



Where in the World Do We Find the Things We Need? Map Study Lesson #2

Natural and Man-made Resources: Local and Global



K20 Center

Published by Oklahoma Young Scholars/Javits

This work is licensed under a Creative Commons CC BY-SA 4.0 License

Grade Level2nd - 3rd GradeSubjectScience, Social Studies

Essential Question

How do we rely on natural resources to meet our daily needs? Where do we find the things we need and use?

Summary

Students will explore natural and man-made resources by using a Card Sort to make observations about resources. Students will develop and create class definitions for the terms in the Card Sort by creating a class T-Chart. After the Card Sort exercise, students listen and interact with a book about the two types of resources. Students then participate in an "I Spy" activity, where they practice identifying objects from both types of resources. The lesson concludes by exploring whether or not these resources are found in local or global markets.

Snapshot

Engage

Students begin the lesson using their observation skills to decide which item is Not Like The Others. Students share justifications for their choices with an Elbow Partner and then during a whole-class discussion.

Explore

Students explore natural and man-made resources in a <u>Card Sort</u> to develop a new understanding of the two topics. In a class discussion, students have conversations in response to higher order thinking questions.

Explain

Students listen and interact with books such as Natural or Man-Made? by Kelli Hicks or Our Natural Resources by Jennifer Overend Prior. In addition, students interact with statements, pictures, and questions about different natural and man-made items. With help, students identify and define the differences between natural and man-made resources.

Extend

Students participate in an "I Spy" activity where they practice identifying whether an object is man-made or a natural resource. Students determine whether these resources are found in local or global markets. Peter Menzel in his book <u>Material World: A Global Family Portrait</u> introduces the terms **local** and **global**.

Evaluate

Student understanding of natural and man-made resources will reveal itself throughout the lesson as students share their ideas. Students examine pictures of resources provided in the slide deck or brought in by the teacher, and record their responses to "Is this object made by man or nature?"

Standards

Hawaii Content and Performance Standards for Social Studies (Grade 2)

SS.2.7.1: Identify and explain the human (man-made) and physical (natural) characteristics of a neighborhood or the community **SS.2.7.3:** Describe a variety of the earth's natural resources (e.g., water, forests, and oil) and ways in which people use them

Attachments

- <u>Card-Sort-Labels-Where-in-the-World-2.docx</u>
- Card-Sort-Labels-Where-in-the-World-2.pdf
- <u>Card-Sort-Photographs-Where-in-the-World-2.docx</u>
- <u>Card-Sort-Photographs-Where-in-the-World-2.pdf</u>
- <u>Cut-and-Paste-Resources-Where-in-the-World-2.docx</u>
- <u>Cut-and-Paste-Resources-Where-in-the-World-2.pdf</u>
- $\bullet \ \underline{ Lesson\text{-Slides-Where-in-the-World-2.pptx} }$
- Nature-and-Man-Made-Matches-List-Where-in-the-World-2.docx
- Nature-and-Man-Made-Matches-List-Where-in-the-World-2.pdf

Materials

- Lesson Slides (attached)
- Card Sort Photographs (attached; one set per student and one extra)
- Card Sort Natural and Man-Made labels (attached; a few labels per student)
- Nature and Man-Made Matches List (attached; optional)
- Cut and Paste Natural Resources
- Suggested books:
 - o <u>Natural or Man-Made?</u> by Kelli Hicks (available on Epic)
 - o <u>Our Natural Resources</u> by Jennifer Overend Prior (read by Danelle Cantu)
 - o <u>Material World: A Global Family Portrait</u> by Peter Menzel
- Computer
- Sticky notes
- Chart paper

Engage

Using the attached **Lesson Slides**, display the essential questions on **slide 3**:

- How do we rely on natural resources to meet our daily needs?
- Where do we find the things we need and use?

Then, briefly go over the lesson objectives on slide 4:

- Describe a variety of the earth's natural resources (e.g., water, forests, and oil) and the ways in which people use them.
- Identify the difference between a natural resource and a man-made resource.
- Explain the natural and man-made characteristics of a community.
- Explain why these ideas are important.

 $Introduce \ the \ \underline{Not \ Like \ The \ Others} \ strategy \ to \ students. \ Ask \ students \ to \ use \ this \ strategy \ as \ they \ see \ the \ next \ few \ slides.$

Go through **slides 5-9** one by one. Ask students to identify a word or picture on each slide that "doesn't fit" with the others. Have students explain to an <u>Elbow Partner</u> the reasoning for their choice. Then, invite students to share some of their ideas with the whole class. Encourage students to think for themselves. Let them know that more than one answer is possible, depending on the person's thinking and reasoning. Possible responses for this activity are located in the notes sections in each slide.

