

Pumpkins by the Pound

Objective

Students will use pumpkins to reinforce math skills such as estimation, counting, and measurement.

Materials

- pumpkins in assorted sizes
- string
- scale
- tape measure
- 1 large knife (for each group)
- 1 pumpkin
- 3 sheets construction paper
- tape
- 10 small cups (muffin cup, bathroom cup, or nut cup)
- 2 large styrofoam cups

Procedure

1. Bring several pumpkins to class in assorted sizes.
 - Set the pumpkins out in random order.
 - Introduce the terms “weight” (a measure of the heaviness of an object) and “perimeter” (the measure of the whole outer boundary of a body or figure).
 - Students will lift the pumpkins one by one and estimate their weights.
 - Students will arrange the pumpkins according to their weights— from lightest to heaviest.
2. Pass out copies of the student worksheet.
 - Students will weigh the pumpkins and record their findings in pounds and kilograms.
3. Students will estimate the perimeter of each pumpkin by cutting lengths of string they think will reach around the pumpkin.
 - Students will measure the pumpkins with a tape measure.
 - Create a classroom graph on the board with the words “too long,” “too short,” “same.”
 - Students will tape the string estimates in the correct space on the graph.
 - Discuss the graph. Ask how many pieces of yarn were too long? Too short? The same? Most estimates were _____
 - Students will draw a model of the graph in a journal or on a separate sheet of paper.
4. Introduce the abbreviation for pounds (“lbs.”) and the pound symbol (“#”).
5. Students will estimate the number of seeds in a pumpkin.

Oklahoma Academic Standards

GRADE 1

Number & Operations: 1.2,4,5,8.
Measurement: 2.2,3,4. Data: 1.1,2,3

GRADE 2

Number & Operations: 1.3,6;
2.3,4,5,6. Measurement: 2.1,2.
Data: 1.1,2,4

GRADE 3

Measurement: 2.3,4,5. Data: 1.2

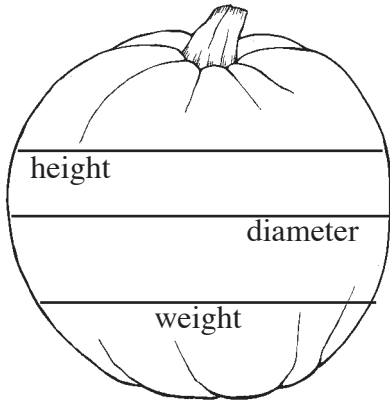
- Divide class members into groups of four or five students.
- Provide one pumpkin for each group. allow students to handle the pumpkins.
- Review the term “estimate.”
- Each group will estimate the number of seeds in their pumpkin.
- Write the group estimates on the chalkboard.
- Hand out three sheets of construction paper.
- Groups will tape the construction paper together in a row to create place value boards.
- One member of each group will write the place value terms:
 - “ones” across the top of the first sheet of construction paper,
 - “tens” across the top of the second sheet
 - “hundreds” across the top of the third sheet.
- Cut the top from each pumpkin.
- Give each group 10 small cups and two large styrofoam cups. Keep extra containers handy in case any of the pumpkins have unusually large numbers of seeds.
- Students will scoop the seeds from the pumpkins with their hands and place them on the construction paper labeled “ones.”
- Students will count the seeds into groups of ten and place them in the small cups.
- Students will place the filled cups on the construction paper labeled “tens.”
- When students have counted ten groups of ten they will dump those cups into the larger cups and place them on the construction paper labeled “hundreds.”
- Continue the activity until all the seeds have been counted.
- Students will write and read the exact number of seeds in their pumpkins.
- Students will compare exact numbers with estimates.

Name _____

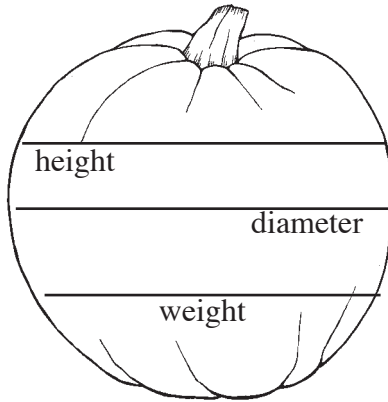
Pumpkins by the Pound

Measure and weigh several pumpkins. Record the facts below.

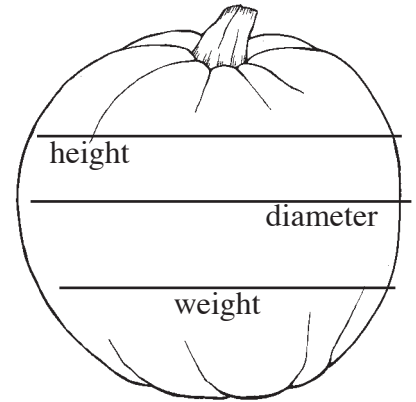
1.



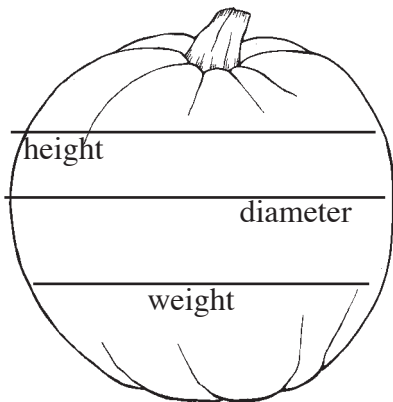
2.



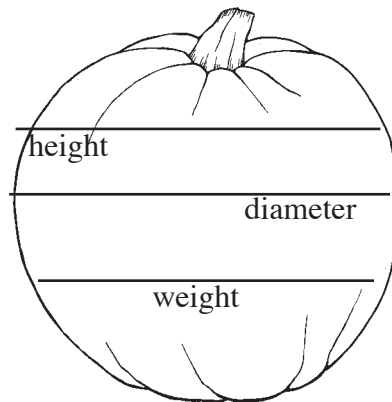
3.



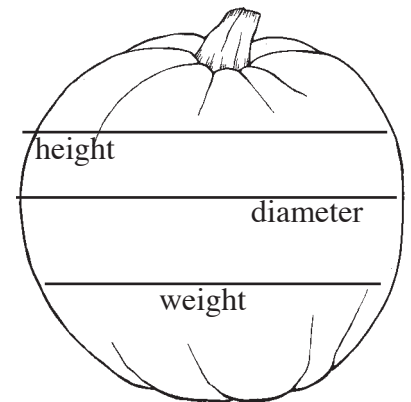
4.



5.



6.



1. Which pumpkin is biggest? _____
2. Which pumpkin weighs the most? _____
3. Does the biggest pumpkin weigh the most? _____
4. Does the smallest pumpkin weigh the least? _____
5. Which two pumpkins are closest in size? _____
6. Which two pumpkins are closest in weight? _____