## **Collect and Organize Data**

I Can collect and organize data.

#### Florida's B.E.S.T.

- Data Analysis & Probability 5.DP.1.1
- Mathematical Thinking & Reasoning MTR.1.1, MTR.2.1, MTR.4.1, MTR.6.1



# UNLOCK the Problem Real World



**Data** are sets of numbers or pieces of information. Conducting a survey is one way to collect data. When you ask people questions and record their answers, you are conducting a survey. Making an observation is another way to collect data. When you collect data by looking at an object or event, you are making an observation.

You can use a table to record the data you collect.

**Activity** Conduct a survey of the students in your class and record the results in a tally table.

- **STEP 1** Measure your pencil to the nearest  $\frac{1}{4}$ -inch.
- **STEP 2** Title your table. Include the units of measure.
- STEP 3 Survey the students in your class. Record their results in the table.
- STEP 4 Analyze your data.

Which was the most common length?

Which was the least common length?

How many students did you survey?





Engage in discussions on mathematical thinking.

Describe how your survey results compare with those of a friend.

### **Examples**

When you conduct a survey, you must ask a good question.

• Would you rather have a delicious yellow banana or a brown banana?

You can answer this question, but the word *delicious* might lead you to choose the yellow banana. It is not a fair question. So, this survey question is not a good question.

• Do you like the color and smell of bananas? (Yes, No)

You cannot answer this question if you like the color but not the smell. The question asks about too many things. So, this survey question is not a good question.

• What is your favorite fruit? (Apple, Orange, Banana, Other)

This survey question a good question.

How many bananas did you eat last week?

It is possible to count how many bananas someone ate for a week. There is more than one possible answer. It \_\_\_\_\_\_ a good question.

• You can record the results in a tally table.

Which choice got the least tally marks?

Which choice got the most tally marks?

How many people were surveyed?



	Tally
	JHT JHT
	ШΙ
	Ш
	JH

#### Remember

A tally mark stands for one vote. It looks like this: I. Five tally marks look like this:

## **Share and Show**

Math Board

Tell if the survey question or observation is good.

**1.** How many pets do you have? (Cat, Dog, Other)

You \_\_\_\_\_ answer this question, even if you have a bird,

so it a good question.

**2.** Observe children in the park and record how many like math.

It \_\_\_\_\_\_possible to look at children to know if they like math.

So, this observation \_\_\_\_\_ a good way to collect data.



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