Most of the slides have pictures of natural and man-made resources on them. Students should use their observation skills as they look for similarities and differences among the groups of words and pictures. This will help prepare them for the explorations and discussions that happen later in the lesson.

Explore

Display slide 10. Give each student a copy of the Card Sort Photographs handout. Have students cut out each picture.

Assign students to groups of 2-3 (or have them work individually), and introduce students to the <u>Card Sort</u> strategy. Start with an open sort—have students sort the cards any way they want. Let them know in advance that they will have to explain their reasons for their sorting choices to their group members.

After groups have discussed their sorting choices, ask for student volunteers to explain their ideas to the whole class. Some possible sorts might be sorting by color, shape, size, real, fake, living, or nonliving.

Display **slides 11 and 12**. Invite students to examine the photographs closely. Tell them: "Some things occur naturally in our world. These things are not made by people. Nature has created things like water, rocks, plants, and trees. Do we have any of these things in our cards? Let's find them."

After the class has identified these items, explain these items are called **natural resources**: "Natural resources include things like plants, soil, sunshine, water, fossil fuels, air, wildlife, metals and minerals. Now let's take a look at the rest of the items in out card sort. Who do you think made the rest of these things?"

Display **slide 13**. Continue the discussion of natural resources compared to man-made objects: "Yes, the other items in our world are made by people. There are many of these human-made things on our earth. We call these things **man-made objects**."

Teacher's Note: Man-Made

Take this opportunity to explain that **man-made** is a term used for all people: women, men, and children. (If teaching this lesson in Hawaii, you may want to use the word **keiki**, which is Hawaiian for children.)

Display **slide 14.** Encourage students to name familiar man-made objects. Next, give each group a copy of the attached **Card Sort Labels.** Have students cut out these labels and place them with the correct groups of cards. Have students keep track of their card sets—they will be used again later. (*You may want to collect and store the Card Sorts for them*)

Display **slide 15**. Create and label a class <u>T-Chart</u> with "Natural Resources" in the left-hand column and "Man-made Resources" in the right-hand column. Place the T-Chart in a visible spot in the classroom.

35 minutes

Explain

Direct students' attention to the class T-Chart. Spend a few minutes introducing the meaning of the word **resource**. You might say, "A resource is something that can be used for a purpose." You may choose to look up the word as a class in a dictionary or online and create the meaning as a class.

Display slide 16. At this point in the lesson, direct students' attention back to the essential questions:

- How do we rely on natural resources to meet our daily needs?
- Where do we find the things we need and use?

Let students know that the class will read a book together. Read from either <u>Natural or Man-Made?</u> by Kelli Hicks or show the YouTube video of <u>Our Natural Resources</u> by Jennifer Overend Prior read by Danelle Cantu.

Teacher's Note: Reading and Pausing

As you read the book, stop periodically and discuss which items in the book are natural resources and which are man-made. Have students hold up a closed hand for man-made and an open hand for natural as you read the book. As they identify a resource, write the name of the object in the appropriate column on the class T-Chart. Make sure the class agrees with you on the type of resource. If you have items that students cannot agree on, take the conversation a step further and have them explain their reasoning. Decide as a class where each item belongs.

Display slide 17. Remind students that both types of items/materials make up the Earth's surface.

Display slide 18 if you are reading Kelli Hicks' book Natural or Man-Made?

Display ${f slide 19}$ if you are playing the YouTube video of Our Natural Resources.

When you have completed one or both of the books, display **slide 20**. ask students to create a definition of the two terms: **natural resource** and **man-made resource**. Add these definitions to the T-Chart or write them on the board.

Teacher's Note: Lesson Preparation

For the next activity, you will need to print another copy of the attached Card Sort Photographs. This time, print out a single copy and cut apart the photographs. If the class is larger than the number of available photographs, duplicate or write the name of resources on index cards. Make enough cards so that each student has their own card.

Distribute one of the prepared photograph cards to each student. Once the cards have been distributed, call on students to identify their assigned resource. Have them tape their cards in the correct columns on the T-Chart. As each student tapes their card to the chart, have the class give a "thumbs up" for right answers and "palms down" for answers they disagree with. If there is a disagreement, have the class discuss their ideas and decide as a class whether the photograph depicts something that is natural or man-made.

Extend I

Invite students to play "I Spy"! Practice how the game is played by using the picture and prompts on **slide 21.** Then have students retrieve their Cart Sort cards. Students should sort the cards again into two categories: "natural" and "man-made." Encourage them to check their work using the class T-Chart. Students should end up with their cards spread out on their desks so they can see all their cards at the same time.

After students have spread their Card Sort cards across the top of their desks, do a test run by calling out a couple of "I Spy" examples: "I spy with my little eye something that is made from trees"; "I spy with my little eye a natural resource where we can go surfing."

