Chemistry 115 Name

Dr. Cary Willard

Quiz 2a (20 points) February 8, 2011

All work must be shown to receive credit. Use dimensional analysis for calculated problems.

1. (4 points) Write the name and symbol of an element that fits the following criteria
   1. A nobel gas

Name Symbol

* 1. A transition metal

Name Symbol

1. (4 points) Identify each of the following as a physical or chemical change.
   1. An iron pipe breaking
   2. Lactic acid reacting with methanol to form methyl lactate.
2. (4 points)For an atom of nickel with 31 neutrons determine the following
   1. The number of protons in the atom
   2. The mass number of the atom
   3. The elemental symbol for this element (isotopic symbol)
3. (4 points) How many liters of olive oil contain 1.5 kg of olive oil? (density olive oil = 0.92 g/mL)
4. (4 points) How many miles will light travel in 3.0 minutes if light travels at the rate of 3.00 x 108 m/sec? (1 mile = 5280 ft)

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Quiz 2b (20 points) February 8, 2011

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1. (4 points) Write the name and symbol of an element that fits the following criteria
   1. A halogen

Name Symbol

* 1. A transition metal

Name Symbol

1. (4 points) Identify each of the following as a physical or chemical change.
   1. Ammonia reacting with vinegar to form acetamide.
   2. A chunk of glass melting
2. (4 points)For an atom of zinc with 35 neutrons determine the following
   1. The number of protons in the atom
   2. The mass number of the atom
   3. The elemental symbol for this element (isotopic symbol)
3. (4 points) How many liters of olive oil contain 2.5 kg of olive oil? (density olive oil = 0.92 g/mL)
4. (4 points) How many miles will light travel in 2.0 minutes if light travels at the rate of 3.00 x 108 m/sec? (1 mile = 5280 ft)

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Quiz 2c (20 points) February 10, 2011

All work must be shown to receive credit. Use dimensional analysis for calculated problems.

1. (4 points) Write the name and symbol of an element that fits the following criteria
   1. An alkaline earth

Name Symbol

* 1. An inner transition metal

Name Symbol

1. (4 points) Identify each of the following as a physical or chemical property.
   1. Calcium carbonate is a white powder.
   2. Phosphorus will ignite when exposed to air
2. (4 points)For an atom of chromium with 31 neutrons determine the following
   1. The number of protons in the atom
   2. The mass number of the atom
   3. The elemental symbol for this element (isotopic symbol)
3. (4 points) What is the mass in kg of 2.5 L of olive oil? (density olive oil = 0.92 g/mL)
4. (4 points) How many minutes will it take light to travel 5.0 billion miles (5.0 x 109 miles) if light travels at the rate of 3.00 x 108 m/sec? (1 mile = 5280 ft)

Chemistry 115 Name

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Quiz 2d (20 points) February 10, 2011

All work must be shown to receive credit Use dimensional analysis for calculated problems.

1. (4 points) Write the name and symbol of an element that fits the following criteria
   1. A noble gas

Name Symbol

* 1. An inner transition metal

Name Symbol

1. (4 points) Identify each of the following as a physical or chemical property.
   1. Fluorine gas will explode in the presence of hydrogen.
   2. Neon is a colorless gas at room temperature
2. (4 points)For an atom of chlorine with 22 neutrons determine the following
   1. The number of protons in the atom
   2. The mass number of the atom
   3. The elemental symbol for this element (isotopic symbol)
3. (4 points) What is the mass in kg of 1.5 L of olive oil? (density olive oil = 0.92 g/mL)
4. (4 points) How many minutes will it take light to travel 6.0 billion miles (6.0 x 109 miles) if light travels at the rate of 3.00 x 108 m/sec? (1 mile = 5280 ft)