



<b>Title:</b> Arkansas Rocks Make Life Great	
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<b>Course:</b> Science, Social Studies <b>Grade Level:</b> 2-3	<b>Duration:</b> 30 minute lesson
<b>Objective:</b> The student will be able to identify products derived from natural resources and discuss the ways those products are used in their lives. They will be able to link the product to the natural resource(s) from which it was made. The students will also learn the myriad of products made from natural resources in Arkansas.	
<b>Summary of Lesson:</b> This lesson will teach students the difference between natural resources and the products made from them.	
<b>Standards: CCSS, Arkansas State Frameworks, Next Generation Science Standards, Other</b>	
<b>Code:</b>	<b>Standard:</b>
CCSS.ELA – Literacy.RI.2.7	Explain how specific images contribute to and clarify text
CCSS.ELA – Literacy.RI.2.1	Ask and answer questions such as who, what, when, where, why, and how to demonstrate understanding of key details in text
Science ESS.8.2.4	Identify products derived from natural resources
Science NS.1.2.1	Communicate observations orally, in writing, and in graphic organizers: T-charts, pictographs, Venn diagrams, bar graphs
Social Studies E.8.3.3	Recognize the product associated with the natural resources from which it is created.
<b>Teacher Excellence and Support System:</b> Domain 3 – Focus on 3a-Communicating with Students, 3b-Using Questioning and Discussion Techniques, 3c-Engaging Students in Learning	
<b>Instructional Strategies and Practices:</b>	



The lessons related to this topic focus mainly on STEM (Science, Technology, Engineering, and Mathematics) strategies and practices.

**Bloom's Level:** (*Highest Level Only*)

Analyzing – classify, categorize, distinguish

**Materials and Resources:**

Materials

- Texts, magazines or handouts with information about natural resources
- Internet access for iPad, computer or projector so all students can research topic
- 2 note cards for each student
- Tape for all students
- Markers / crayons / writing utensils for all students
- String for all students
- Pictures of Arkansas' natural resources (one per student) – These can be cut out of magazines or printed from the internet. Arkansas state parks brochures also have great photos for this activity.

Resources

[www.epa.gov/osw/education/quest/pdfs/sections/u1\\_chap1.pdf](http://www.epa.gov/osw/education/quest/pdfs/sections/u1_chap1.pdf) - This website contains an entire **unit of lessons** on the 2<sup>nd</sup> and 3<sup>rd</sup> grade level about using natural resources, making products from resources, and conserving resources including use of Dr. Seuss literature to enhance student learning. This entire unit could be used as a stepping stone to background knowledge about natural resources.

[www.calrecycle.ca.gov/Education/curriculum/ctl/K3Module/.../Lesson1.pdf](http://www.calrecycle.ca.gov/Education/curriculum/ctl/K3Module/.../Lesson1.pdf) - This is a great **lesson with printables** for students to use with this introductory lesson about natural resources and products made from them

[www.energy4me.org](http://www.energy4me.org) – A site with **free classroom materials** to teach about energy resources and request a classroom speaker. Features information about careers in energy; includes pre-made teacher ready lesson plans and free downloadable/printable lesson materials

[classroom.jc-schools.net/SS-units/presentations/nat-res-products.ppt](http://classroom.jc-schools.net/SS-units/presentations/nat-res-products.ppt) – This **PowerPoint about natural resources to products** is intended for 3<sup>rd</sup> grade social studies but can be used in 2<sup>nd</sup> grade as well

[www.amnr.org/](http://www.amnr.org/) website for Arkansas Museum of Natural Resources

[iprb.org/products.html](http://iprb.org/products.html) - list of items made from oil

[www.generalshale.com](http://www.generalshale.com) – list of products made from shale

[www.cotton.org](http://www.cotton.org) – list of products made from cotton

**Formative Assessment:**

The final portion of the activity in this lesson is the formative assessment. If the students connect the correct natural resource to the appropriate product then understanding has been achieved. If not, continue the lesson with more examples.



