

Making Graphs

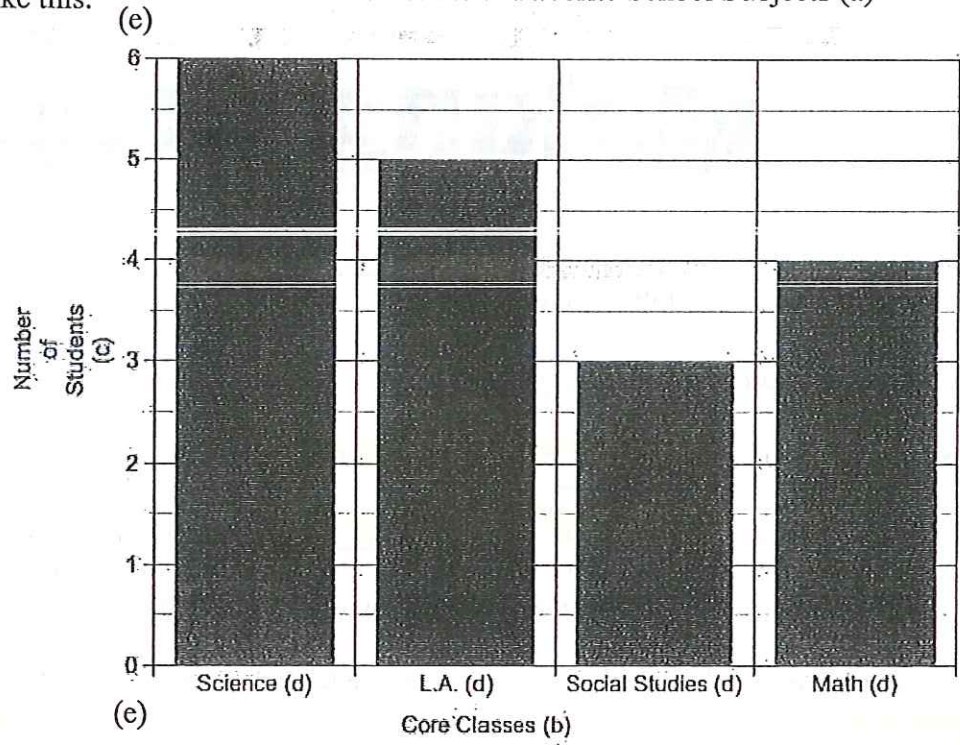
Any graph must have the following information:

- **Title** - (appropriate and descriptive) See (a) on the graphs.
- **X-axis label** - Do NOT write "x-axis" on a graph! See (b) on the graphs.
- **Y-axis label** - Do NOT write "y-axis" on a graph! See (c) on the graphs.
(Most of the time, this is the axis on which you are numbering. You should include the UNIT used to measure. For example, instead of writing "Temperature," write, "Temperature (°C)."
- **Each bar** on a bar graph or dot on a line graph labeled See (d) on the graphs.
- **Scale** (numbers) in equal intervals See (e) on the graphs.
 - Always start with zero.
 - **A quick way to figure out the interval for a graph:**
 1. Find the largest number in the data that you will graph.
 2. Divide that number by the given number of horizontal lines above zero. (Do not count the zero line.)
 3. Round UP to the next easiest number to count by.
 - Number the LINES on the y-axis— not the spaces and number all the way to the top line.
- If you are completing a bar graph, the bars must be colored with colored pencils or crayons. NEVER color a graph with ballpoint pen or regular pencil.
- Neatness is always counted.
- Line graphs use a line to relate 2 sets of data, such as comparing changes over time. Within the graph, a point is plotted where the values of the two variables intersect and a line is used to connect all the points. All of the above directions for labeling bar graphs are the same for labeling line graphs. Always connect dots with a ruler (straight edge.)



