Measurements In Class Worksheet 1/30/17

Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) All of the following are SI units of measurement, **except**   1) _____
    A) kelvin.   B) second.   C) meter.   D) gram.   E) mole.

2) If the temperature is 178°F, what is the temperature in degrees Celsius?   2) _____
    A) 352°C   B) 451°C   C) 378°C   D) 81.1°C   E) 67°C

3) The outside air temperature is 30°F, what is the temperature in Kelvin?   3) _____
    A) 274 K   B) 303 K   C) 307 K   D) 272 K

4) Determine the density of an object that has a mass of 149.8 g and displaces 12 .1 mL of water when   4) _____
  placed in a graduated cylinder.
    A) 11.4 g/mL   B) 1.38 g/mL   C) 18.1 g/mL   D) 8.08 g/mL   E) 12.4 g/mL

5) A student performs an experiment to determine the density of a sugar solution. She obtains the   5) _____
  following results: 4.11 g/mL, 4.81 g/mL, 4.95 g/mL, 3.75 g/mL. If the actual value for the density of
  the sugar solution is 4.75 g/mL, which statement below best describes her results?
    A) Her results are accurate, but not precise.
    B) Her results are precise, but not accurate.
    C) Her results are neither precise nor accurate.
    D) Her results are both precise and accurate
    E) It isn't possible to determine with the information given.

6) How many significant figures are in 1009.630 mL?   6) _____
    A) 3   B) 4   C) 5   D) 6   E) 7

7) How many significant figures are in 3.408×10^4 m?   7) _____
    A) 3   B) 4   C) 5   D) 7   E) 8

8) How many significant figures are in the measurement, 463.090 m?   8) _____
    A) 2   B) 3   C) 4   D) 5   E) 6

9) How many significant figures are in the measurement, 0.0005890 g?   9) _____
    A) 4   B) 5   C) 6   D) 7   E) 8

10) What answer should be reported, with the correct number of significant figures, for the following   10) _____
  calculation? (433.621 – 333.9) × 11.900
    A) 1.19×10^3
    B) 1.186799×10^3
    C) 1.18680×10^3
    D) 1.1868×10^3
    E) 1.187×10^3

11) How many mg does a 433 kg sample contain?

    A) 4.33×10^7 mg

    B) 4.33×10^{-4} mg

    C) 4.33×10^6 mg

    D) 4.33×10^8 mg

    E) 4.33×10^{-3} mg

11) _____

12) If a room requires 25.4 square yards of carpeting, what is the area of the floor in units of ft^2? (3 ft = 1 yd)

    A) $68.6\ ft^2$ B) $76.2\ ft^2$ C) $229\ ft^2$ D) $282\ ft^2$ E) $8.47\ ft^2$

12) _____

13) A person weighs 77.1 kg. What is their weight in pounds?

    A) 154 pounds   B) 170 pounds   C) 162 pounds   D) 35.0 pounds

13) _____

14) If the walls in a room are 955 square feet in area, and a gallon of paint covers 15 square yards, how many gallons of paint are needed for the room? (3 ft = 1 yd)

    A) 47 gallons   B) 7.1 gallons   C) 24 gallons   D) 2.3 gallons   E) 21 gallons

14) _____

15) Gas is sold for $1.399 per liter in Toronto, Canada. Your car needs 12.00 gallons. How much will your credit card be charged in dollars?

    A) $4.44   B) $67.15   C) $63.54   D) $16.79

15) _____