

From Peanuts to Peanut Butter by Melvin Berger. (Newbridge Educational Publishing, New York, N.Y.,1992.) ISBN 1-56784-026-4

Literature Annotation: This book shows the planting of peanut seeds, harvesting the “pegs,” and then on to the factory as the peanuts are processed into peanut butter.

Grade Level: 1

Duration: 1-2 days or 60 minutes

Economic Concepts: Economic Resources

Maryland Voluntary State Curriculum (VSC)

Economics Standard: Students will identify the economic principles and processes that are helpful to producers and consumers when making good decisions. (PreK-3 Standard)

4.A.2.a Give examples of natural and human resources used in production, such as making butter, making ice cream, and building houses (Grade 1)

Reading Standard: Students will read, comprehend, interpret, analyze, and evaluate informational text. (PreK-3 Standard)

2.A.1.a Read and recognize nonfiction materials to gain information and content knowledge

2.A.2.a Use print features

2.A.2.b Use graphic aids

2.A.3.g Recognize and use main idea and supporting details

2.A.4.g Summarize the text or a portion of the text

Objective:

Students will identify and classify the natural, capital, and human resources needed to produce peanut butter.

Vocabulary:

“pegs”

roast

grind

natural resource- The “gifts of nature” that can be used to produce goods and services including but not limited to land, water, animals, minerals, trees, climate, and soil fertility.

human resource-The health, strength, talents, education, and skills that humans can use to produce goods and services.

capital resource- The goods that are manufactured and constructed by people and used to produce other goods and services, including but not limited to factories, warehouses, roads, bridges, machinery, ports, dams, and tools.

Materials:

From Peanuts to Peanut Butter by Melvin Berger (Big Book or multiple copies of the student book)

Teacher Background

George Washington Carver was known as the peanut man. He invented peanut butter and is credited with developing over 300 uses for the peanut. In the United States, the states of Georgia, Alabama, and North Carolina produce a lot of peanuts. However, Africa and Asia produce most of the world's peanuts. Peanut plants grow best in well-drained sandy soil that receives lots of sunshine, moderate rainfall, warm temperatures, and a frost-free growing period of 4-5 months. "Pegs" are the little stems that grow from the plant into the ground and form a peanut. Peanuts are sometimes called goobers, goober peas, or groundnuts.

Note: Some students may have allergies and sensitivities to peanuts and peanut butter. Bringing either peanuts or peanut butter into the classroom is not advised.

Lesson Development

Motivation:

Have students list sandwiches they eat for lunch. Many students will have some type of peanut butter sandwich for lunch. Ask students if they know where peanut butter comes from or how the product peanut butter is made?

Activities:

1. Show students the cover of the book *From Peanuts to Peanut Butter* by Melvin Berger and read the title. Discuss how peanuts might be made into peanut butter. Identify peanut butter as goods that is produced using resources. Tell students that today we will read to find information about peanuts being made into peanut butter and the resources that are used to produce it.
2. Read the book *From Peanuts to Peanut Butter* by Melvin Berger. As you read discuss the information shown in the pictures, as well as information stated in the text.
3. After reading, have students recall the sequence of growing peanuts. Use a sequence chain organizer to record their responses. Verify the sequential order by referring to pp. 2-7 in the text.
4. Have the students identify ways that the peanuts may be transported to the factory. Possible responses include truck, train, or plane. Even ship is a possible response if the children know that peanuts are grown in other parts of the world besides the United States. This step is not shown in the book and requires students to use prior knowledge about transportation of goods.
5. In pairs or small groups, have students list the sequence of steps in the factory to produce peanut butter from the peanuts on a sequence chain or other organizer. Then have students share with the class to create a class sequence of the process. Refer to pp. 10-14 to check the steps. Tell students that both sequence chains need to be combined to show the complete production process from the planting of the seed to the jar of peanut butter in the factory. With the students

review the steps from planting to sending the jar to the supermarket. (Save these charts for later.)

