

**Physical Properties:**

- ▶ No Conduction
- ▶ Red Color
- ▶ Brittle
- ▶ Not Magnetic
- ▶ Not Ductile
- ▶ Solid @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 20.02 grams
VOLUME: 11 cm³
DENSITY: _____ g/cm³
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?

NAME _____

MYSTERY ELEMENTS # 1**Physical Properties and their Density****Directions:**

- ▶ Calculate the density of each Element using the mass and volume given.
- ▶ Find the element by matching the density to the element on the Periodic Table.
- ▶ Determine if the Mystery Element is a Metal, Nonmetal, or Metalloid based on the physical properties listed and the element's location on the Periodic Table.
- ▶ Be sure to write the Name of the element.

**Physical Properties:**

- ▶ Conductor
- ▶ Shiny Luster
- ▶ Malleable
- ▶ Not Magnetic
- ▶ Not Ductile
- ▶ Solid @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 714 grams
VOLUME: 100 cm³
DENSITY: _____ g/cm³
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?

**Physical Properties:**

- ▶ Semiconductor
- ▶ Shiny Luster
- ▶ Brittle
- ▶ Not Magnetic
- ▶ Not Ductile
- ▶ Solid @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 156 grams
VOLUME: 25 cm³
DENSITY: _____ g/cm³
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?

**Physical Properties:**

- ▶ Conductor
- ▶ Orange Luster
- ▶ Malleable
- ▶ Not Magnetic
- ▶ Ductile
- ▶ Solid @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 672 grams
VOLUME: 75 cm³
DENSITY: _____ g/cm³
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?

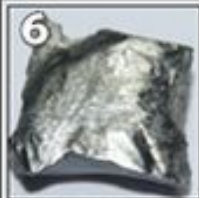
**Physical Properties:**

- ▶ Semiconductor
- ▶ Shiny Luster
- ▶ Brittle
- ▶ Not Magnetic
- ▶ Not Ductile
- ▶ Solid @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 266 grams
VOLUME: 50 cm³
DENSITY: _____ g/cm³
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?

**Physical Properties:**

- ▶ Conductor
- ▶ Shiny Luster
- ▶ Malleable
- ▶ Not Magnetic
- ▶ Ductile
- ▶ Solid @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 123.45 grams
VOLUME: 15 cm³
DENSITY: _____ g/cm³
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?

**Physical Properties:**

- ▶ No Conduction
- ▶ Red-brown Color
- ▶ Not Brittle/Malleable
- ▶ Not Magnetic
- ▶ Not Ductile
- ▶ Liquid @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 78 grams
VOLUME: 25 cm³
DENSITY: _____ g/cm³
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?

**Physical Properties:**

- ▶ Conductor
- ▶ Shiny Luster
- ▶ Malleable
- ▶ Not Magnetic
- ▶ Ductile
- ▶ Solid @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 598.3 grams
VOLUME: 31 cm³
DENSITY: _____ g/cm³
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?

**Physical Properties:**

- ▶ No Conduction
- ▶ Yellow Color
- ▶ Brittle
- ▶ Not Magnetic
- ▶ Not Ductile
- ▶ Solid @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 207 grams
VOLUME: 100 cm³
DENSITY: _____ g/cm³
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?

**Physical Properties:**

- ▶ Semiconductor
- ▶ Shiny Luster
- ▶ Brittle
- ▶ Not Magnetic
- ▶ Not Ductile
- ▶ Solid @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 367.4 grams
VOLUME: 55 cm³
DENSITY: _____ g/cm³
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?

**Physical Properties:**

- ▶ No Conduction
- ▶ Yellow-Green Color
- ▶ Not Brittle/Malleable
- ▶ Not Magnetic
- ▶ Not Ductile
- ▶ Gas @ Room Temp.

QUESTIONS:

- Calculate the density of the element.
MASS: 150.87 grams
VOLUME: 47 L
DENSITY: _____ g/L
- Is it a Metal, Nonmetal, or Metalloid?

- What is the Mystery Element?
