

Math

Genre

Informational Nonfiction

can give instructions or directions with clear details.



Text Feature

Tables present information visually using rows (across) and columns (down).

Content Vocabulary

estimate

random sample

representative sample

biased sample



Annie

Students Who Would Attend *Annie*

Method of Selecting Sample	Percent
Frank asked 50 of his friends.	30%
Sue put the names of all sixth-grade students in a hat and selected 50 names from the hat.	80%
Ellen put the names of all the students in a hat and selected 50 names from the hat.	60%

This table shows the data from the surveys.

How to Conduct a Survey

Frank, Sue, and Ellen conducted surveys to **estimate** how many students in their school would attend a student production of *Annie*. What is the best prediction (or guess) for the percentage of students in the whole school that would attend *Annie*?

In a **random sample**, a group of subjects (a sample) is selected from a total group of people (a population). Each subject is chosen completely by chance and each member of the total group (the population) has an equal chance of being included in the sample. When you pick names out of a bag without looking, you are selecting a random sample of the names in the bag.

Ellen took a random sample of all the students in the school. Each student had an equal chance of being chosen. Frank and Sue did not take random samples.

In their samples, each student in the school did not have an equal chance of being selected.

A sample that gives you a good idea of what a total group (whole population) is like is called a **representative sample**.

A sample that does not represent the total group is called a **biased**

sample. For example, Frank asked only his friends, and Sue asked only sixth-grade students.

Ellen's method is most likely to represent the total school. It is the best one to use for predicting (or guessing) the percentage of students in the school who would attend *Annie*. The best prediction is 60%.

Connect and Compare



1. Look at the table on page 356. What percentage of sixth-grade students would be likely to attend *Annie*? **Reading a Table**
2. Which method would you use to conduct a survey? Why? **Evaluate**
3. How should the students in *The Case of the Phantom Poet* plan and conduct a survey to find out who everyone thinks the mystery poet is? **Reading/Writing Across Texts**



Math Activity

Conduct a survey of your own. Include a random sample and a biased sample. Present your findings using a table.



Find out more about surveys at www.macmillanmh.com

Write a Scene

Writer's Craft

Tone

When you are writing a scene, you may set the **tone** you want by using sentence fragments because that is how people actually speak. Dialogue should always sound natural.

I used fragments and complete sentences to set the tone in my dialogue.



I tried to make the dialogue in the scene sound natural.

The Science Lesson

by Amelia L.



TIME: The present

SETTING: A sixth-grade classroom

Mr. Rosario: Please turn to page 303 in your books.

Nolan: (whispering to Tony) Where is it? Show it to me.

Tony: (pointing to his left hand) Here.

Mr. Rosario: Yesterday we read about amphibians. Who can name an amphibian? Kay?

Kay: A frog?

Mr. Rosario: Very good. Any other examples?

Jade: Toads are amphibians.

Mr. Rosario: That's right. (He turns to the board.)

Tony: No! Wait! (He dives under his desk.)

Mr. Rosario: (turning) Excuse me?

Nolan: I think he dropped something.

Mr. Rosario: Tony? What are you doing?

Tony: (going after something) Don't move, anyone!

Kay: (pointing) What's that moving like lightning?

Nolan: If only she knew.

Tony: (getting up with his hands cupped) Got it!

Mr. Rosario: Tony, what's going on?

Tony: (with hesitation) Oh, well . . . I have an amphibian. Would you like to see my frog?

Your Turn

Write a scene from a play. Try to make the dialogue sound natural, and set the tone by using both fragments and sentences. Your scene can be made-up or something that actually happened. Use the Writer's Checklist to check your writing.



Writer's Checklist

- Ideas and Content:** Is it clear what is happening in my scene?
- Organization:** Do the events and dialogue proceed naturally?
- Voice:** Do the voices of my characters come through?
- Word Choice:** Did I choose words that my characters would really use?
- Sentence Fluency:** Did my use of fragments help establish the **tone** of my dialogue?
- Conventions:** Did I punctuate my scene correctly?
Did I check my spelling?