

**Worksheet 5-5—  
Lesson Plan  
Format**

(adapted with permission)

Subject: Science Lesson Name: Define/Identify Class: 8 <sup>th</sup> Grade Earth Science Date: 03/11/09		Teacher: Deborah Peterson Location: Franklin Middle School Unit Context: Renewable & Nonrenewable resources
<b>Activities</b> Small group activity (2/3 students) using resources in ProQuest, will develop a definition of renewable and nonrenewable resources and five examples of each. Groups will share with class to create master lists and group definitions. Class will identify 6 renewable and 6 nonrenewable resources for further research.	<b>Big6™ Skills</b> <ul style="list-style-type: none"> <li>• Task Definition</li> <li>• Information Seeking Strategies</li> <li>• Location and Access</li> <li>• Use of Information</li> <li>• Synthesis</li> </ul>	<b>Idaho Science Standards</b> Goal 5.3 Understand the importance of Natural Resources and the need to manage and conserve them

Learning Context:

Day one of unit

Materials/Resources:

Computers  
Paper/writing utensil

Evaluation:

Students will be able to present definitions and examples of renewable and nonrenewable resources. They will then create a class definition of renewable and nonrenewable resources. Students will be able to determine which Big6 skill they are addressing through their brainstorming.

Notes:

**Worksheet 5-5—  
Lesson Plan  
Format**

(adapted with permission)

Subject: Science	Teacher: Deborah Peterson
Lesson Name: Becoming an Expert	Location: Franklin Middle School
Class: 8 <sup>th</sup> grade Earth Science	Unit Context: Renewable & Non-renewable resources
Date: 03/11/09	

<p>Activities Small group activity (2/3 students) using resources in ProQuest students will become experts on one of the 12 resources identified. They will be able to identify the major advantages and disadvantages of the resource, the current use in the United States and worldwide, the projected usage in the next ten years.</p>	<p>Big6™ Skills</p> <p><b>Task Definition</b> <b>Information Seeking</b> <b>Location and Access</b> <b>Use of Information</b></p>	<p>Idaho Science Standards</p> <p>Goal 5.3 Understand the importance of Natural Resources and the need to manage and conserve them</p>
--	---	--

Learning Context:

Day two of unit—after students created a class definition and list of sources, students in small groups of 2 or 3 become experts on a resource that will be used for a presentation at the end of this unit.

Materials/Resources:

- Computers
- Paper/writing utensil
- Library

Evaluation:

Students are able to locate useful information

Students know how to pull key ideas as well as respond to criteria for resource

Notes:

**Worksheet 5-5—  
Lesson Plan  
Format**

(adapted with permission)

Subject: Powerpoint Guidelines	Teacher: Deborah Peterson
Lesson Name: Powerpoints	Location: Franklin Middle School
Class: 8 <sup>th</sup> Earth Science	Unit Context: Renewable & Nonrenewable resources
Date: 03/11/09	

<p><b>Activities</b> To create a powerpoint on the major advantages and disadvantages of their identified resource, the current use in the United States and worldwide, the projected usage in the next ten years</p>	<p><b>Big6™ Skills</b></p> <ul style="list-style-type: none"> <li>• Use of Information</li> <li>• Synthesis</li> </ul>	<p><b>Idaho Science Standards</b> Goal 5.3 Understand the importance of Natural Resources and the need to manage and conserve them</p>
---	--	--

**Learning Context:**

Day 3 of unit

**Materials/Resources:**

Students will refer to data collected on previous day.

Guidelines on powerpoint development will be presented which include:

- Begin with an introductory slide including your topic and the names of the presenters.
- Include an opening slide stating that your project contains copyrighted materials (if indeed it does), which have been used under the fair use exemption of the U.S. Copyright Law. If you have made alterations, those must be indicated.
- Each slide should contain BRIEF main points, NOT the entire text of your presentation. No more than 6 words per line.
- You should use the points for elaboration through your oral presentation. Give your classmates a reason to have to listen to you and take notes if needed. In fact, the less text you have, the more interesting your presentation will be.
- Font size should be no smaller than 36 points and the style should be consistent.
- Font color should contrast with the background color. Font color, typeface and contrast should be visible. You should not have to turn off the lights to see read your slides.
- Text animation should be used sparingly, if at all. Use it to make a point, not to entertain.
- Images should reinforce or extend the content and be visible from the back of the room.
- Be careful—text may be difficult to read if superimposed over graphics.
- Use a lot of "white space," refraining from cluttering each slide.
- Use sound prudently—only for extending or supporting the content.
- Slide transitions should be consistent throughout the presentation.
- If linking to web sites, those should also be visible from the back of the room.
- Use correct grammar, spelling, punctuation, and capitalization.
- Include a "Works Cited" slide.