The practice calls enable you to model what you want your students to look for and the proper etiquette for forming their "I Spy" requests. You can do the calls as a "teacherled" activity or have students take turns doing the "I spy" calls. If you conduct the game as a whole class, decide in advance what the rules will be for answering. Write them on the board so that students understand who can answer and how the answer is to be done. This activity can also be placed in a practice center for Elbow Partners to do throughout the week.

Teacher's Note: I Spy

Some I Spy suggestions are:

- I spy with my little eye something that is made from trees.
- I spy with my little eye something that can be found in Hawaii.
- I spy something made from cows.
- I spy a natural resource that we can go surfing in.
- I spy a man-made object that is made from a natural resource. (This "I Spy" has multiple answers.)
- I spy a plant that is used to make shirts.
- I spy a natural resource where deep inside are some of the resources we need to make computers.

The procedure for the "I Spy" game is as follows:

- Start the game out by calling a couple of the "I spys."
- Once the students have practiced a bit by distinguishing between natural and man-made resources, expand the questions to include the concepts of **global** and **local** resources.
- Shift the questions to include:
 - o I spy something made in our state.
 - o I spy something made in another part of the world
 - o I spy something that could be made in many places

These last few "I spy" statements lead into the next section, Extend II, about local and global resources.

Optional: Center Activities

Consider the following ideas to enhance the above activities for your students:

- Have students use the Card Sort to match man-made items with the natural resources that they come from. Some items may have more than one match, and others might not have any. Then have students come up with matches for the items with no match. See the attached **Nature and Man-Made Matches List** for an answer key to this activity.
- Have students work on the attached **Cut-and-Paste Resources** T-Chart sheet about natural vs. man-made resources.
- Have students go on a magazine/newspaper scavenger hunt and organize global and local resources, either man-made or natural.

Extend II

Start by reviewing the list of items on the T-Chart in the "Natural" column to determine how many of the **natural** objects come from your state or region. Then have students identify local natural objects. Next review the "Man-Made" column to determine where these items come from or are made.

Display **slide 22**. Open the slide deck linked here and on the slide: Material World: Portraits On-Line. Introduce the book Material World: A Global Family Portrait by Peter Menzel, Charles C. Mann, and Paul Kennedy, or go to Peter Menzel's website "Material World Portrait Gallery" to explore families around the world. These pictures show human possessions in many different parts of the world.

Use the pictures in the book or the portraits on the websites to discuss what resources you see in a few of the families. Ask students, "Do you think the resources can be found in our local community?" Could we find some of the things we need in their communities?" This is what we mean by our global community. Remind students that the two types of resources—natural and man-made—are available all over the world.

To help your students have a more concrete understanding of global, have students look at tags or markings on objects in the classroom to find where they were made. Mark these locations on your globe or map. For instance, the coffee mug might say China, a T-shirt might say Taiwan, a blanket might be from Germany, and so on. Make sure to have a few items from various countries available in the classroom. See if you have anything in your classroom that was made in your state or the USA. Then have students help you define the word "global."

Display **slides 23-24.** Review the concept of local and global resources by having students decide if the items in the pictures are local or global resources. Have them look for clues in the pictures and explain their reasoning and/or give evidence for their opinions.

Evaluate

In addition to your observations of students' understanding throughout the lesson, have students use dry-erase boards or paper to investigate whether more objects are natural or man-made.

Go through slides 25-34 one by one. Ask students to record whether the objects on each slide are natural or man-made on their boards or papers.

Display **slide 35**. Ask each student to write the name of or draw an example of one natural and one man-made object on a sticky note. Remind them to label their object as either **natural** or **man-made**. Have each student put their sticky notes on the class T-Chart.

Display **slide 36.** If you did not use the Cut-and-Paste Resources in the **Extend I** phase of the lesson, you can use it now as part of the evaluation. For this activity, hand out a copy of the attached **Cut-and-Paste Resources** to each student. Have students cut on the dotted lines at the bottom of the handout. Once they have cut out all 12 word cards, have them write words of their own on the two blank cards. Then, have students glue or tape the word cards in the correct columns. When students have completed their pages, have them either glue the sheet into their journals or turn it in.

