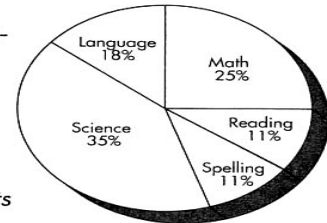


Pie Graph

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 |

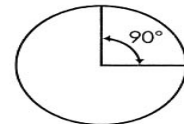
2

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° .
 $.25 \times 360^\circ = 90^\circ$
 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° |