1 Decide the Purpose

First you must decide the purpose of the survey. Think about what you need to find out. The students at Hawthorne Elementary want to find out how most students and neighbors want the empty lot to be used.

2 Write Questions

A survey uses questions to gather data. Brainstorm a list of questions to ask people. Then choose the best questions. Leave out any questions that simply state a question in a different way.

**Purpose**
We want to find out how our neighbors and other students think the empty lot next to our school should be used.

**Questions**
1. What would you like to see in the empty lot next to Hawthorne School?
   - Vegetable garden
   - Flower garden
   - Bird sanctuary
   - Junk sculpture

2. Do you have any other ideas or suggestions for the empty lot?

3. What should the city do with the empty lot next to Hawthorne School?
Ask Questions

You will want to ask many people your questions. If you ask only a few people, you won’t have a very good idea of what most people think. As you ask people the questions on your survey, you can mark their votes on the sheets with tally marks.

*Tallies* are an easy way to mark and count votes. One line in a tally equals one vote. A tally that looks like this ＿ ＿ ＿ ＿ equals five votes. Tallies are easy to count because they can be counted by 5s.

First teams of Hawthorne students surveyed all the students in the school. Then they surveyed each block in the neighborhood.

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**Survey**

**Tom and Sue**

1. What would you like to see in the empty lot next to Hawthorne school?
   - Vegetable garden
   - Flower garden
   - Bird sanctuary
   - Junk sculpture park

2. Do you have any other ideas or suggestions for the empty lot?
   - Playground
   - Baseball diamond

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**Survey**

**Toshi and Mary**

1. What would you like to see in the empty lot next to Hawthorne school?
   - Vegetable garden
   - Flower garden
   - Bird sanctuary
   - Junk sculpture park

2. Do you have any other ideas or suggestions for the empty lot?
   - Wildlife preserve
   - Ice-skating rink
   - Petting zoo
   - Skateboard park

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*After-school art shack*
*Carnival*
4 Show the Results

Once you have asked enough people the questions in your survey, you should show the results in a way that is easy to read and understand. One good way to show the results is by making a bar graph. The bars are easier to compare than tally marks.

The Hawthorne students made this bar graph to show their results. Each rectangle on the graph stands for five votes (or tally marks) on the survey. You can see that the flower garden got the most votes.

<table>
<thead>
<tr>
<th>Idea</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetable garden</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<td>Flower garden</td>
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<td>Bird sanctuary</td>
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<tr>
<td>Junk sculpture park</td>
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</tbody>
</table>

Number of votes
USE THIS SKILL

Do a Survey

Do a survey of your classmates to find out which environmental projects they prefer. You can use the list of ideas below to help you. Show the results of your survey in a bar graph.

Idea for an Environmental Project

- Collect cans, bottles, paper, and plastic for recycling
- Save unwanted classroom papers to use as scratch paper
- Pick up trash on the school grounds or in a nearby park
- Host a “What’s One Person’s Trash Is Another Person’s Treasure” sale
- Make posters urging students to buy recycled products
- Start a campaign to get your school to buy recycled paper

TEST TIP

You might be asked to read the results of a survey on a bar graph when taking a test. Remember that longer bars stand for larger numbers and shorter bars stand for smaller numbers.
Use pages 61 and 62 to help you do your survey.

Write the question that you asked each of your classmates.

Use the tally sheet below to keep track of the answers you received. Place a tally mark in the second column for each student next to the environmental projects listed. If a student names a project that is not listed, place a tally mark in the row next to the word Other.

<table>
<thead>
<tr>
<th>Environmental Project</th>
<th>Number of Students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle cans, bottles, paper, plastic</td>
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<tr>
<td>Save paper to use as scratch paper</td>
<td></td>
<td></td>
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<tr>
<td>Pick up trash at school and in park</td>
<td></td>
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<tr>
<td>Get school to buy recycled paper</td>
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<tr>
<td>Host a “Trash/Treasure” sale</td>
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<tr>
<td>Make recycling posters for school</td>
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<td></td>
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<tr>
<td>Other</td>
<td></td>
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</tr>
</tbody>
</table>
Use the space below to show your results in a bar graph.

<table>
<thead>
<tr>
<th>Idea</th>
<th>0</th>
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<tbody>
<tr>
<td>Recycle cans, bottles, paper, plastic</td>
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<td>Save paper to use as scratch paper</td>
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<td>Pick up trash at school and park</td>
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<tr>
<td>Get school to buy recycled paper</td>
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<tr>
<td>Host a &quot;Trash/Treasure&quot; sale</td>
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<td>Make recycling posters for school</td>
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<td>Other</td>
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