

5: The Natural State

Based on the Arkansas quarter reverse



OBJECTIVES

Students will identify man-made materials that are derived from natural resources. Students will also reflect on how their world would be different if our natural resources were not available.



MATERIALS

- 1 overhead projector (optional)
- 1 overhead transparency (or photocopy) of the Arkansas quarter reverse
- 1 class map of the United States of America
- An assortment of natural and man-made materials or illustrated examples
- Copies of the “Natural State” cards
- Pencils
- Crayons and/or colored pencils
- Lined paper or writing journals



PREPARATIONS

- Make an overhead transparency (or photocopy) of the Arkansas quarter reverse.
- Make copies of the “Natural State” worksheets (1 per pair).



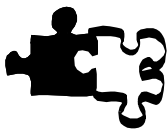
GROUPINGS

- Whole group
- Pairs
- Individual work



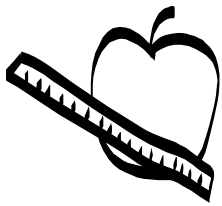
CLASS TIME

Two 30- to 45-minute sessions



CONNECTIONS

- Science
- Social Studies
- Language Arts
- Art



Exploring Natural Resources



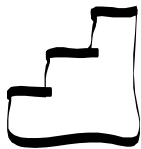
TERMS AND CONCEPTS

- Quarter
- Reverse (back)
- Natural resources
- Man-made
- Resource



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of items found in nature.



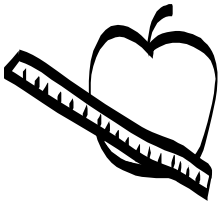
STEPS

Session 1

1. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Then display the transparency or photocopy of the Arkansas quarter reverse. On a classroom map, have a pair of students locate Arkansas. Note its position in relation to your school's location.
2. With the students, examine the design on this coin's reverse. Ask students to identify objects they recognize: a duck (mallard) in flight, a forest, a river, a diamond, and several stalks of rice.
3. Ask students why they think Arkansas chose to put these images on their quarter. To prompt student thinking, explain that a nickname for Arkansas is "The Natural State." Answers should relate to the idea that Arkansas has many natural resources.
4. Ask students to identify the materials from which these items are made. Students should note that these items are not made of other materials. They occur in their original state in nature and are not made by humans.
5. Referring to the prepared collection of man-made materials and natural resources, ask the students whether or not these items could be found in nature. If an item is not a natural resource, ask the students from what they think it is made.

Note: At this point, the teacher may wish to explain that while these items are all materials that come from nature, most of these items would also be labeled as natural resources, meaning that they are materials that occur in their natural state but also have economic value. Identify the duck, diamond, rice, trees, and water as natural resources on the quarter reverse.

6. Introduce students to the "Natural State" matching game, where students will match man-made materials to the natural resources that were used to make them. This game will give students the opportunity to see the numerous ways we rely on natural resources in our daily life.

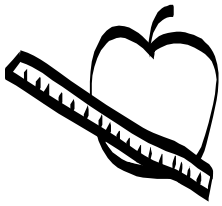


The Natural State

7. Break students into pairs and distribute 1 copy of the “Natural State (1)” cards to each group.
8. As a class, review the “Natural State (1)” cards, discussing the relationship between each resource and the product below, which is made using that resource.
9. Once students demonstrate understanding of this concept, distribute 1 copy of the “Natural State (2)” cards to each group.
10. Direct students to work with their partners to determine, draw, and label a picture of a product that comes from the material listed on the card that shows the same number. Students may refer to the pictures and examples of natural resources used earlier to help in the identification of possible products.

Session 2

1. Direct students to cut out the “Resource” and “Product” cards from each of their two worksheets. Ask each group to write the group member names on the back of each of their cards so that they will not get lost.
2. Students should turn their cards over and shuffle them well. One student will distribute 3 cards to each group member.
3. Students will search for matching pairs of natural resources and the items that they produce by first looking in their hands to see if they have any matches. If a student has any matches, he/she will lay them in a pile next to him/herself.
4. The students will then take turns asking each other for either a natural resource (“Do you have a steel card?”) or its match (“Do you have a product made from steel?”). If the student does have the requested card, it must be surrendered to the opposite player. If the player does not have the requested card, the other player must take a card from the pile of remaining cards and try to make a match.
5. The player with the most pairs is the winner.
6. After playing the “Natural State” game, regroup the class and take a natural product from one deck and ask the students how they think their world would be different if that item were not available. Have the students conduct a Think-Pair-Share to discuss this topic.
7. After this discussion, ask each student to select a natural resource from the reverse of the Arkansas quarter.
8. Students should reflect independently and then write a story, on lined paper or in their journals, about how an average day would be different for them if that resource were not available.

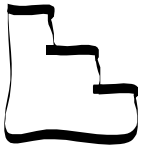


The Natural State



ENRICHMENT/EXTENSION

As a class, examine life on a farm or ranch. Invite a guest speaker to speak to the impact of harvesting on the land, the people, the community's way of life, and/or other factors. Discuss the impact of farming or ranching on other factors, such as home building or transportation, and have students work in groups to develop posters describing the relationships that they uncover.



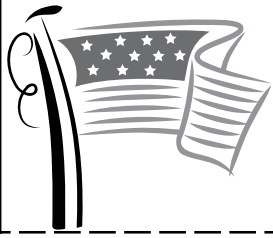
DIFFERENTIATED LEARNING OPTION

Provide pictures or video about the process a natural resource undergoes to become a different product.



