## Graph-etti

## Graphing Activities for

## Elementary Students

## OUR FAVORITE DAIRY PRODUCTS

THIRD GRADE - $3 / 4 / 03$


Alabama Agriculture in the Classroom Summer Institute 2003

## GRAPHING FOR ELEMENTARY STUDENTS

Information is all around us. We see it; hear it; read it. In this modern age we live in, information multiplies, not just annually, but month - weekly - daily - and sometimes even hourly.

Organizing and using all of this information has become a challenge for adults and even more so for students. One method of organization that is seen with increasing frequency is graphs of all kinds: bar graphs, line graphs, t-shaped graphs, circle graphs, and even picture graphs. Reading and understanding information depicted graphically are important skills that should be taught beginning in the early elementary years of school.

To most young students, graphs are new and interesting. They are not only a means of organizing and remembering information, but also are something students enjoy taking home and explaining to parents, grandparents, brothers, and sisters.


## GRAPHING VOCABULARY

As you work with students to develop class graphs, they should become familiar with the following words or terms.

| graph | more | less |
| :--- | :--- | :--- |
| most | least | equal to |
| more than | less than | how much |
| how many | title | legend |
| axis | kinds of |  |

## Graphing Ideas

1. What is Your Favorite Dairy Product?
milk, cheese, yogurt, butter
2. Which is Your Favorite Milk: Chocolate, White, Strawberry

This can be done using the students in your class, your grade level, or even the entire school. Students love a graph that features teachers' responses only.
3. Our Favorite Ice Cream Treats

Simplify the choices: cone, dish, bar, sandwich
4. Do You Drink Milk?

Yes/No
5. Our Favorite Pizza Toppings
6. Our Favorite Pizza Take Out
7. Which Pizza Crust is Best?

Thin \& Crispy, Hand-Tossed, Deep Dish, Stuffed Crust
8. I Like My Bread. . .

Ask students to assist in developing choices: bagel, biscuit, sandwich, pretzel, other. .
9. Our Favorite Breakfasts Pancakes, Bacon \& Eggs, Waffles, Cereal, other. . .
10. How Do You Eat Your Eggs?

Fried, Scrambled, Hard-boiled
11. Our Favorite Vegetables
12. Our Favorite Fruits
13. Which Is Your Favorite Apple? Assist students in naming choices: Red Delicious, Golden, Fuji, MacIntosh
14. Peanuts: Roasted or Boiled?
15. What do You Eat on Your Toast? Butter, Jam, Cheese, Apple Butter, Plain
16. How Do You Like Your Grits?
17. What Is the Circumference of Our Pumpkin?

Assist each student in cutting a length of string that they think will fit around the class pumpkin. Next, direct them to try and fit their strings around the pumpkin, and place them on the graph under the appropriate heading: too long; too short; just right.
18. What Is the Best Way to Eat Peanut Butter?

PB\&J Sandwich, PB Cookies, PB\& Celery Boats, PB Candy
This sparks an interesting conversation about the nutritional value of students' choices
19. Do Pea Plants Grow Taller With Light or Without?

Plant some peas with your students and graph the growth results.
20. Which Type of Soil is Best for Growing Beans?

Plant lima beans in different types of soils. Assist students in making predications about which will grow best. Graph the height of the developing plants.

## What Is Your Favorite Ice Cream Flavor?

Third Grade - May 5, 2003


1. Which flavor did third grade students like the best?
2. How many more students liked strawberry than vanilla?
3. How many students liked chocolate and vanilla altogether?
4. How many more students would have to chose vanilla for it to receive the same number of votes as strawberry?
5. How many students participated in the survey on May 5?
6. How many students like butter pecan ice cream?

7. Which grade level prefered white milk? Chocolate milk? Strawberry milk?
8. How many more second graders than fifth graders liked chocolate milk?
9. How many more fourth graders prefered chocolate milk than white milk?
10. In which two grades did white milk received the same number of votes?
11. How many students chose chocolate milk?

Use the graph shown below to answer the questions at the bottom of the page.


1. Which farm milked the most cows on April 15?
2. How many cows did Berry Hill Farm milk? $\qquad$
3. How many cows did Brookside and Greenway Farms milk altogether?
4. How many more cows did Hillside Farm milk than Oakdale Farm? $\qquad$
5. How many more cows would Brookside Farm have to milk to equal the number of cows milked by Hillside Farm? $\qquad$
6. Which farm milked the fewest cows on April 15? $\qquad$
7. Which farm milked fifty-five cows? $\qquad$
8. How many cows were milked at all five farms on April 15? $\qquad$
9. Which farm milked 25 more cows than Brookside Farm? $\qquad$
10. Did Brookside and Greenway Farms together milk more or fewer cows than Hillside Farm

Answers: 1. Hillside; 2.65 cows; 3.90 cows; $4.30 ; 5.45 ; 6$. Brookside; 7. Oakdale; 8. 295; 9. BerryHill 10. more

