

Name _____ Period _____ Date _____

Test 1 Review

1. What's the difference between a scientific hypothesis and a scientific theory?

A scientific hypothesis _____
_____. A scientific theory _____.

2. What's the difference between an inference and an observation?

An inference _____
_____. An observation _____.

3. Bonita set up an experiment to test the effect of salt water on the germination of plant seeds. She used 4 different concentrations of salt water to water seeds in different plant pots, along with one plant pot she watered with plain water, and counted how many seeds sprouted in each pot.

a. What is the **experimental variable** in this experiment? _____

b. Name two **control variables** in this experiment. _____

c. Write a **hypothesis** for Bonita's experiment using IMP format.

If _____
and _____
then _____

4. What are the other names for the metric system?

5. What is the metric system unit for mass? _____ length (=distance)? _____ volume? _____

6. Use your metric conversion tool to convert the following measurements.

a. 6.2km = _____ m b. 45L = _____ mL c. 133mg = _____ g
d. 4,524m = _____ km e. 2,453kg = _____ g f. 175ml = _____ L

7. Choose from the following conversion factors to make the conversion.

$\frac{1.6\text{km}}{1\text{mi}}$	$\frac{1\text{mi}}{1.6\text{km}}$	$\frac{2.54\text{cm}}{1\text{in}}$	$\frac{1\text{in}}{2.54\text{cm}}$	$\frac{1\text{m}}{100\text{cm}}$	$\frac{100\text{cm}}{1\text{m}}$
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a. 4.7km . _____ = _____ mi b. 18cm . _____ = _____ in

c. 3.3mi . _____ . _____ . _____ = _____ cm

d. 1,245in . _____ . _____ . _____ = _____ km