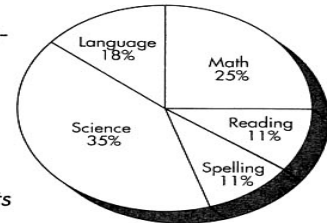


# Pie Graph

A pie graph is used to show how parts are compared to a whole. The petunia experiment results would not be represented appropriately with this type of graph. However, survey results are very clearly represented using a pie graph.



A class of 28 students was surveyed, and the students were asked to name their favorite school subject. Here are the results in a pie graph.

To make this pie graph, these simple steps were followed:

## 1

Survey students.

SUBJECTS	NO. OF STUDENTS
MATH	= 7
READING	= 3
SCIENCE	= 10
SOC. SCIENCE	= 0
LANGUAGE	= 5
SPELLING	= 3

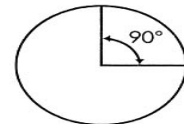
## 2

Calculate percentage. Divide the tally total for each subject by the total number of students surveyed.

Math ||||| = 7  
 $7/28 = .25$  or 25%

## 3

Calculate degrees. Multiply the percent in decimal form by  $360^\circ$ .  
 $.25 \times 360^\circ = 90^\circ$   
 Use the degrees to divide the pie circle.



The data table shows an organized way to calculate and record this information:

Subjects	No. of Students	Calculation of Decimal Fraction	Calculation of Degrees
Math	7	$7/28 = .25$	$.25 \times 360^\circ = 90^\circ$
Reading	3	$3/28 = .11$	$.11 \times 360^\circ = 40^\circ$
Science	10	$10/28 = .35$	$.35 \times 360^\circ = 126^\circ$
Soc. Studies	0	$0/28 = .00$	$0 \times 360^\circ = 0^\circ$
Language	5	$5/28 = .18$	$.18 \times 360^\circ = 64^\circ$
Spelling	3	$3/28 = .11$	$.11 \times 360^\circ = 40^\circ$
TOTALS	28	1.00	$360^\circ$