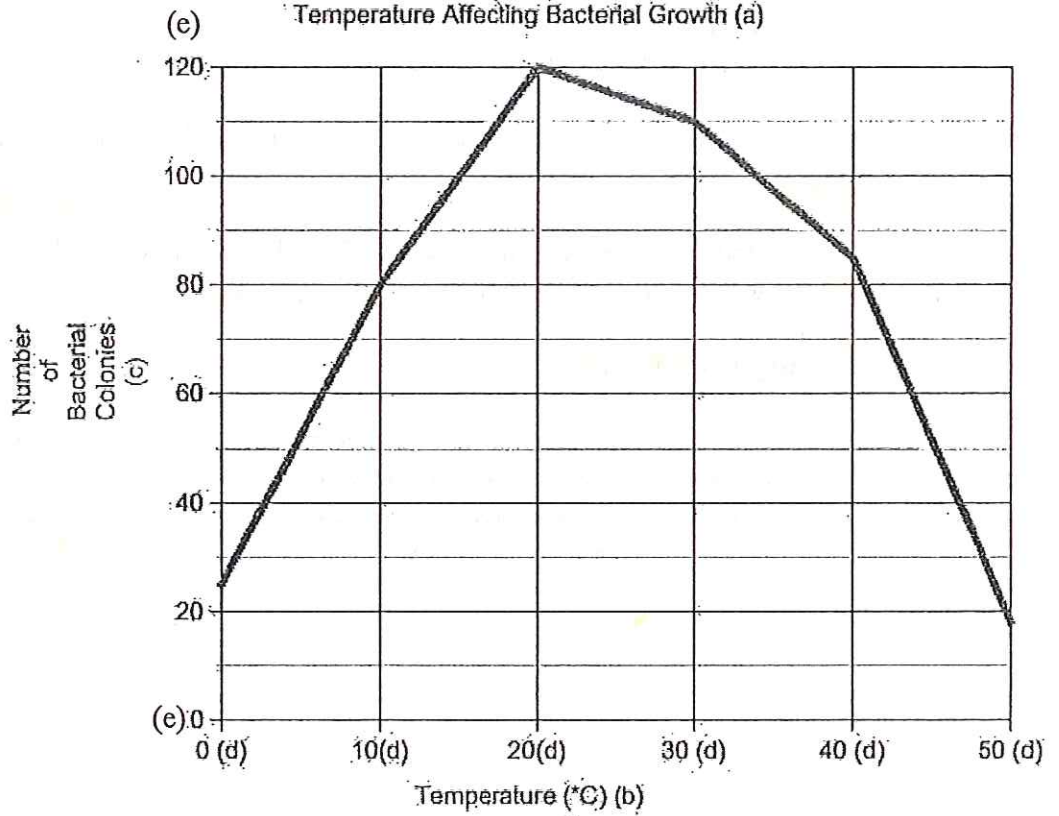
A bar graph should look like this.

HCMS Sixth Graders' Favorite School Subjects (a)



A line graph should look like this:

Temperature Affecting Bacterial Growth (a)



Graphing Practice



1. Scan the QR code for an instructional video on graphing.
2. Watch the video with your earbuds in.
3. Follow directions in the video to complete the two practice graphs on this page.
4. Pause the video as needed so that you can stay on track.

