

Follow these steps to learn how to collect data.

## 1 Make Observations

- Pay attention to details such as a change in shape, color, size, position, temperature, and so on.
- Making observations may include measuring. If you need to take any measurements, make sure that they are as accurate as possible.

## 2 Record Accurately

In order for data to be useful, it must be collected and recorded as accurately as possible.











- Use exact words to describe your observations. Draw a sketch or a diagram of what you have observed.

- Record all measurements as soon as they are made so that you don't forget to write down anything.
- Write down exact numbers of any objects that you counted.
- Recording information in tables will help you keep your notes organized.

## 3 Make Repeated Trials

To make sure that the data are accurate, you can repeat your tests and record your observations each time. You can also use a larger sample size. For example, if you want to find out whether seeds will sprout more slowly in cold water than in warm water, use a large number of seeds rather than just two or three.

**Traits Observed by Mendel**

Shape of seeds	Color of seeds	Shape of pods	Plant height	Color of flowers
 Round	 Yellow	 Full	 Tall	 Pink
 Wrinkled	 Green	 Flat	 Short	 White

# USE THIS SKILL

## Collect Data

Choose one of the topics below. Make observations, collect data, and record data. Remember that measurements, notes, sketches, and tables are useful ways of recording data.

- Hair color of students in your class
- The number and types of birds that visit a feeder
- The warmest and coolest areas of your home or school
- Eye color of students in your class
- The circumference of trees in a local park
- What students in your class eat for lunch
- How much rain or snow your city or town receives in a month
- Color, texture, and length of fur on dogs in your neighborhood

### TEST TIP

You may be asked to record observations on a test. Use exact language to describe your observations. Readers should be able to clearly understand what you observed.

**Practicing Skill 5****HOW TO Collect Data****Inherited Traits**

Find out the eye color of at least 10 students and the eye color of two people in their families. Use the chart below to record your data and answer the questions that follow.

Person	Student Eye Color	Family Member Eye Color	Family Member Eye Color

1. What is the most common eye color in the chart?  
\_\_\_\_\_
2. What is the least common eye color in the chart?  
\_\_\_\_\_
3. How many students have the same eye color as one family member?  
\_\_\_\_\_
4. How many students have the same eye color as both family members?  
\_\_\_\_\_
5. How many students have eyes that are a different color than either family member? \_\_\_\_\_

**Investigate Your Own Question**

Use the questions and space below to gather data about a question you have.

1. Choose a topic on page 25 of ***Student Edition***. What kind of observations will you need to make?

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2. How will you collect your data? Do you need special tools?

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3. Use the space below to record your data. Remember that you can make a chart, list, or graphic organizer to keep track of your data.