtribune.com/article/LK/20040315/News/605205566/SH/
- https://www.carltonreserve.org/history/turpentine/

Learning Goals/Standards

SC.4.E.6.3
Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable.

SC.4.E.6.6
Identify resources available in Florida (water, phosphate, oil, limestone, silicon, wind, and solar energy).

SC.4.L.17.4
Recognize ways plants and animals, including humans, can impact the environment.
Idea 2 - 4th Grade: Native Americas in Florida (Shell Mound, other mounds on the West Coast of FL/Natural Resources)

Integrate social studies standards on Native Americans of Florida. Read about Shell Mound and discuss the ways that resources were used and how humans impacted their environment to create and maintain shell mound. Use Prof. Ken Sassaman’s Shell Mound Article and:

- https://www.historicspanishpoint.org/about-us/history/prehistory/
- https://www.scgov.net/home/showdocument?id=39158

Learning Goals/Standards

SC.4.E.6.3
Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable.

SC.4.E.6.6
Identify resources available in Florida (water, phosphate, oil, limestone, silicon, wind, and solar energy).

SC.4.L.17.4
Recognize ways plants and animals, including humans, can impact the environment.

SS.4.A.2.1
Compare Native American tribes in Florida.

Idea 3 - 3rd Grade: Photosynthesis (include Carbon Sequestration/Forestry)

Integrate Carbon Sequestration into lesson on Photosynthesis.

Refer to Prof. Tim Martin’s forest management PowerPoint.


Learning Goals/Standards

SC.3.L.17.2 Recognize that plants use energy from the Sun, air, and water to make their own food.
Idea 4 - 2nd Grade: Florida’s Aquifers (Water Cycle/Weather/Climate)

Explain how the water cycle, weather, and climate impact and are connected to the Florida aquifer systems. Use the Howard T. Odum Florida Springs Institute Springs Map: https://floridaspringsinstitute.org/springs-map-2.0/

Learning Goals/Standards

SC.2.N.1.6
Explain how scientists alone or in groups are always investigating new ways to solve problems.

SC.2.E.7.3
Investigate, observe and describe how water left in an open container disappears (evaporates), but water in a closed container does not disappear (evaporate).

SC.2.E.7.1
Compare and describe changing patterns in nature that repeat themselves, such as weather conditions including temperature and precipitation, day to day and season to season.

Idea 5 - 1st Grade: Coastal Estuaries and Sea Level Rise

Study coastal estuaries and tie in basic needs of living things. Discuss how sea level rise is impacting these plants and animals. Create before/after diagrams illustrating sea level rise.

https://www.pbs.org/show/sinking-cities/

http://futurebear.strikingly.com/

Learning Goals/Standards

SC.1.E.6.3
Recognize that some things in the world around us happen fast and some happen slowly.

SC.1.N.1.1
Raise questions about the natural world, investigate them in teams through free exploration, and generate appropriate explanations based on those explorations.

SC.1.L.17.1
Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space.
Idea 6 - Kindergarten: Trees/Forestry

Observe trees on campus, discuss the role that trees play in our environment and how they benefit the Earth’s ecosystem.

https://www.plt.org/curriculum/southeastern-forests-climate-change/

Learning Goals/Standards

SC.K.L.14.3

Observe plants and animals, describe how they are alike and how they are different in the way they look and in the things they do.

SC.K.N.1.4

Observe and create a visual representation of an object which includes its major features.

What additional resources do you need in order to act on these ideas?
Grade level specific resources.