

MATH IN SCIENCE

Numbers, measuring, making graphs, calculating, adding, subtracting, and more...there is a lot of Math involved in Science. Whether you are studying plants, animals, or the solar system, you will use Math procedures during your investigations and data recording.

Let's look at some examples of using Math in Science:

When Studying Plants

If you are conducting an experiment with two plants and you plan to compare the growth of each plant in centimeters – you'll be doing Math! You will have to measure both plants with a ruler and see which number is larger, in centimeters.

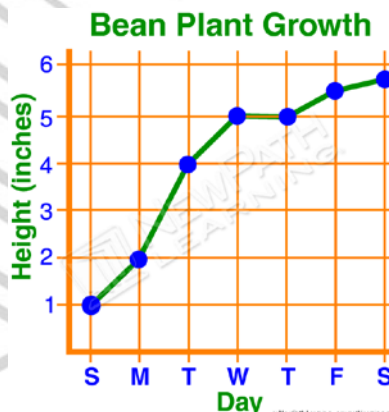


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You might measure plant stems, roots, or leaves for comparison in another investigation as well.

You will also use graphs when recording your results and data. In the case of the experiment mentioned above, you could make a line graph and record the growth of each plant per day.

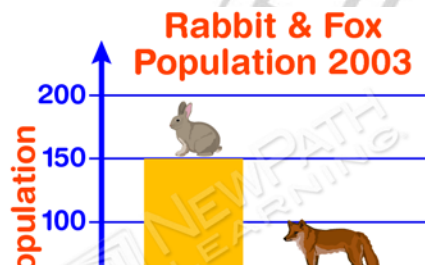


When Investigating Animals

Let's say you want to investigate which animal has the longest life span. You might make a bar graph to compare the life spans of several long living animals to easily see which animal lives the longest.

When Studying Relationships Among Living Things

When comparing animal populations in a community, you might make a bar graph of certain predators and their prey (such as foxes and rabbits) to note the differences between the populations of the two. Graphs often make information easy to read and to understand.



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When Checking

Measurement
the weather a

When studying
infall
between cities, measuring the amount of snowfall at your school, comparing the average temperatures during each month of the year, or figuring out how many trees were left standing after a major hurricane—you are using math each time!

When Inspecting Rocks, Minerals, and Soil

You will work with numbers, measuring, graphing, and even more math procedures when studying the effects of weather on soil as well. For instance, you might want to investigate how many centimeters of soil erode from a coastline in a three year time period.

When Studying Changes on Earth

Numbers are certainly important when it comes to studying earthquakes. Numbers are ranked on a Richter Scale to determine the strength of an earthquake.

When Keeping Track of Recycling

You would need to measure the weight of different objects in science as well, such as measuring how many kilograms of glass your school recycled in one year.



When Investigating

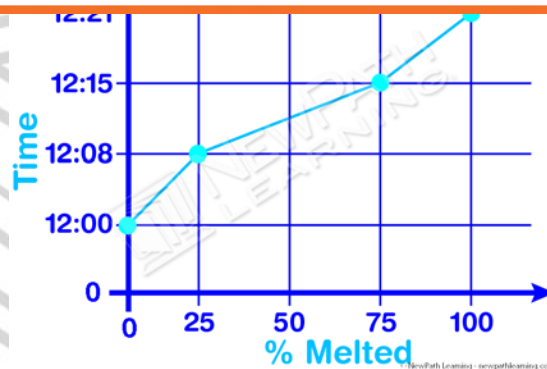
You can measure the change in states of matter from a solid to a liquid.



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or matter to be to change



When Observing Forces, Motion, and How Things Move

You will also find that you use numbers and math procedures when studying different forces and objects in motion. You might measure the distance it takes for one object to move from one place to another and you might then chart your results and findings on a graph.

When Dealing with Simple Machines

Numbers and measuring also are used when comparing the benefits of using simple machines. For example, you might compare the difference in centimeters and meters when raising a heavy box with your hands and arms with raising the same box with a pulley.

When Testing Sounds

Sound is measured in decibels. You can make a chart or graph comparing different sounds and the decibels each sound measures for comparison.

Decibels of Sound

a whisper		10
normal conversation		60
Train horn		100
Rock concert		140

When Investigating

You will especially use math when studying Earth and the solar system. You will use calculations – figuring out how far planets are from Earth in kilometers or how long it takes light to travel most hours of the day.



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System

studying the solar system, when you are looking at the Sun in our solar system here has the