Metric Conversion Practice Worksheet

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Part 1: Building a Foundation

Which of the following is the base unit of length in the metric system?

Hint: Think about the primary unit used for measuring length.

- ◯ Kilometer
- ◯ Meter
- ◯ Centimeter
- ◯ Millimeter

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Which of the following are units of mass in the metric system? (Select all that apply)

Hint: Consider the units used to measure weight.

- ☐ Gram
- ☐ Liter
- ☐ Kilogram
- ☐ Millimeter

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- [ ] Liter
- [ ] Kilogram
- [ ] Millimeter

Define the term "conversion factor" in the context of metric conversions.

Hint: Think about how you relate different units.

Define the term "conversion factor" in the context of metric conversions.

Hint: Think about how different units relate to each other.

List the metric units for measuring volume and temperature.

Hint: Think about common units used in science.

1. Volume units

2. Temperature unit

How many centimeters are there in a meter?

Hint: Consider the relationship between these two units.

- ◯ 10

- ◯ 100
- ◯ 1000
- ◯ 10000

How many centimeters are there in a meter?

Hint: Remember the basic metric conversions.

- ◯ 10
- ◯ 100
- ◯ 1000
- ◯ 10000

Part 2: Application and Analysis

If a recipe requires 500 milliliters of water, how many liters is this equivalent to?

Hint: Think about the conversion between milliliters and liters.

- ◯ 0.5 liters
- ◯ 5 liters
- ◯ 50 liters
- ◯ 500 liters

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- ◯ 5 liters
- ◯ 50 liters
- ◯ 500 liters

You are planning a trip that is 5 kilometers long. Which of the following are equivalent distances? (Select all that apply)

Hint: Consider how kilometers relate to meters and other units.

- ☐ 5000 meters
- ☐ 500 meters
- ☐ 5,000,000 millimeters
- ☐ 50,000 centimeters

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Describe a real-world scenario where converting between metric units of mass would be necessary.

Hint: Think about situations in cooking or science.

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Analyze the following conversions and identify which are correct. (Select all that apply)

Hint: Consider the relationships between these units.

- [ ] 2.5 kg = 2500 g
- [ ] 0.75 L = 750 mL
- [ ] 100 cm = 1 m
- [ ] 500 mg = 5 g

Analyze the following conversions and identify which are correct. (Select all that apply)

Hint: Consider the accuracy of each conversion.

- [ ] 2.5 kg = 2500 g
- [ ] 0.75 L = 750 mL
- [ ] 100 cm = 1 m
- [ ] 500 mg = 5 g

Part 3: Evaluation and Creation

Which metric unit would be most appropriate for measuring the length of a football field?

Hint: Consider the size of a football field.

- ◯ Millimeters
- ◯ Centimeters
- ◯ Meters
- ◯ Kilometers

Which metric unit would be most appropriate for measuring the length of a football field?

Hint: Consider the size of a football field in metric terms.

- ◯ Millimeters
- ◯ Centimeters
- ◯ Meters
- ◯ Kilometers

Evaluate the following statements and select those that are true about metric conversions. (Select all that apply)

Hint: Think about the principles of metric conversions.

- [ ] Converting from a larger unit to a smaller unit requires multiplication.
- [ ] Converting from a smaller unit to a larger unit requires division.
- [ ] The metric system is based on powers of ten.
- [ ] Temperature conversions are not part of the metric system.

Evaluate the following statements and select those that are true about metric conversions. (Select all that apply)

Hint: Think critically about the principles of metric conversions.

- [ ] Converting from a larger unit to a smaller unit requires multiplication.
- [ ] Converting from a smaller unit to a larger unit requires division.
- [ ] The metric system is based on powers of ten.
- [ ] Temperature conversions are not part of the metric system.

Design a simple experiment that requires the use of metric conversions, and explain how you would perform the necessary conversions.

Hint: Think about a scientific experiment or a cooking recipe.

Design a simple experiment that requires the use of metric conversions, and explain how you would perform the necessary conversions.

Hint: Think about a scientific experiment that involves measurements.