



Gaga Over Graphs

The Big Idea:

Use household items like toys and stuffed animals to explore counting and comparisons. Group them, then line them up to make rows on the floor or on a tabletop. Turns out you've just made an official bar graph!

You Will Need:

- ★ A set of items to plot: stuffed animals, toys, socks, etc.
- ★ Masking tape, yarn, or string
- ★ Scratch paper or sticky notes

The Math Behind the Scenes:

Bar graphs are a tool used by grown-ups all the time to show facts and figures in an easy-to-digest way - and that's literally true for our graph! The bars show key statistical concepts:

- ★ **maximum**: the row with the most items
- ★ **minimum**: the row with the fewest items
- ★ **median**: if ordered from fewest to most, the middlemost item

Go Big!

1. Gather several items from around your house that can be sorted on a graph. For example, you can graph stuffed animals, socks, shoes, toys in a similar group, like vehicles or blocks or dolls and action figures.
2. Use masking tape, yarn or other long thin material to make your bar graph. It will have two perpendicular lines, or **axes**. The horizontal line that runs from left to right is called the **x-axis**. The vertical line that runs up and down is called the **y-axis**. The point where the x-axis and the y-axis intersect is called the **origin**.
3. Use paper or sticky notes to label your graph. Label your x-axis with categories for sorting your items. For example, you can sort socks by short, medium and long or solids, stripes and prints.
4. You can label your y-axis with numbers to help you count the number of objects in each category.
5. Line up each of your items vertical row above each category on the x-axis. Make sure you space the items out evenly and equally so you can easily see how many you have in each column.
6. When you're all done, look and see which category has the maximum (most) and which category has the minimum (least). Can you figure out the median?