

Math for Peanuts

Objective

Students will use peanuts in estimation and graphing activities. Students will create art with peanut shells. Students will play games with peanuts.

Background

Peanuts grow underground. The peanut plant is a vine. To harvest a peanut plant, the farmer cuts the main taproot and pulls the plant gently from the soil. The plants are left in the field for a few days to dry. Then the peanut pods are taken from the plant with a machine called a “combine.” Peanuts are very nutritious. They contain protein and are rich in Vitamin B complex (for strong muscles and tissues). They can be used in soup, salads, puddings and breads. Even the shells are useful. They can be crushed and spread in the garden as mulch or mixed with baking soda to make kitty litter. Oklahoma farmers produce the ninth largest crop of peanuts in the U.S. Most peanut fields are located in the southern part of the state.

Math

PREPARATIONS: MAKE SURE THERE ARE NO STUDENTS IN YOUR CLASS WITH PEANUT ALLERGIES BEFORE CONDUCTING THESE ACTIVITIES.

- Copy the peanut pattern on brown and yellow construction paper and provide one for each student.
 - Students will cut out the peanut shapes.
 - Make a large peanut-shaped classroom graph with five columns.
1. Students will estimate how many peanuts (in the shell) are in a 2-pound bag, and then count the actual number.
 2. Hand out peanuts in the shell, at least one for each student. Read and discuss background information about peanuts and peanut products.
 - Students will estimate the number of peanuts (between one and five) in one of the shells and write the estimate on the yellow peanut.
 - Students will place their estimates in the appropriate column on the classroom graph.
 - Discuss the graph.
 - Students will break open their shells, count the peanuts and record the actual number on the brown paper peanut.
 - Students will place the brown peanuts next to the yellow estimates, in the appropriate columns. Discuss the graph. have students count the results. Count by twos, if appropriate. Students will find the most common number of peanuts in one shell.
 3. Make peanut butter.
 - Place 2 cups peanuts in a blender. Ask students to predict what will

Oklahoma C3 Standards

KINDERGARTEN

Creative Skills—1:2

Small Motor—1.2

Social and Personal Skills—1.1

Civics—1.1

Physical Education—2.1

COMMON CORE

Math Practice—MP.1,2,3,4,5,6,8

Math Content—K.CC.4,6; K.MD.2,3

GRADE 1

Visual Art—3.2

Physical Education—2.1; 5.4; 7.3

COMMON CORE

Math Process—MP.1,2,3,4,5,6,8

Math Content—1.CC.4,6; 1.MD.2,3

Language Arts—SL.1b

GRADE 2

Visual Art—3.2

Physical Education—2.1,11; 5.2,3;

6.1; 7.2

COMMON CORE

Math Practice—MP.1,2,3,4,5,6,8

Math Content—MD.10

Language Arts—SL.3

Materials

2-pound bag of peanuts in shell

brown construction paper

yellow construction paper

Vocabulary

combine—a machine that harvests, threshes, and cleans grain while moving over a field

harvest—the gathering of a crop

peanut—a plant of the legume family that has yellow flowers and is grown for its underground pods of oily nutlike edible seeds which yield peanut oil or are crushed to make peanut butter

shell—the outer covering of a nut, fruit, or seed especially when hard or tough

taproot—a large main root that grows straight down and gives off many smaller side roots

happen to them.

—Turn the blender on the chop speed.

—Let the blender run for about five minutes, stopping occasionally to scrape the sides of the blender and around the blades with a spatula. Let students look at the peanuts each time you stop. If necessary, add a small amount of vegetable oil.

—Eat the peanut butter on crackers or celery sticks. Ask students how it is different and similar to store-bought peanut butter.

Visual Art

1. Students will make animals or pictures out of the peanut shells.

Physical Activity: Peanut Play

1. Each student will roll or blow a peanut as far as he or she can in three minutes.
2. Play peanut toss to find out how far partners can toss peanuts to one another before dropping them.
3. Peanut Hunt
 - Hide unshelled peanuts in every possible space of the room—under cushions, in drawers, behind doors and curtains, on top of books, etc.
 - Give each student a plastic cup, and send them out in search of the hidden peanuts. The players may hunt as individuals or divide up into small teams.
 - After five minutes, stop the hunt and see who has the largest number of peanuts.
4. Alternative Peanut Hunt
 - Chalk or tape a large circle on the floor, and scatter the peanuts inside the circle.
 - Three students will step into the circle. Blindfold them and hand each a paper bag.
 - On signal, students will get down on their hands and knees and grope for the peanuts.
 - After three minutes, remove the blindfolds and count to see who has collected the most.

Extra Reading

Charlip, Remy, *Peanut Butter Party: Including the History, Uses and Future of Peanut Butter*, Tricycle, 2004.

Keller, Kristin Thoennes, *From Peanut to Peanut Butter*, 2004.

Nelson, Robin, *From Peanut to Peanut Butter*, Lerner, 2004.

Wright, Michael, *Jake Goes Peanuts*, Feiwel & Friends, 2010.

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Print one copy of the outline of a peanut on yellow construction paper and one on brown paper for each student.

