

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

(adapted with permission)

<b>Subject:</b> food safety	<b>Teacher:</b>
<b>Lesson Name:</b> What is your risk of contracting a food borne illness?	<b>Location:</b>
<b>Class:</b> 8-9	<b>Unit Context:</b> Earth Science
<b>Date:</b> 3-12-2009	

<p><b>Activities</b></p> <p>Identify causes of food borne illnesses</p> <p>Present food safety scenarios for students to react to.</p> <p>Explore effect of varying amounts of food (sugar) on the growth of yeast, a common and safe fungus for modeling other more harmful micro-organisms</p> <p>Research food borne illness occurring in the last year. (create a chart to include illness, symptoms, annual risk of contracting illness, methods of reducing risk level)</p> <p>Create a presentation on how they will reduce their risk of contracting a food borne illness.</p>	<p><b>Big6™ Skills</b></p> <p>Task Definition Information Seeking Strategies Location &amp; Access Use of Information Synthesis</p>	<p><b>Idaho Science Standards</b></p> <p>Standard 5 Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced 8-9.ES.5.1.1 Analyze environmental issues such as water and air quality, hazardous waste, and depletion of natural resources. (656.01a)</p> <p>Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them 8-9.ES.5.3.1 Describe the difference between renewable and nonrenewable resources. (656.03a)</p>
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**Learning Context:**  
food safety, causes and risks.

## Materials/Resources:

Joseph M. Dougherty Deseret News. . "Chlamydia is prevalent. " Deseret News [Salt Lake City, Utah] 4 Mar. 2009,B.1. ProQuest Newsstand. ProQuest. Lili.org, Boise, Idaho. 13 Mar. 2009 <<http://www.proquest.com/>>

"Temperature Is Key to Reducing Risks. " USA Today 1 Aug. 2008: 3. Research Library. ProQuest. Lili.org, Boise, Idaho. 13 Mar. 2009 <<http://www.proquest.com/>>

Kent Garber. . "Drinking It Raw--or Not :Health officials face off with farmers over unpasteurized milk. " U.S. News & World Report 28 Apr. 2008: 25. ABI/INFORM Global. ProQuest. Lili.org, Boise, Idaho. 13 Mar. 2009 <<http://www.proquest.com/>>

"Food Safety Expert: Americans Not Aware of Ongoing Risk & Complications of Salmonella Poisoning. " PR Newswire 12 March 2009. ProQuest Newsstand. ProQuest. Lili.org, Boise, Idaho. 13 Mar. 2009 <<http://www.proquest.com/>>

## Evaluation:

Presentation (PowerPoint, poster, flyer, etc.)

## Notes:

**Worksheet 5-5—  
Lesson Plan  
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(adapted with permission)

<b>Subject:</b> Energy uses	<b>Teacher:</b>
<b>Lesson Name:</b> Why is energy conservation important to me?	<b>Location:</b>
<b>Class:</b> grades 8-9	<b>Unit Context:</b> Earth Science
<b>Date:</b> 3-12-2009	

<b>Activities</b>	<b>Big6™ Skills</b>	<b>Idaho Science Standards</b>
Identify energy sources: (renewable/nonrenewable) Identify energy uses on a typical day. Create a collage of various uses/sources of energy What can I do to conserve energy? Identify a problem related to energy conservation. (state problem & develop solution) Present and defend your solution	Task Definition Information Seeking Strategies Location & Access Use of Information Synthesis Evaluation	Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced 8-9.ES.5.1.1 Analyze environmental issues such as water and air quality, hazardous waste, and depletion of natural resources. (656.01a)

**Learning Context:**

Non-renewable & Renewable Resources  
 Advantages & Disadvantages of renewable and nonrenewable

**Materials/Resources:**

Susan Holtz. . "Beyond Food-vs-Fuel. " Alternatives Journal 35.2 (2009): 8-9. Research Library. ProQuest. Lili.org, Boise, Idaho.. 14 Mar. 2009 <<http://www.proquest.com/>>

Bryan Walsh. . "An Oil Giant Dreams Green. " Time : Mind & Body Special Issue / How Faith Can Heal 23 Feb. 2009: 38. ABI/INFORM Global. ProQuest. Lili.org, Boise, Idaho. 14 Mar. 2009 <<http://www.proquest.com/>>

Terrence Stutz. . "Texas clean air bill proposes higher energy efficiency standards. " McClatchy - Tribune Business News 30 January 2009. ProQuest Newsstand. ProQuest. Lili.org, Boise, Idaho. 14 Mar. 2009 <<http://www.proquest.com/>>

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

(adapted with permission)

<b>Subject:</b> Habitat pollution	<b>Teacher:</b>
<b>Lesson Name:</b> Why is our environment important to me?	<b>Location:</b>
<b>Class:</b> grades 8-9	<b>Unit Context:</b> Earth Science
<b>Date:</b> 3-12-2009	

