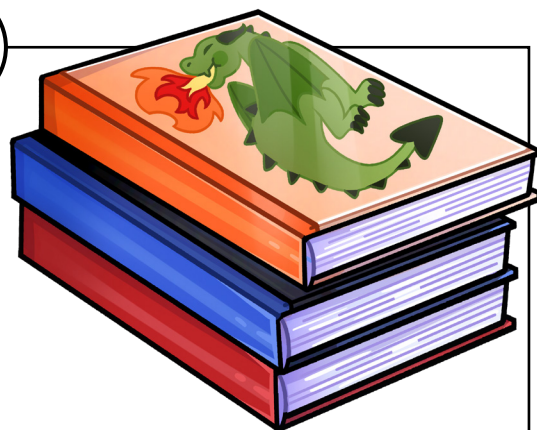


Name: \_\_\_\_\_

# Histograms

Histograms use bars, called bins, to display the frequency of numerical values in a data set that have been organized into equal, non-overlapping intervals. Since the numerical values show a continuous range, the bins **do** touch.



**Step 1:** Sort the values into ranges using a frequency table.  
Make sure the intervals are equal and do not overlap.

Reading Hours Last Weekend	
2, 6, 8, 4, 5, 1, 13, 0, 3, 5, 8, 0	

Value	Tally	Frequency
0-4		6
5-9		5
10-14		1

## Examples of Bad Bins

**0-5, 6-10, 11-15**

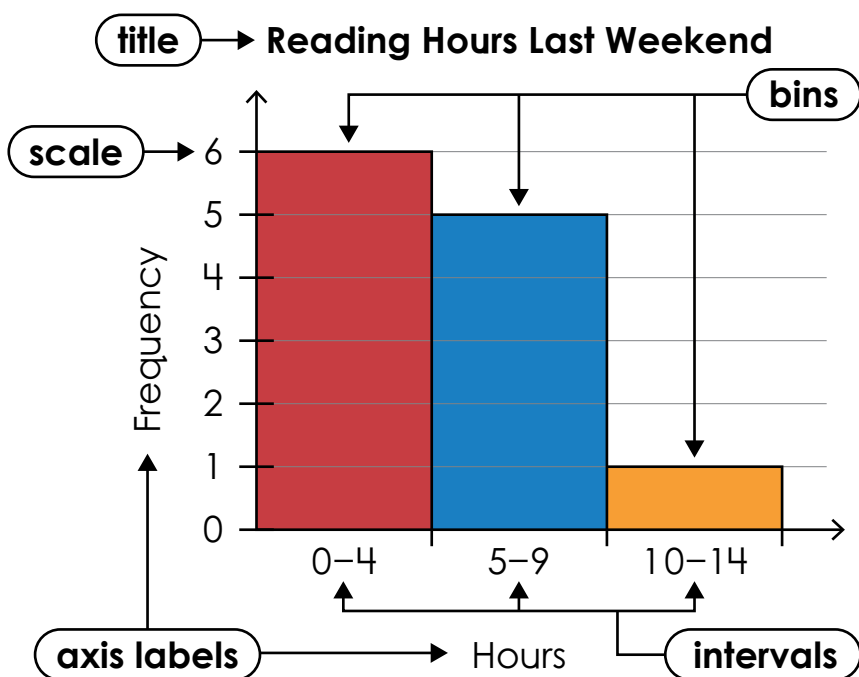
The first bin includes six values.  
The others include five values.

**0-5, 5-10, 10-15**

Bin values overlap, e.g., 5 and 10.

**Step 2:** Set up your graph. Give a title, then make and label your axes. Intervals are almost always on the x-axis, and frequency is almost always on the y-axis. Don't forget to include a scale!

**Step 3:** Graph each interval as a bar-shaped bin. Do **not** leave space between bins unless there are interval gaps in the data.



Some histograms do not list whole intervals. Instead, they list each interval's starting value to the left of the bin.

