

Team 8

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Conserving the Natural Resources in Illinois

Approximate time for lesson: 45-50 minutes

Grade Level: 3rd Grade

Broad Goals: The students will have a broader knowledge of what resources are important in Illinois, why those resources are so important, and how they as individuals can help to preserve our very important natural resources.

Standards:

- IL.12.B STANDARD: Know and apply concepts that describe how living things interact with each other and with their environment.
- IL.12.B.1a > Describe and compare characteristics of living things in relationship to their environments.
- IL.12.E.1c > Identify renewable and nonrenewable natural resources.
- IL.13.B.1e > Demonstrate ways to reduce, reuse and recycle materials.
- IL.15.C.1a > Describe how human, natural and capital resources are used to produce goods and services.
- IL.16.E.1.US > Describe how the local environment has changed over time.
- IL.17.C.1a > Identify ways people depend on and interact with the physical environment (e.g., farming, fishing, hydroelectric power).
- IL.17.C.1b > Identify opportunities and constraints of the physical environment.
- IL.17.C.1c > Explain the difference between renewable and nonrenewable resources.
- IL.22.C STANDARD: Explain how the environment can affect health.
- IL.22.C.1 > Identify sources and causes of environmental health risks (e.g., air, soil, sun, water, noise, food, chemicals).

Objectives: The students will be able to identify different resources available in Illinois and how these resources have decreased since the nineteenth century. Students will also be able to identify the importance of these resources and several different ways to conserve them. Students will construct a poster about their choice resource with the poster persuade/educate others on ways to conserve that resource.

Vocabulary:

Renewable Resource- A renewable resource is a resource that can regenerate itself faster than it can be depleted or completely used up. Examples: oxygen, fresh water, solar energy, trees

Non-Renewable- A non-renewable resource is a resource that can not be re-produced, re-grown, or re-generated as fast as the resource is being used up. Examples: coal, natural gas, fossil fuels

Pollution- Releasing chemicals or other substances that contaminate the air, water, land, or soil

Recycle- to re-use or re-make

Materials: Various colored markers; one sheet of poster board per student

Resources:

Freedman, R. (1987). Lincoln A Photobiography. New York, NY: Clarion

<http://www.wilmette39.org/virtualmuseum/default.html>

<http://www.wilmette39.org/virtualmuseum/museum01/Campbell01/resources01.htm>

Illinois State Water Survey

<http://www.sws.uiuc.edu/docs/wsfaq/>

Illinois Environmental Protection Agency

<http://www.epa.state.il.us/kids/teachers/materials-resources/index.html>

Illinois Environmental Protection Agency

<http://www.epa.state.il.us/kids/fun-stuff/kids-earth-day.html>

The EnviroLink Network

<http://www.envirolink.org/external.html?www=http%3A//www.epa.gov/students/&itemid=20000501172440885043>

Nicor Gas

http://www.nicor.com/nsr/nicor_conservation_guide.pdf

Focusing Activity: I will do a short review with the students about the natural resources we have discussed in previous lessons. I will ask the students to tell me what natural resources they remember us talking about. During this review I will use a graphic organizer (information web) on poster board to highlight all the natural resources the students can identify. I will also ask the students to start thinking about why these natural resources are so important to us.

Instruction: After writing all the natural resources that the students identify in my web, from the focusing activity I will then begin the lesson by asking the students how they think the natural resources are different today than they were when Lincoln was alive? I will discuss with the students how many of the natural resources have been greatly reduced since Lincoln's day. Some examples that I will give will be:

- Farm land has been drastically reduced
- Water supply is much smaller and much more polluted
- Decreased number of trees
- Air is more polluted
- Coal, Oil, and natural gases are being burned much faster

After discussing some of the examples from above I will ask the students why they think that we are using our natural resources so much faster now than when Lincoln was alive. I am hoping to guide students to see that not only is Illinois much more populated now but also that some people are really wasteful when it comes to using natural resources.

After discussing with the students the reduction of natural resources in Illinois today then I will move the lesson to ask the students why they think the natural resources are so important to us and what they do for us on an everyday basis. Some questions I will ask are:

- Why do we need water? What are some of the different things we use water for? How important do you think water is to us?
- Why do we need farms so much? What are some of the things we do with the corn and soybeans we grow on our farms?
- How do we use coal in our lives?
- What do we use natural gases for in Illinois?
- Can anyone give me some examples of how we use oil in Illinois? Do you use oil everyday in your life?
- What about the air? Is it important that we keep the air clean?

While discussing some these questions with the students I will also write some of the answers on poster board so everyone can see the uses and importances of our natural resources.

After learning the importance of our natural resources then I would like the students to share some ideas about how they think they can conserve the natural resources that we have here in Illinois. While the students share their ideas with me I will write them on a poster board under the natural resource that they are referring to. I will also be helping them to come up with various ways of conserving our natural resources such as:

Water:

- Turn off water while brushing teeth
- Repair leaky faucets
- Use minimum amount of water needed
- Do not take really long showers

- Do not pollute
- Recycle

Air:

- Turn off lights, electricity requires burning of coal, which pollutes air
- Car pool
- Use public transportation
- Combine errands to reduce trips made to store
- Keep your car tuned up

Land/Farm Land/Trees

- Do not litter or pollute
- Plant Trees
- Recycle paper, plastic, glass, etc.
- Reduce waste/less waste equals less landfills

Coal/Oil/Natural Gas

- Turn off lights
- Turn off television when leaving room
- Turn furnace down/Air conditioner up
- Close storm window in winter to reduce chills or cold drafts

After the students have discussed various ways to help conserve our natural resources I will ask the students to construct a poster. Each student will be given 1 sheet of post board and they will be asked to create a poster about a resource of their choice. The poster needs to state what the resource is and how we as individuals can help to conserve/preserve that resource. The students will be instructed to make the poster very informative so that anyone who sees it will know how to help conserve our natural resources in Illinois.

Modeling and Guided Practice: While I am instructing the students on what type of poster I would like them to create I will show an example by using a poster I have created about the resource I feel it is most important to conserve. I will point out to the students my title, my methods of conserving/preserving the resource, and any illustrations I have added to my poster. This will assist students in knowing what is expected of them when constructing this poster.

Conclusion: For the conclusion of the lesson I will ask students to share the poster he/she has constructed and give a brief explanation why he/she chose that natural resource. I will then have a closing discussion to ask the students what they learned about conserving natural resources today, what steps they think they can take to conserve our natural resources and why it is so important to take those steps.