MATH IN OUR LIVES: MEASUREMENT – METRIC UNITS
STUDY GUIDE

VOCABULARY

Metric	A system of measurement based on the decimal system.
Mass	The measure of how much matter an object has.
Volume	The measure of the space within a three dimensional shape.
Prefix	A group of letters placed at the start of word to change its meaning.
Convert	To change from one unit of measure to another

COMPREHENSION QUESTIONS

Why is the metric system used by scientists, like astronauts?

What is the difference between a centimeter, a millimeter, a meter and a kilometer?

What is the difference between mass and weight?

What kinds of objects are weighed in milligrams? Grams? Kilograms?

What is the name of the metric temperature scale? How is it different from the Fahrenheit scale?

What do prefixes tell us about metric measures?

What is the simple way to convert from one metric unit to another? How would you convert from milligrams to kilograms? From meters to centimeters?

FOLLOW UP ACTIVITIES

There is disagreement about whether the United States should adopt the metric system. Students can research both sides of the argument and present a debate.

Students can make their own “metric conversion charts” on index cards. Copy the following chart on a card:

Kilo	Hecto	Deca	BASE	Deci	Centi	Milli
thousands	hundreds	tens	ones	tenths	hundredths	thousandths

This chart helps students learn how to move the decimal point when making metric conversions. For example, to see how many centimeters are in a kilometer have students start in the “kilo” column and make one – two – three – four – five jumps to the right, until they’ve landed in the “centi” column. To convert from kilos to centis, move the decimal five spaces to the right. This chart can be used with any metric measure since the prefixes are the same for meters, grams and liters.