# Making Graphs Clear

It is important that information on a graph is clear. This **pictograph** uses pictures of dogs. Each picture represents the number of dogs living in 3 different cities in Central County. The pictures of dogs look good, but the information on the graph is not clear. It looks as if each city has only one breed of dog living there. The graph has a title but no *x*- or *y*-axis labels. The different kinds of dogs are also **distracting** and keep the reader from finding out the correct information.

## Dogs Living in Central County Cities


The pictograph below shows the same information about the number of dogs living in Central County. But it uses the same picture to show the information for each city. It also uses a key to explain what the picture means. What does this graph tell you?

## Dogs Living in Central County Cities


## Let's Explore Math

Use the pictograph above to answer these questions.

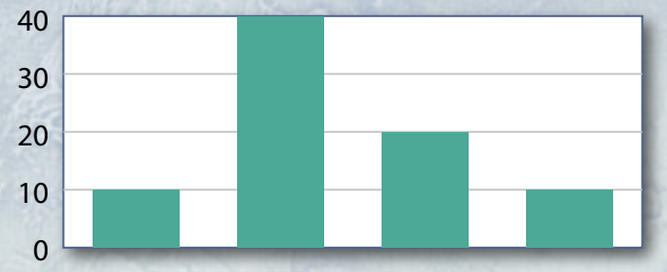
**a.** How many dogs live in Left Town?

**b.** How many more dogs live in Right City than in Centralville?

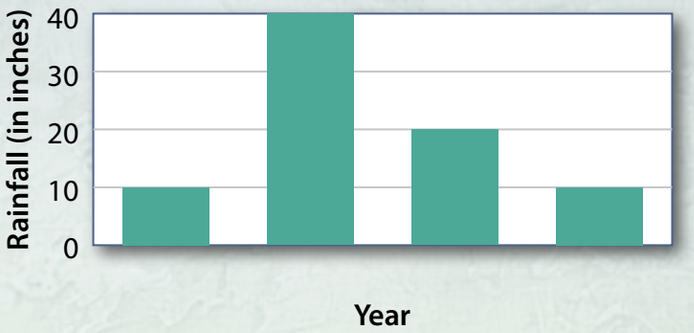
**c.** How many dogs in total live in the 3 Central County cities?

**d.** If you were setting up a dog-washing business, which city would you live in? Give reasons for your answer.

Graphs need to be clear so we can understand the information they show. If they are not clear, they are not useful. Look at this bar graph. What information does it tell you? Is it useful?

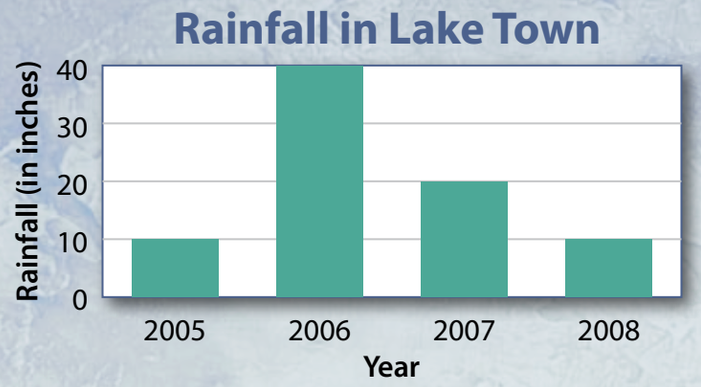



Now look at the same graph with a label on each axis.

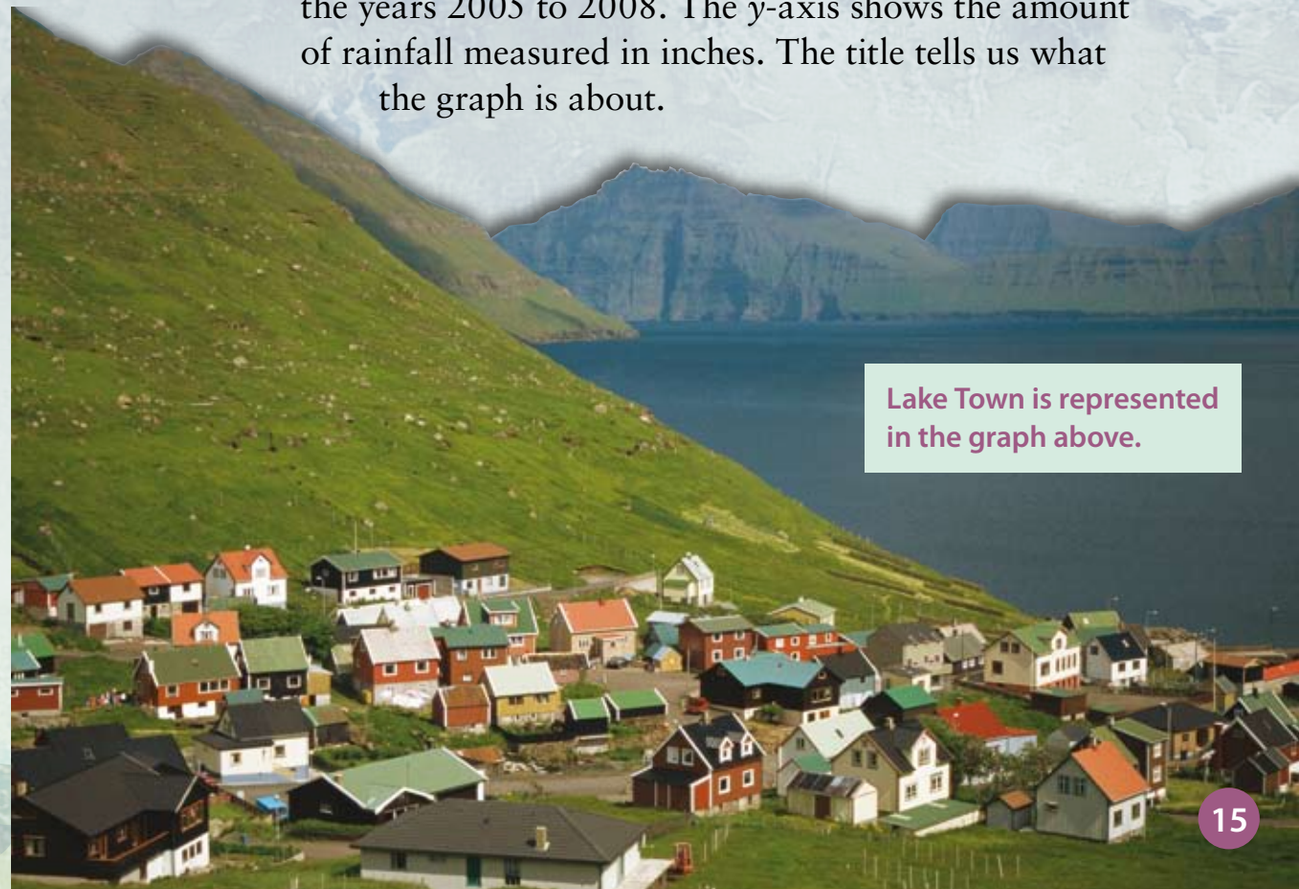



Now we know that the graph is showing rainfall over time. But we still need more information for the graph to make sense and be useful.






The *x*-axis shows that we are looking at rainfall for the years 2005 to 2008. The *y*-axis shows the amount of rainfall measured in inches. The title tells us what the graph is about.



Lake Town is represented in the graph above.