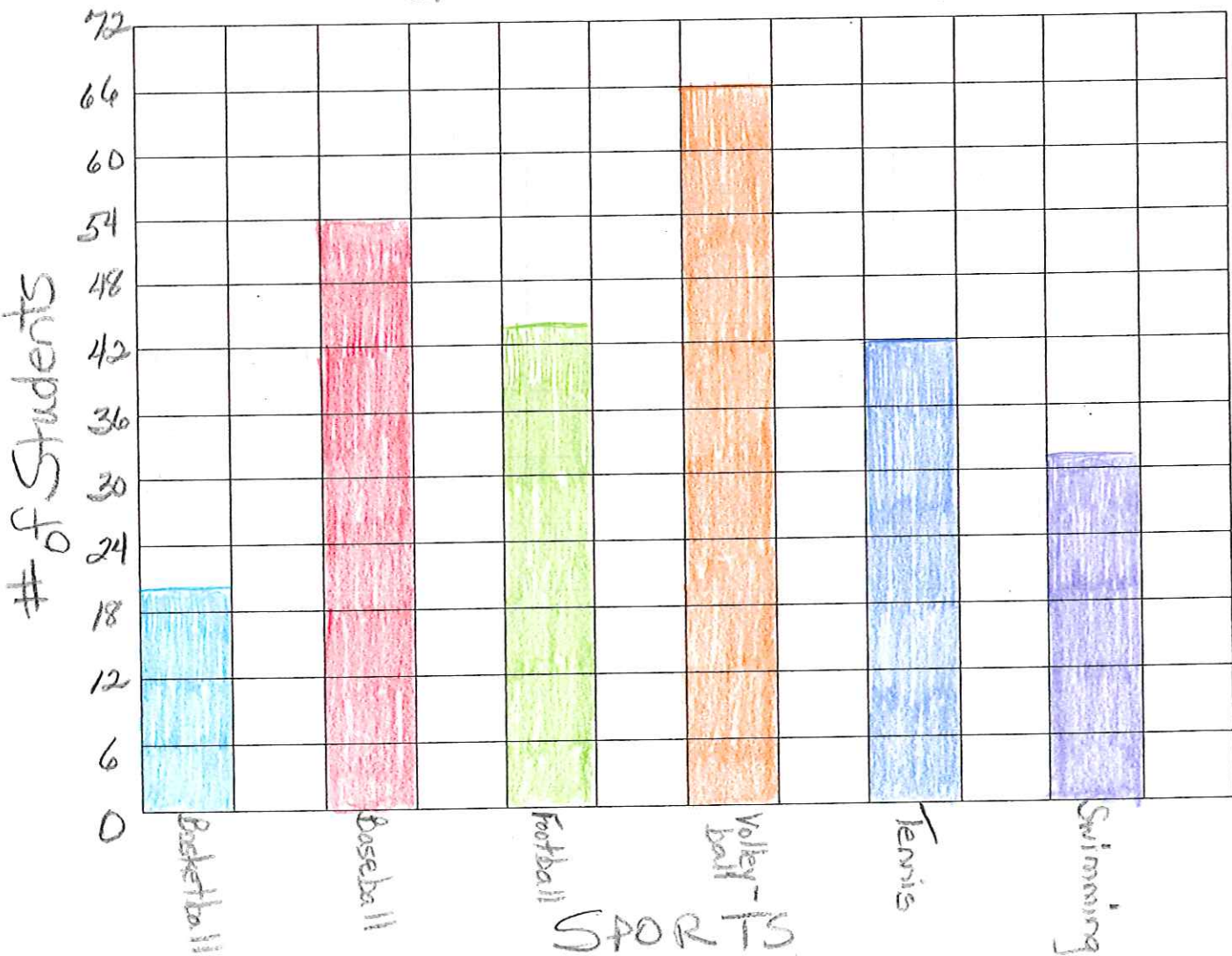
Create a bar graph for the following data:

6th graders' favorite sports:

- Basketball: 22 students
- Baseball: 54 students
- Football: 46 students
- Volleyball: 66 students
- Tennis: 42 students
- Swimming: 32 students

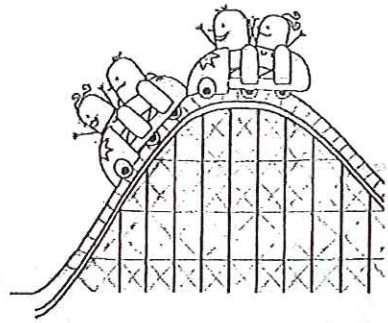


6th Graders' Favorite Sports



Roller Coaster Riders

An amusement park wanted to keep track of its roller coaster riders for weeks. Plot the data on a LINE graph.



<u>Day 1</u> 350	<u>Day 2</u> 125	<u>Day 3</u> 133	<u>Day 4</u> 201	<u>Day 5</u> 223	<u>Day 6</u> 300	<u>Day 7</u> 447
<u>Day 8</u> 450	<u>Day 9</u> 130	<u>Day 10</u> 147	<u>Day 11</u> 230	<u>Day 12</u> 217	<u>Day 13</u> 315	<u>Day 14</u> 503

of Roller Coaster Riders ~~Per Day~~ ^{for 2 Weeks}