6. Tell students that now they are going to identify the resources used in the process. Have students identify the three types of resources used to produce a product (*natural, human, and capital.*) Display a large class chart of “Resources to Produce a Product,” Resource Sheet 1, with the three columns labeled Natural Resources, Capital Resources, and Human Resources. Have the students review the definition of each type of resource (natural resources are as they appears in nature, human resources are the person doing work to produce the product, and capital resources are the tools and machinery that are used to produce the goods.)
7. Distribute “Resources to Produce a Product,” Resource Sheet 1. In small groups or pairs, have students list resources that were used to produce the goods (product) peanut butter on their chart. (*Natural resources include peanut plants or peanuts, soil, sun and water. Human resources include the farmer, factory workers such as the shell removing machine operator, roasting machine operator, forklift operator, jar checker, and maybe truck driver. Capital resources include the tractor, planter, digger, shell removing machine, roasting machine, machine to take off the skins, peanut grinder jar packer, and forklift, and possibly trucks or trains to carry peanuts to the factory.*)

Assessment:

Students will sequence the “Peanut to Peanut Butter” booklet with appropriate illustrations for each sentence. Then students will name each resource in their drawing and label it N (natural), H (human), or C (capital). Have students make a Peanut to Peanut Butter Booklet using Resource Sheet 2. Have students cut apart the pages and organize the sentences in correct order to sequence the production of peanuts to peanut butter. Then have the students illustrate the sentences in their booklet. Have students label the resources in their drawing with its name. Then place N, H, or C above the label. (Label Natural Resources with an N, the Human resources with an H, and the Capital Resources with a C.)

Score Point Descriptors:

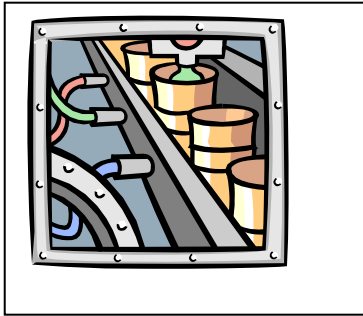
- 3- Student accurately illustrates and labels at least 9 resources used to produce peanut butter, with 3 or more natural resources, 3 or more human resources, and 3 or more capital resources.
- 2- Student accurately illustrates and labels at least 6 resources used to produce peanut butter, with at least 2 natural resources, 2 human resources, and 2 capital resources.
- 1- Student accurately illustrates and labels at least 3 resources used to produce peanut butter, with at least 1 natural resource, 1 human resource, and 1 capital resource.

Suggested Responses

- **Natural resources** include soil, peanut seeds, water, sun, metal to make machines, trees to make boxes and sand to make glass.
- **Human Resources** include farmer, peanut factory worker that runs the machine to shell peanuts, worker that runs machine to grind peanuts, worker that packs jars in a box, forklift driver and truck driver.
- **Capital Resources** include tractor, planter, digger, machine that shells the peanuts, machine that roasts the peanuts, grinder, machine that fills the jars, forklift and trucks

Additional Activities and Resources

- Additional information on growing peanuts, as well as booklets for kids, can be downloaded at the website: www.aboutpeanuts.com
- Search the web for information about George Washington Carver. There are several sites with information about his life and contributions.
- Read *The Story of George Washington Carver* by Eva Moore. New York: Scholastic, 1971. ISBN 0-590-42660-5
- Read *George Washington Carver* by Katherine Scrapper. Benchmark Education: NY, 2002. ISBN 01-58344-500-5 (Lesson available from the Maryland Council on Economic Education at www.econed.org)



Capital Resources

Natural Resources

Human Resources

Resources to Make a Product

Natural Resources	Human Resources	Capital Resources

Peanuts to Peanut Butter

By _____

Stems called “pegs” grow into the soil and make a peanut on the end.

Peanut grinding machines grind the peanuts into peanut butter.

Peanut butter is packed into jars and then put in boxes to send to the stores.

Peanut factory workers have machines that take off the shells and roast the peanuts.

Farmers plant the peanut seeds in the soil and take care of the plants so they grow.