HPC CONNECTION

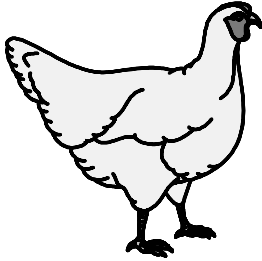
Even the filament in a light bulb requires the use of a natural resource! Visit Thomas Edison in HPC's Time Machine: Industry and Expansion (1877-1900) to learn more about this man-made material that helps us see, even when it's dark! (<http://www.usmint.gov/kids/index.cfm?Filecontents=/kids/timemachine/index.cfm>)



Natural State Cards (1)

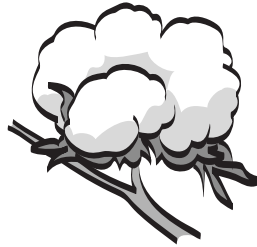


RESOURCE: CHICKEN



1

RESOURCE: COTTON



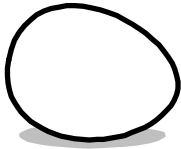
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RESOURCE: IRON ORE



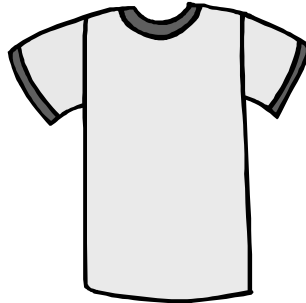
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PRODUCT: EGG



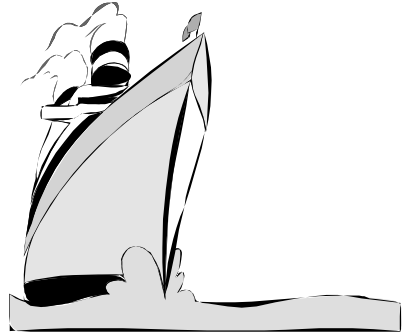
1

PRODUCT: CLOTH



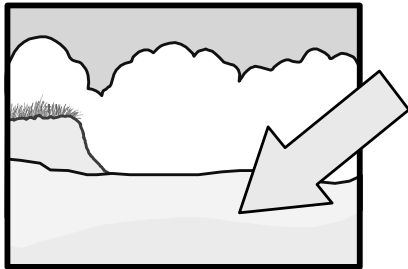
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PRODUCT: STEEL



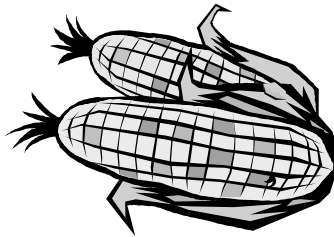
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RESOURCE: SAND



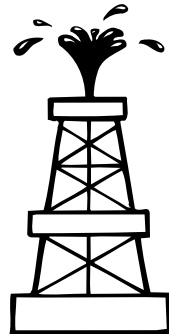
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RESOURCE: CORN



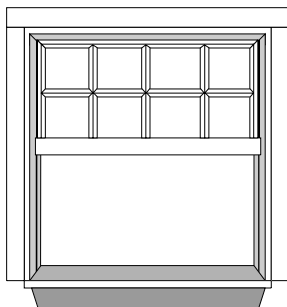
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RESOURCE: OIL



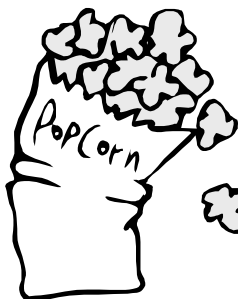
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PRODUCT: GLASS



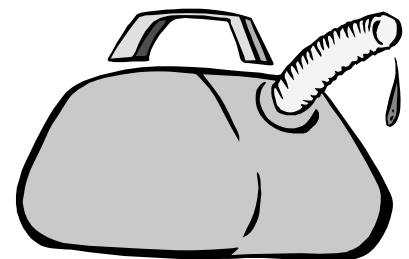
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PRODUCT: POPCORN

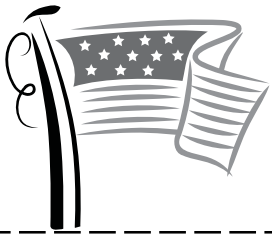


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PRODUCT: GASOLINE



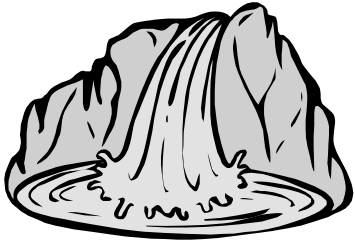
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Natural State Cards (2)



RESOURCE: WATER



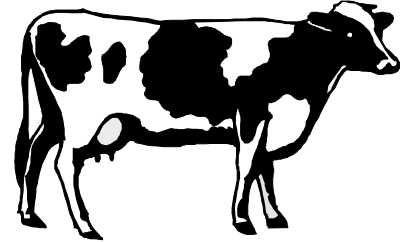
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RESOURCE: TREE



8

RESOURCE: COW



9

PRODUCT: _____

PRODUCT: _____

PRODUCT: _____

7

8

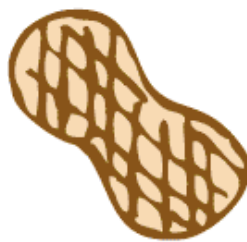
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RESOURCE: WHEAT



10

RESOURCE: PEANUT



11

RESOURCE: ORANGE



12

PRODUCT: _____

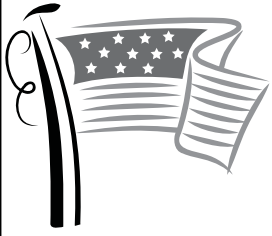
PRODUCT: _____

PRODUCT: _____

10

11

12



Arkansas Quarter Reverse

