



Name: _____ #: _____

Date: _____ Section: _____ HR: _____

Measurement – A Common Language: Density, Time, & Temperature

Density

Density:

The formula of density is:

$$\text{Density} = \underline{\hspace{2cm}}$$

Figure 5: Comparing Densities -
Inferring: Which item has the greater density? Explain.

Units of Density

Why is density expressed as a combination of two different units?

The two common units for density are:

- _____
- _____

Math Practice

What is the density of a wood block with a volume of 125 cm³ and a mass of 57 g?

Density = _____

Density =

What is the density of a liquid with a mass of 45 g and a volume of 48 mL?

Density = _____

Density =

Densities of Common Substances

When does an object float in water?

When does an object sink in water?

Figure 6: Densities of Some Common Substances - Applying Concepts: How could you use density to determine whether a bar of metal is pure gold?

✓ **Reading Checkpoint (page 53)**
Will an object with a density of 0.7 g/cm³ float or sink in water?

- _____

Time

Units of Time

What is the SI unit used to measure time?

- _____

Common Conversions for Time		
1 s	=	
	=	60 s
1 h	=	

Measuring Time

Why would a stop watch be used to measure time in an important race?

✓ Reading Checkpoint (page 53)

How many milliseconds are in one second?

- _____

Temperature

Units of Temperature

A common unit to measure temperature:

- _____

Water freezes at:

- _____

Water boils at:

- _____

What is the official SI unit for temperature?

- _____

Figure 8: Measuring Temperature

Observing: At what temperature on the Kelvin scale does water boil?

- _____

What is absolute zero?

Measuring Temperature

What instrument is used to measure temperature?

- _____