

Pumpkin Math

Part A: Estimate each of the following.

	Estimate
Weight	
Circumference	
Height	
Radius	
# of Seeds	
Width of Widest Rib	
# of Ribs	

Part B: Measure each of the following.

	Actual
Weight	
Circumference	
Height	
Radius	
Weight of the Seeds and Goop	
Weight of just the Seeds	
# of Seeds	
Width of Widest Rib	
# of Ribs	

Part C: Compare your estimates to the actual measurements of your pumpkin. Write a few short sentences describing your estimating skills.

Part D: Complete the following using the data you collected.

1. Write a ratio to compare
 - a. Circumference to Height
 - b. Circumference to Radius
 - c. Height to Radius
 - d. Weight of the Seeds and Goop to Weight of the Entire Pumpkin
 - e. Circumference to Number of Ribs
2. Determine what percentage of the pumpkin's mass was from the seeds and goop.
3. Determine the average width of each rib using the circumference.
4. Determine the average weight of one seed.
5. Write a ratio to compare
 - a. Number of Seeds to Weight
 - b. Circumference to Weight
 - c. Number of Ribs to Weight
6. Convert each ratio in question 5 to a percentage.

7. Use your solutions for questions 5 and 6 to make the following predictions

Pumpkin Weight	Predicted Number of Seeds	Predicted Circumference	Predicted Number of Ribs
1 kg			
2 kg			
5 kg			
10 kg			
25 kg			

8. Collect the pumpkin data from the rest of your classmates.

[illegible]

9. Choose two categories to compare using a scatterplot.