**Evaluation:**

Students will be able to create a presentation which includes a minimum of a title slide, 8 information slides, and a citation slide and meets the guidelines discussed above.

**Notes:**

Need to create scoring rubric for presentation

*The Definitive Big6™ Workshop Handbook, page 78*

*The "Big6" is copyright© (1987) Michael B. Eisenberg and Robert E. Berkowitz. For more information, visit [www.big6.org](http://www.big6.org)*

**Worksheet 5-5—  
Lesson Plan  
Format**

(adapted with permission)

Subject: Science	Teacher: Deborah Peterson
Lesson Name: Problem Scenario	Location: Franklin Middle School
Class: 8 <sup>th</sup> grade Earth Science	Unit Context: Renewable & Nonrenewable Energy
Date: 03/11/09	

<p><b>Activities</b> Small groups of two to three students will be formed with a representative from “experts” from the different resources. They will be given a scenario of an energy related problem and asked to find a solution using the resources represented in their group. They will present to the class their solution.</p>	<p><b>Big6™ Skills</b></p> <ul style="list-style-type: none"> <li>• Use of Information</li> <li>• Synthesis</li> </ul>	<p><b>Idaho Science Standards</b></p> <p>Goal 5.3 Understand the importance of Natural Resources and the need to manage and conserve them</p>
---	--	---

**Learning Context:**  
Day six of the unit

**Materials/Resources:**  
Notes from student presentations on renewable and nonrenewable resources

**Evaluation:**  
Students will effectively present their solution/response to the problem.

**Notes:**  
Scenario:  
Terrorists have blown up the dams on the Snake River. We have major power outages, no storage for irrigation, and flooded farm lands downstream from the dams. Using what you know about renewable and nonrenewable resources what is the most effective way to deal with the problems associated with this disaster?

Deborah Peterson  
Citations  
Materials to be Used with Lesson Plans  
Critical Learning Skills  
03/11/09

Ayres, Robert U. "The energy we overlook." World Watch. 01 Nov 2001. 30. eLibrary.

Proquest CSA. POCATELLO SCHOOL DISTRICT 25. 11 Mar 2009.

<<http://elibrary.bigchalk.com/curriculum>>.

"Guided Tour of Wind Energy." ProQuest Editorial Website G. 01 Nov 2008. ProQuest

Editorial Website G. eLibrary. Proquest CSA. POCATELLO SCHOOL DISTRICT 25.

11 Mar 2009. <<http://elibrary.bigchalk.com/curriculum>>.

Graber, Cynthia. "Water Works." Ask. 01 Apr 2007. 17. eLibrary. Proquest CSA.

POCATELLO SCHOOL DISTRICT 25. 11 Mar 2009.

<<http://elibrary.bigchalk.com/curriculum>>.

Lavelle, Marianne. "Power Revolution." U.S. News & World Report. 05 Nov 2007. 46.

eLibrary. Proquest CSA. POCATELLO SCHOOL DISTRICT 25. 11 Mar 2009.

<<http://elibrary.bigchalk.com/curriculum>>.

Morgan, Sally and Mike Allaby. Chapter 3.6: Endless Energy. The New Encyclopedia

of Science: Ecology and Environment. Oxford University Press. 2003. eLibrary.

Proquest CSA. POCATELLO SCHOOL DISTRICT 25. 11 Mar 2009.

<<http://elibrary.bigchalk.com/curriculum>>.

Solar Energy. Earth Explorer. Enteractive. 1995. eLibrary. Proquest CSA. POCATELLO

SCHOOL DISTRICT 25. 11 Mar 2009. <<http://elibrary.bigchalk.com/curriculum>>.

Sources of Energy. The World Almanac for Kids 2005. World Almanac Books. 2005.

eLibrary. Proquest CSA. POCATELLO SCHOOL DISTRICT 25. 11 Mar 2009.

<<http://elibrary.bigchalk.com/curriculum>>.

Wind power. Compton's by Britannica. Encyclopedia Britannica. 2005. eLibrary.

Proquest CSA. POCATELLO SCHOOL DISTRICT 25. 11 Mar 2009.

<<http://elibrary.bigchalk.com/curriculum>>.