

Measurements in Science

Do you know how tall you are?

If you do, you probably know your height in feet and inches.

When scientists measure the height of something, like these plants, they don't use inches, but use centimeters instead.

This is because measurements in science use the metric system.

The metric system is a collection of units used by scientists worldwide so that they are able to communicate their results to each other.

It's kind of like speaking the same language, but with numbers.

When making measurements in science, it is important to use the appropriate unit.

The unit is what follows the number.

For example, the length of this earthworm is measured in centimeters.

21 is the number, and centimeters is the unit.

Would you use centimeters as the unit of measure for the length of this whale?

You could, but the number would be pretty big.

A more appropriate unit for the whale's length would be the meter.

When finding the mass of this mouse on a scale, the unit used is grams.

Would you use grams as the unit of measure for the mass of an elephant?

You can, but again, it's not the most appropriate because the number will be huge!

A more suitable unit for the elephant's mass is the kilogram.

When the volume of a small amount of liquid is measured in a graduated cylinder, it is measured in milliliters.

A larger amount, like the volume of water in a fish tank, would be measured in liters.

Do you know the temperature at which water freezes?

If you said 32 degrees, you are measuring in degrees Fahrenheit.

In science, degrees are commonly measured in degrees Celsius.

Water freezes at 0 degrees Celsius.

There are many different units of measure in the metric system, and choosing the right one for each measurement is part of learning the language of science.