Resources

- Bernard, J. (n.d.). Two horses. [Image]. Source: http://fc03.deviantart.net/fs71/i/2010/179/4/6/Two Horses by DragonLove151.jpg
- Cantu, D. (2020, May 7). Our Natural Resources by Jennifer Overend Prior. [Video]. YouTube. https://www.youtube.com/watch?v=i5BmWsqnqVk
- Carousel horse. (n.d.). [Image]. https://upload.wikimedia.org/wikipedia/commons/7/74/Carousel Horse_Alc2.JPG
- Deviantart. (n.d.). Cool Sun. [Image]. http://fc04.deviantart.net/fs70/i/2010/320/6/0/the_cool_sun_by_deohboeh-d330n3t.jpg
- Fortnite. (n.d.). Fortnite. [Image]. https://4.bp.blogspot.com/-V_uav6eH7g8/WvSYRAtqTZI/AAAAAAAAPMM/tW-M-WN3wDlly1iQGX7qwveFp37jFNRQgCLcBGAs/s1600/2b02f09dda89cfbef21b7bc3eea90fc4.jpg
- Get.Pxhere. (n.d.). Ocean and beach. [Image]. <a href="https://get.pxhere.com/photo/beach-landscape-sea-coast-water-sand-rock-ocean-shore-wave-vacation-shoreline-cliff-seaside-surf-cove-bay-blue-seashore-terrain-summit-body-of-water-current-rocks-sandy-strand-waves-mountains-deep-marine-peaks-curl-cape-swell-rollers-landform-crags-breakers-geographical-feature-wind-wave-819310.jpg
- Get.Pxhere. (n.d.). Outdoor play. [Image]. https://get.pxhere.com/photo/outdoor-play-city-summer-recreation-equipment-park-child-playing-yellow-lifestyle-leisure-public-space-kids-children-fun-playground-chute-slide-amusement-campground-outdoor-play-equipment-playground-slide-760305.jpg
- Get.Pxhere. (n.d.). Wet and wild. [Image]. <a href="https://get.pxhere.com/photo/beach-water-outdoor-sky-wet-summer-vacation-travel-recreation-pool-amusement-park-swimming-pool-tropical-park-holiday-lagoon-leisure-swimming-activity-clouds-fun-aqua-resort-estate-caribbean-water-park-slide-amusement-entertainment-water-slide-resort-town-850277.jpg
- Hicks, K. (2012). Natural or Man-Made? [Booklet]. Rourke Classroom. Natural or Man-Made? (center.k12.mo.us)
- Menzel, P., Mann, C. C., & Kennedy, P. (1994). Material World: A Global Family Portrait. https://www.menzelphoto.com/portfolio/G0000GPaxwfSZQ0Q/I0000zqRKAr03i9l
- Prior, Jennifer Overend. (2014). Our Natural Resources. [Booklet]. Teacher-Created Materials, Inc.
- K20 Center. (n.d.). Card sort. Strategies https://learn.k20center.ou.edu/strategy/14720
- K20 Center. (n.d.). Elbow partners. Strategies. https://learn.k20center.ou.edu/strategy/116
- K20Center. (n.d.). Not like the others. Strategies. https://learn.k20center.ou.edu/strategy/77
- Creative Commons. (n.d.). Weinermobile. [Image]. https://images.uncyc.org/commons/2/25/1 61 062807 Weinermobile.jpg
- K20 Center. (n.d.). T-chart https://learn.k20center.ou.edu/strategy/86
- Icon image: http://2.bp.blogspot.com/-8RJgEfb0jJQ/T80EcWUhYgI/AAAAAAACZ8/v_IcLhLAdcU/s1600/HOME.jpg
- Pearl City Highlands Elementary School. (n.d.). [Image]. http://teach.leeward.hawaii.edu/uploads/2/2/5/4/22549928/1469148240.png?
- Pixabay. (n.d.). lphone. [lmage]. https://cdn.pixabay.com/photo/2017/07/02/16/56/iphone-2464968_1280.png
- Pixabay. (n.d.). Mountain and grass. [Image]. https://cdn.pixabay.com/photo/2018/04/09/16/43/nature-3304622_960_720.jpg
- Pixabay. (n.d.). Ruled paper. [Image]. https://cdn.pixabay.com/photo/2012/04/15/18/56/paper-34910_1280.png
- Publicdomainpictures. (n.d.). Soccer ball. [Image]. https://www.publicdomainpictures.net/pictures/80000/velka/soccer-ball-2.jpg
- Staticflickr. (n.d.). Surfboard. [Image]. https://c1.staticflickr.com/3/2542/3977540409_4df7a3dfb0.jpg
- Wallpaperflare. (n.d.). Orchid. [Image]. https://www.wallpaperflare.com/three-black-rocks-towel-orchid-leaves-spa-stones-candle-wallpaper-zyhx
- Wikimedia. (n.d.). Volcano. [Image]. https://cdn.pixabay.com/photo/2018/04/09/16/43/nature-3304622 960 720.jpghttps://upload.wikimedia.org/wikipedia/commons/thumb/a/a9/Eruption of a volcano above a village%3B lava covering Wellcome V0044790.jpg/800px
- Wikimedia. (n.d.). Sailing Dinghy. [Image]. https://upload.wikimedia.org/wikipedia/commons/e/eb/Laser_3000_sailing_dinghy_1.jpg