### Teaching Notes:

Make sure there is a place set up and ready to use for this activity because students will have to move around to carry out the lesson. Be sure to get the natural resources walk approved by the administrator as required by your school.

### Student Activity:

1. Teacher: Present the following information about natural resources to the class – project on the overhead and read aloud together with students.

**Natural resources are those things found in the environment (in nature) around you. They are used to make the man-made products we have. We classify natural resources as renewable or non-renewable.**

**Renewable resources are those things we find in nature that nature makes more of in our lifetime, like sunshine, air, wind, and trees.**

**Nonrenewable resources are things that cannot be made again in our lifetime or that take a very long time for nature to make again, like minerals such as diamonds and coal, or fossil fuels like oil and natural gas.**

**We use all of these natural resources to make products we use every day.**

2. Using a large flip chart, have each student write a natural resource on the chart as a brainstorming exercise. Tear off the list of natural resources and post it in the classroom.
3. Using the flip chart again, make a T-chart with natural resources on one side and products on the other. Clarify the difference between a natural resource and a product that might be made from it. For example:

Natural resource:	Product:
Tree	Wooden desk
Apple	Apple pie
Bear	Rug from its pelt
Diamond	Jewelry
Oil	Diesel fuel, candles, life jackets,

4. Make sure the students understand the difference – let them give a few examples to ensure complete understanding. Address any issues that come up during this exercise and clear up any misunderstandings about the difference between a resource and a product.



5. Hand out a note card and crayon to every student. Take the class on a walk outside and ask students to look around for natural resources. Remind them that **natural** resources are things that come from **nature** – people don't make these. They should each write on the note card one natural resource they see on the walk. When students return from the resource walk have them tell the class the resource they wrote down and then tape the cards in a line on the wall.
6. Now have the students make a list of products they use every day that are **not** natural resources. Hand out a note card to each student again – this time have them write down a product they use every day or something they see in the room that is a product. Have the students share these with the class and tape them in a line across from the natural resources.
7. At this point there are two lines of cards – one line is natural resources, the other is products. Give each student a piece of string (use colorful yarn for this) long enough to reach from the natural resource line of cards to the products line. Allow each student in turn to go to the wall and tape their string to one resource then connect the other end of the string to a product made from that resource. If the student connects the resource with a correct product then understanding has been achieved and the student has mastered the concept. If there are mismatches – address those with the class and see if other students have ideas on where to place the string. Allow students who made mismatches to try again.
8. To complete the lesson, provide pictures of various natural resources in Arkansas. Allow students to choose one resource to use for a homework assignment. To further confirm their understanding of the concept of natural resources students could be asked to cut pictures out of magazines or other materials you provide.
9. For homework assignment, ask the student to take the picture they selected home and have their family help them identify three products made from that Arkansas resource. If participation on homework is lax or if your school does not allow homework, make this a class research project. Let students use the internet and book sources to find products made from their resource. The librarian would be a great help in the research efforts for this project. A homework form is included in the Student Handout section of this lesson. A due date can be added in the blank provided on the form.

**See Student Handout**



## Arkansas' Natural Resources and the Products They Make Possible Homework Assignment Form

Student Name \_\_\_\_\_

Natural Resources are those things made by nature like sunshine, air, soil, trees, animals, oil, natural gas, coal, and metal ores.

Products are the man-made materials we design using natural resources as raw materials.

The picture you have selected illustrates one of Arkansas's Natural Resources. Glue the picture to the back of this page.

Work with your family to find three uses of the natural resource you have and return the picture and this form with those three products listed to class by:

(Date)\_\_\_\_\_.

You may look up information to find products using textbooks, magazines, internet searches, and common knowledge of those you ask for help.

**My natural resource is** \_\_\_\_\_.

**Three Products made from this resource are:**

1. \_\_\_\_\_

Where I found this information \_\_\_\_\_

2. \_\_\_\_\_

Where I found this information \_\_\_\_\_

3. \_\_\_\_\_

Where I found this information \_\_\_\_\_