

**2-1****Study Guide and Intervention*****Problem-Solving Investigation: Make a Table***

When solving problems, one strategy that is helpful is to *make a table*. A table often makes it easy to clarify information in the problem. One type of table that is helpful to use is a *frequency table*, which shows the number of times each item or number appears.

You can use the *make a table* strategy, along with the following four-step problem-solving plan to solve a problem.

**1 Understand** – Read and get a general understanding of the problem.

**2 Plan** – Make a plan to solve the problem and estimate the solution.

**3 Solve** – Use your plan to solve the problem.

**4 Check** – Check the reasonableness of your solution.

**Example 1**

**MOVIES** Carlos took a survey of the students in his class to find out what type of movie they preferred. Using C for comedy, A for action, D for drama, and M for animated, the results are shown below. How many more students like comedies than action movies?

C A M M A C D C D C M A M M A C C D A C

**Understand** You need to find the number of students that chose comedies and the number of students that chose action. Then find the difference.

**Plan** Make a frequency table of the data.

**Solve** Draw and complete a frequency table.

7 people chose comedies and 5 people chose action. So,  $7 - 5$  or 2 more students chose comedy than action.

**Check** Go back to the list to verify there are 7 C's for comedy and 5 A's for action.

Favorite Type of Movie		
Movie Type	Tally	Frequency
comedy		7
action		5
drama		3
animated		5

**Exercise**

**GRADES** The list below shows the quarterly grades for Mr. Vaquera's math class. Make a frequency table of the data. How many more students received a B than a D?

B C A A B D C B A C B B  
B D A C B B C A A B A B