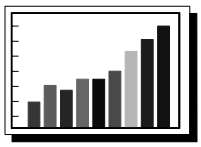
Name_____



BAR GRAPHS

Bar graphs are used to show data that are not continuous. A bar graph allows us to **compare** data like amounts or frequency or categories. They allow us to make **generalizations** about the data. They also help us see **differences** in data.
Bar graphs also let us find the value of one variable when we know the value of the other.

To make a quality bar graph:

1. Put the independent (amounts, frequencies, categories) variable on the X-axis. The X-axis is the horizontal axis on the bottom of the graph.
2. Put the dependent (what was measured) variable on the Y-axis. The Y-axis is the vertical axis on the side of the graph.
3. Decide on an appropriate scale for each axis. The scale is the numbers used on the axes of the graph. The scale usually begins at zero. Bar graphs frequently do not have numerical scales on the X-axis. The scale of the graph is very important. The same data can be plotted on different scales and not look like the same data at all.
4. Select an appropriate interval for your graph. The interval is the amount of space between one number and the next or one type of data and the next on the graph. The interval is just as important as the scale.
5. Label each axis.
6. For each of the specific independent variables (category, frequency, or amount) draw a solid bar to height of appropriate dependent variable.
7. Give the graph a descriptive title (ex: A Comparison of...)

One way to remember which data goes on which axis is **DRY MIX**

DRY	MIX
D – Dependent	**M** – Manipulated
R – Responding	**I** – Independent
Y – Y-axis	**X** – X - axis

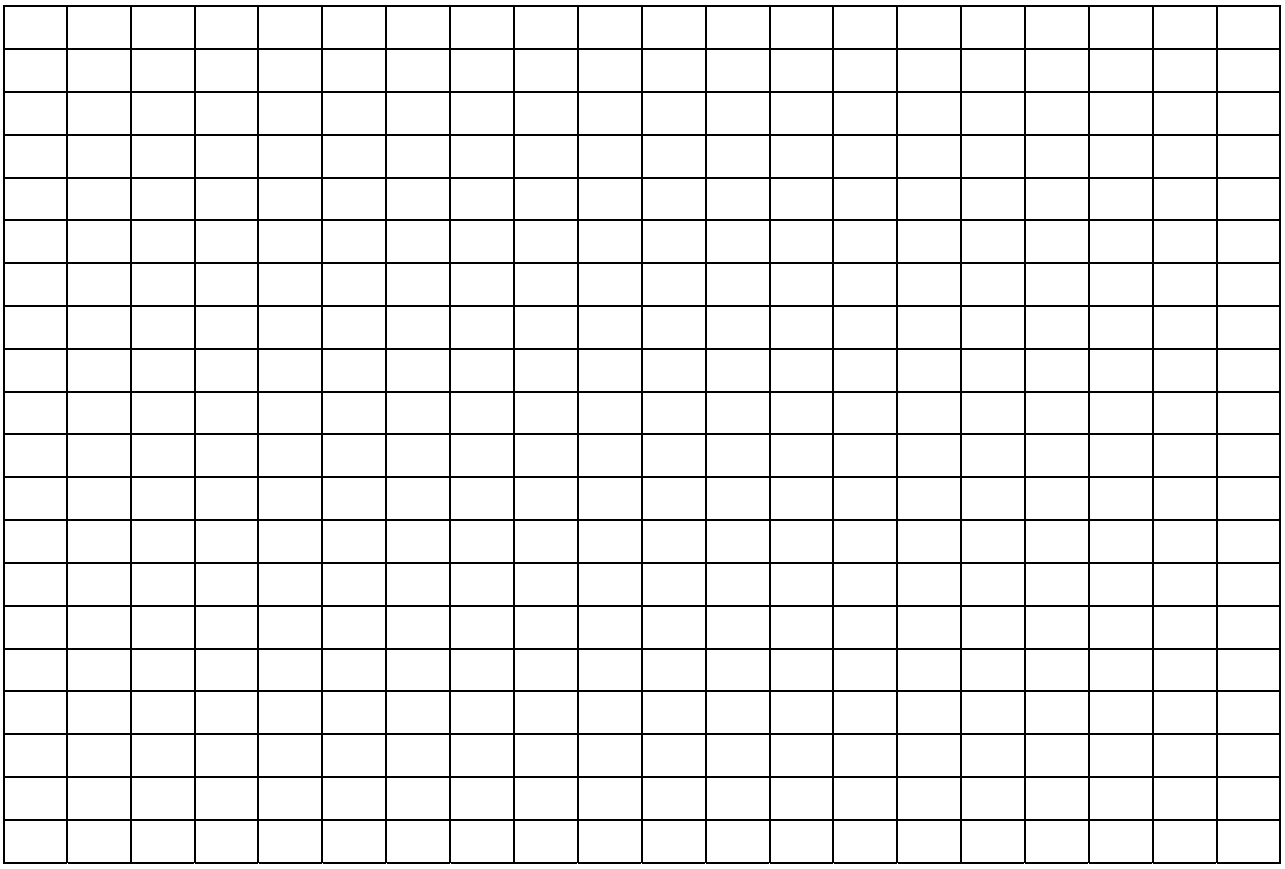
Changing the scale or the interval changes the way a graph looks, and can change how the graph is interpreted. Make sure your interval and scale are appropriate for the data.

One way to remember everything needed for a graph is **TAILS**.

TAILS
T – Title
A – Axis
I – Interval
L – Labels
S – Scale

Make a quality bar graph of the following data:

2005 Playoffs – Number of Games Played	
Player	**Games Played**
Tim Duncan	23
Manu Ginobili	23
Tony Parker	23
Robert Horry	23
Nazr Mohammed	23
Brent Barry	23
Bruce Bowen	23
Glenn Robinson	13
Beno Udrih	21
Devin Brown	12
Rasho Nesterovic	15
Tony Massenburg	9



Analyze your data.

1. What is the independent variable? _____
2. The dependent variable? _____
3. What differences can we see with this graph?

   _____

4. What are we comparing with this graph?

   _____

5. In general, what can we say about the number of games played by each of the Spurs during the playoffs?