

Graphing Ideas

What is a Graph?

A graph is a visual tool that makes it easier for us to see and analyze information. A graph uses pictures, objects, circles, bars, and lines to show and compare information. Graphs help students to become better problem solvers as they see things in patterns and arranged in different ways.

Kinds of Graphs – Fourth Grade

1. *Pictograph*—uses pictures or symbols to show data
2. *Real Graph*—use actual objects or models
3. *Circle Graph* (or “pie” graph)—used to show how parts make up a whole
4. *Bar Graph* (vertical or horizontal; single or double bars)—used to compare data
5. *Line Graph*—shows change over time
6. *Venn Diagrams*—show how data can belong in more than one group. It uses circles that may overlap or intersect.
7. *Line Plot*—a graph showing frequency of data on a number line

Ideas For Gathering Data

1. What is your favorite season of the year?
2. What is your favorite flavor of ice cream?
3. What is your favorite color?
4. What is your favorite kind of potato dish? (mashed, baked, french fries, au gratin, potato chips, hash browns)
5. How many letters are in your first name? Last name?
6. What is the month of your birthday?
7. How many people are in your family?
8. What is your favorite fast-food restaurant?
9. How do you like to eat eggs? (scrambled, hard-boiled, fried, poached, none)
10. What color is your hair?
11. Which holiday do you like best?
12. How many televisions are there in your house?
13. How many pencils do you have in your desk?
14. How many teeth have you lost?
15. What is your favorite pizza topping? (Must choose just one)
16. What is your favorite candy bar?
17. What is your favorite animal to have for a pet?

Tips on Building Great Graphs

1. Choose a **question** to answer; give your graph a **title**.
2. **Gather data** with a survey question; use tally marks on a question sheet.
3. Use the tally sheet results to count the tallies and determine the number of times each item occurs.
4. Choose the **type of graph** applicable to your data. (Problem Solving Strategy)
 - a. If using a **pictograph**, or graphs that **compare** (such as a double bar graph), showing the symbols or colors and their values in a **key**.
 - b. If using a **bar graph**, make the bars the same width and put equal space between them.
 - c. Use the correct number scale
5. **Analyze** and **discuss** recorded data, using logical reasoning.
6. Enter your findings in a **math journal** page:
 - a. Date
 - b. Problem Solving Strategy: Graphing
 - c. Use logical reasoning
 - d. Cut out & glue graph sample on the page

Make a Graph From the Internet

1. Log in
2. Go to “start”
3. Go to Internet Explorer
4. Granite School District website
5. Click on “favorites”
6. Click on “create a graph”
7. Select a type of graph
8. Go to “click here to create a bar graph”
9. Type title of graph
10. Title of X axis (favorite pie, etc.)
11. Title of Y axis (number of students)
12. Bar 1 (apple) Value (3) Color (red)
13. Bar 2 (pumpkin) Value (5) Color (orange)
14. Bar 3 (berry) Value (4) Color (blue)
15. Bar 4 (minced meat) Value (0) Color (default)
16. Bar 5 (other) Value (8) Color (purple)
17. Graph direction (horizontal)
18. Click “create a printable graph”
19. To save your graph, right click on the graph
20. Click on “copy”
21. Go to “Start Menu”
22. Go to “Microsoft Word”
23. Open to a new document
24. Right click; go to “paste”
25. Double click below the box
26. Type any information you would like to add to your graph
27. Go to “file”
28. Save on “My Documents” (Create a new folder if you don’t have one) and save your graph on the A drive
29. Take your disc to computer one to print in Microsoft Word