Family Letter

Dear Student and Family Members,

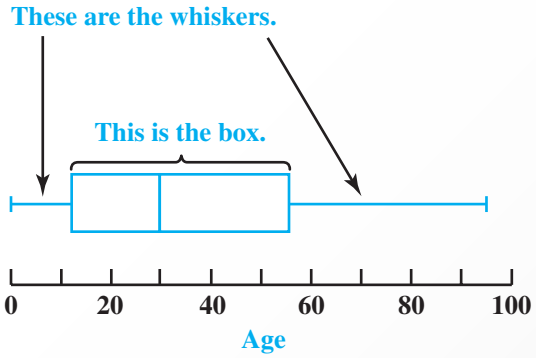
Many games we play at home rely on chance or probability. In the next chapter, our class will study the basics of probability. We will begin by considering marbles drawn from a bag. For example, if there are 6 green and 4 yellow marbles in a bag, we can answer questions like these:

- If one marble is drawn at random, which color is it most likely to be?
- What are the chances that the marble drawn will be green?
- Suppose a yellow marble is drawn, put in a pocket, and then another marble is drawn. What are the chances of drawing a green marble?

We will use probability to test whether games of chance are fair. We'll also play a game that uses probability to develop a winning strategy.

Another common use of probability is in statistical sampling. In statistical sampling, a small group is chosen at random and used to draw conclusions about the entire population. Can you think of surveys or statistics that you have seen which may have been based on statistical sampling? Do you think this is a fair and accurate way to draw conclusions about a large population?

However used, finding probabilities depends on having data. We will review and study many ways to display data, including box-and-whisker plots. Then we will discuss when it is most appropriate to use those displays.



Vocabulary Along the way, we'll learn about these new vocabulary terms:

population	**representative sample**
quartile	**sample**

What can you do at home?

You can join your student in our study of probability by playing different games of chance together. He or she can teach you the games we play at school; other games may include card games where it helps to know what cards you are likely, or very unlikely, to draw next. You can also talk about probabilities in our daily lives, such as the chance of rain.