<b>Activities</b>	<b>Big6™ Skills</b>	<b>Idaho Science Standards</b>
<p>Identify the types of pollution, sources of the pollution, and how can we protect the environment from further pollutants.</p> <p>Assign pollution dilemmas – role play pollution situations analysis possible solutions, provide rational.</p> <p>Select an environmental issue that is important to you – research &amp; create a solution for resolving, and present your case</p> <p>Community service project –litter patrol</p>	<p>Task Definition</p> <p>Information Seeking Strategies</p> <p>Location &amp; Access</p> <p>Use of Information</p> <p>Synthesis</p>	<p>Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced</p> <p>8-9.ES.5.1.1 Analyze environmental issues such as water and air quality, hazardous waste, and depletion of natural resources. (656.01a)</p>

**Learning Context:**

Environmental issues

**Materials/Resources:**

Judie Steeves. . "Environment pollution not an issue yet with house boats. " Kelowna Capital News [Kelowna, B.C.] 10 Jan. 2009,2. Canadian Newsstand Complete. ProQuest. Lili.org, Boise, Idaho. 14 Mar. 2009 <<http://www.proquest.com/>>

Timothy B. Wheeler. . "State Requirements To Control Poultry Farm Pollution Are Put On Hold. " The Sun [Baltimore, Md.] 24 Jan. 2009,A.3. The Sun, Baltimore. ProQuest. Lili.org, Boise, Idaho. 14 Mar. 2009 <<http://www.proquest.com/>>

David Adam, Environment correspondent. "Environment: Pollution 'dead zones' could be greatest emerging threat to life in world's oceans: Huge algal blooms lead to oxygen-starved regions: Total sea area the size of New Zealand now affected. " The Guardian [London (UK)] 15 Aug. 2008,15. ProQuest Newsstand. ProQuest. Lili.org, Boise, Idaho. 14 Mar. 2009 <<http://www.proquest.com/>>

**Evaluation:**

Presentation

**Notes:**

A dilemma example:

You are a farmer. You've been hearing about and even studying alternative farming practices such as organic pest control and leaving edge areas for wildlife. Although these practices may improve your long term benefits, they may reduce your short term profits. You are already having trouble having trouble paying your taxes and keeping up with expenses.

What should you do?

Solution(s) should be justified on economic, ethical, aesthetic, scientific or ecological grounds.

**Worksheet 5-5—  
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<b>Subject:</b> water pollution	<b>Teacher:</b>
<b>Lesson Name:</b> Why do I care about our water supply?	<b>Location:</b>
<b>Class:</b> grade 8	<b>Unit Context:</b> Earth Science
<b>Date:</b> 3-12-2009	

**Activities**

Identify types of hazardous waste found in water

Make posters representing examples of water pollution

Give students two minutes to perform the following activities – using a spoon, a straw, & a medicine dropper. Try to remove as much oil as possible.

- Measure the amount of oil removed and calculate the percentage of pollutant removed using each of the tools.
- Divide amount of oil removed by the amount of water for each technique.
- Mark down any spills on the data chart for each technique.
- Mark down any instances of habitat disturbance, such as water being removed with the cleanup for each technique.
- Analyze the data collected from each group and discuss the most effective oil removal method.

As a group research major oil spills in the world and clean-up methods, present your findings

Community Service project – marking storm drains.

**Big6™ Skills**

Task Definition  
Information Seeking Strategies  
Location & Access  
Use of Information  
Synthesis  
Evaluation

**Idaho Science Standards**

Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced

8-9.ES.5.1.1 Analyze environmental issues such as water and air quality, hazardous waste, and depletion of natural resources. (656.01a)

**Learning Context:**

Preserving our water supply

**Materials/Resources:**

[http://www.cityofboise.org/Departments/Public\\_Works/Services/WaterQuality/Stormwater/page10005.aspx](http://www.cityofboise.org/Departments/Public_Works/Services/WaterQuality/Stormwater/page10005.aspx)

DAVID HENCH Staff Writer. . "Polluters tracked by the 'prints' they leave PForensics help track oil spills :Each oil spill has its own forensic signature that helps identify its source, even at a distance.. " Portland Press Herald [Portland, Me.] 7 Oct. 2007. ProQuest Newsstand. ProQuest. Lili.org, Boise, Idaho . 14 Mar. 2009 <<http://www.proquest.com/>>

Bryan Walsh. . "An Oil Giant Dreams Green. " Time : Mind & Body Special Issue / How Faith Can Heal 23 Feb. 2009: 38. ABI/INFORM Global. ProQuest. Lili.org, Boise, Idaho. 14 Mar. 2009 <<http://www.proquest.com/>>

"New Methods for Cleaning Up Oil Spills. " American Ceramic Society. American Ceramic Society Bulletin 1 Jul 2008: 41. ProQuest Science Journals. ProQuest. Lili.org, Boise, Idaho. 16 Mar. 2009 <<http://www.proquest.com/>>

Stepehn Luntz. . "Oil-eating microorganisms. " Australasian Science 1 Nov. 2002: 11. ProQuest Science Journals. ProQuest. Lili.org, Boise, Idaho. 16 Mar. 2009 <<http://www.proquest.com/>>

**Evaluation:**

Presentation

**Notes:**