

Science Skills-6

Finding Trends in Data - Percentage

Once a scientist has gathered data from an experiment, it must be analyzed. A scientist looks for patterns in the data. Patterns in the data are called trends. Scientists look for trends in several ways. One way a scientist can describe trends in the data are to look at the percentages within the data.

Directions: Look at the tables below and determine the percentages asked for.

A botanist (a scientist that studies plants) measured the height of 5 bean plants after 4 weeks in an experiment. Here are the heights of the plants as the scientist recorded them:

Plant	A	B	C	D	E
Height in cm	11	15	10	18	20

1. What percentage of plants are 11 cm or taller? _____
2. What percentage of plants are 11 cm or shorter? _____

A zoologist (a scientist that studies animals) was counting the number of migrating birds in a rice field every Monday for a month. Here is what she found:

Type of Bird	Week 1	Week 2	Week 3	Week 4
Canadian Geese	205	310	100	50
Cow Bird	45	47	43	50
Whooping Crane	25	35	55	10

3. What percentage of weeks had more than 150 Canadian Geese? _____
4. What percentage of weeks had less than 45 Cow Birds? _____
5. What percentage of weeks had less than 15 Whooping Cranes? _____

An epidemiologist (a scientist that studies how diseases become epidemics) studied the number of people who got sick with the flu in 3 counties in Texas. This is what she found:

County	Harris	Fort Bend	Bexar
Number of people	5087	2476	3239

6. What percentage of counties were lower than 3000? _____
7. What percentage of counties were greater than 2,500? _____

An astronomer (a scientist who studies the stars) was counting the number of asteroids found near Earth during a 6 month time period. This is what he found:

Month	Jan.	Feb.	March	Apr.	May	June
Number of asteroids	10	17	13	18	20	5

8. What percentage of months had less than 12 asteroids? _____
9. What percentage of months had more than 18 asteroids? _____
10. What percentage of months had less than 25 asteroids? _____

A paleontologist (a scientist who studies fossils) was trying to organize the fossils found in a museum. She started by counting how many were in each room. This is what she found:

Fossil type	Room A	Room B	Room C	Room D
Plant	15	114	0	34
Animal	265	89	78	12
Bacteria	14	12	1	3

11. What percentage of rooms had more than 30 plant fossils? _____
12. What percentage of rooms had less than 100 animal fossils? _____
13. What percentage of rooms had less than 10 bacteria fossils? _____

A meteorologist (a scientist who studies the weather) measured the high and low temperatures for a week. This is what he found:

Day of the Week	Low Temperature °F	High Temperature °F
Sunday	43	63
Monday	47	68
Tuesday	35	60
Wednesday	60	80
Thursday	63	75
Friday	45	65
Saturday	55	75

14. What percentage of low temperatures were below 60°F? _____
15. What percentage of high temperatures were above 70°F? _____
16. What is a meteorologist? _____
17. What is a paleontologist? _____
18. What is an epidemiologist? _____