



Science Virtual Learning

6th Grade Science:

Universal Measurements

May 8, 2020



6th Grade Science
Lesson: May 8, 2020

Objectives/Learning Targets:

Students will identify the SI units used to measure physical quantities.



Warm Up

1. Grab something near you that you can measure.

Example: Book, pillow, cup, computer.

2. Without touching that object, describe the exact length of the object. You CANNOT use regular scales such as inches or centimeters. Instead use things around you to describe the length. **Example: My computer is two hands long.**

3. Watch [Bill Nye's Introduction to the Metric System](#)

4. Complete a Quickwrite on your piece of paper to explain why humans stopped measuring with parts of their bodies. Watch the Bill Nye again if you have to!




Warm Up - Answer Key

Example Quickwrite:

Humans stopped measuring with parts of their bodies because they needed to start making consistent measurements. No two bodies are the same therefore, if we were measuring with our body parts, no two measurements would be the same.

Background Information

The International System of Units (SI) is the standard unit of measurement made up of 7 base units, featured on this chart. 

The SI is commonly known as the metric system.

Check out this [video](#) if you're wondering about the U.S. and the metric system!

The SI Units

Base quantity	Name	Symbol
Length	meter	m
Mass	kilogram	kg
Time	second	s
Electrical Current	ampere	A
Thermodynamic temperature	kelvin	K
Amount of substance	mole	mol
Luminous intensity	candela	cd



Practice

Read about the [International System of Units](#). Answer the following questions on a separate sheet of paper.

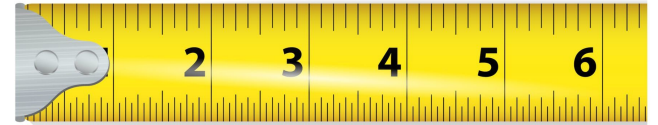
1. What does SI stand for?
2. Why is it important for scientists and engineers to adopt a common system of measurement units?
3. How many grams equal 1 kilogram?
4. What fraction of a meter is a millimeter?
5. How many pounds equal 5 kilograms?

Practice - Answer Key

1. What does SI stand for? *International System of Units*
2. Why is it important for scientists and engineers to adopt a common system of measurement units? *It allows scientists from different regions to communicate scientific data without confusion.*
3. How many grams equal 1 kilogram? *1000 g = 1 kg*
4. What fraction of a meter is a millimeter? *1/1000*
5. How many pounds equal 5 kilograms? *11 lbs*

Practice

Read the article about the [metric system](#). Once completed, take the quiz located at the bottom of the page to test your knowledge.





Additional Practice

1. [Metric System Conversions Song](#)
2. IXL - Choosing Metric Units For: [Distance](#), [Mass](#), [Volume](#)
Remember you do not need to log in. Just complete the 5 free questions for each topic.
3. Read more about the U.S. not going Metric [here](#).