Name_____ (print) Name _____(sign)

Please show work for partial credit on the Long Answers and in some of the Short Answer Questions.   Multiple choice questi
have no partial credit.   Please write anything you want graded legibly.   If I cannot read your work, I obviously cannot gr
it. (1 pts print AND sign exam)   *extra Credit exam redo*

**Part I   MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.   (No
Partial Credit for MC) (3 pts per question, 21 pts pts total)**

1) Solutions are
    A) homogeneous mixtures   B) none of the above
    C) non uniform mixture   D) heterogeneous mixture

1) _____

2) Diamond and graphite are:
    A) have the same crystalline structure   B) the same element
    C) similar in physical properties   D) bonded in the same way

2) _____

3) The metric prefix that means one-hundredth (1/100) is
    A) milli   B) centi   C) kilo   D) mega

3) _____

4) An example of an element which exists normally in its most stable form as diatomic molecules is:
    A) NO_2 B) N_2 C) CO   D) P_4

4) _____

5) Expressed in standard powers-of-10 notation and rounded to four
    significant figures, the number 0.00023648 is

    A) 2.365×10^4 B) 2.365×10^{-4}.   C) 2.364×10^3.   D) 236.4×10^{-6}.

5) _____

6) Density describes
    A) weight per mass   B) mass per unit volume
    C) volume per liter   D) length per unit time.

6) _____

7) Rounding the number 200.601 to three significant figures
    A) gives 201   B) gives 200.601   C) gives 199   D) gives 200.

7) _____

Part II: **Short Answers** (48 pts) Show work on all questions for **partial and full credit** even on questions which do not specify.

1. Metric conversions   1 kilograms = _____ grams (4 pts)

2.   Significant Figures: (4 pts) How many significant figures is in the following number ?

2.30002 _____

3   Identify the following as **(A) element** **(B) compound** (by filling in the blank with the letters. (6 pts, 3 pts each)

In _____   In Cl_3 _____

4.   Fill in the blank with one of the letters.   (A) heterogeneous mixture   (B) homogeneous mixture

Wet sand _____   salty sea water (no sand) _____

5. Match the following with the definition or example below. (8 pts, 2 pts each)

a. solute _____

b. solvent _____

c. solution _____

d. saturated solution ___

(1) The substance which you have less of in a solution..
(2) The substance which you have more of in a solution.
(3) A solution in which you dissolved K Cl into water with some undissolved solid salt still in the bottom of the beaker.
(4) Homogeneous mixture

6.   Given the following miniaturized periodic table, fill in the blank with the correct letter. (8 pts, 4 pts each)

(A) period (B) group   (C) main group (representative elements) (D) transition metal elements (E) lanthanide/actinide
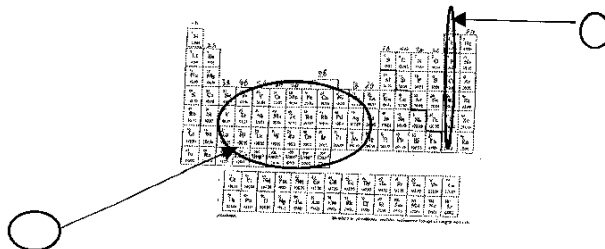
7. Given the following list of chemical formulas, circle all which are covalent compounds (8 pts total, 1 pt each)

K Cl CO_2 Sr_3P_2 MgF_2 SO_2 Li_2O CCl_4 $CaCl_2$

8.   Name the binary compound shown.   Ba F_2 given the name of the elements (barium, fluorine) (4 pts)

Part III: Long Answers (31 pts) Show work on all questions for partial and full credit even on questions which do not specify.   Remember "attempt" points.

   1. Convert the following. Show work.   (15 pts)

from   18.22 pounds to milligrams (453.6 grams = 1 pound, 100 centigrams = 1 gram, 1000 milligram = 1 gram)

   2. Complete the following for the element symbols **Na**   (16 pts, 2 pts each)

      a [(metal) or (nonmetal)] (circle one)

      b.   What is the atomic number ? _____   c. What is the atomic mass ? _____

      b.   How many protons ? _____   How many total electrons (for a neutral atom)? _____

      c.   What is the group number ? _____   d.   How many valence electrons ? _____

      e.   What is the period number ? _____

Name_____ (print) Name _____(sign)

Please show work for partial credit on the Long Answers and in some of the Short Answer Questions.   Multiple choice questi
have no partial credit.   Please write anything you want graded legibly.   If I cannot read your work, I obviously cannot gr
it. (1 pts print AND sign exam) extra credit— (one — exam redo

Part I MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question. (No Partial Credit for MC) (3 pts per question, 21 pts pts total)

1) The metric prefix that means one-hundredth (1/100) is   1) _____
   A) mega   B) milli   C) centi   D) kilo

2) Diamond and graphite are: 2) _____
   A) have the same crystalline structure   B) the same element
   C) bonded in the same way   D) similar in physical properties

3) Expressed in standard powers-of-10 notation and rounded to four   3) _____
   significant figures, the number 0.00023648 is

   A) 2.364×10^3.   B) 2.365×10^4 C) 236.4×10^{-6}.   D) 2.365×10^{-4}.

4) Density describes   4) _____
   A) volume per liter   B) weight per mass
   C) mass per unit volume   D) length per unit time.

5) Solutions are   5) _____
   A) non uniform mixture   B) homogeneous mixtures
   C) none of the above   D) heterogeneous mixture

6) Rounding the number 200.601 to three significant figures   6) _____
   A) gives 201   B) gives 200.601   C) gives 199   D) gives 200.

7) An example of an element which exists normally in its most stable form as diatomic molecules is: 7) _____
   A) P_4 B) CO   C) NO_2 D) N_2

Part II: Short Answers (48 pts) Show work on all questions for **partial and full credit** even on questions which do not specify.

1. Metric conversions   _____ centiliter = one Liter   (4 pts)

2.   Significant Figures: (4 pts)

How many significant figures is in the following numbers ?

1.07 _____

3   Identify the following as **(A) element   (B) compound** (by filling in the blank with the letters. (6 pts, 3 pts each)

C O_2 _____C _____

4.   Fill in the blank with one of the letters.   (A) heterogeneous mixture   (B) homogeneous mixture

Solid salt mixed with sold sugar _____   salt and sugar dissolved in water _____

5. Match the following with the definition or example below. (8 pts, 2 pts each)

  a. solution _____

  b. saturated solution ___

  c. solute _____

  d. solvent _____

(1) The substance which you have less of in a solution..
(2) The substance which you have more of in a solution.
(3) A solution in which you dissolved K Cl into water with some undissolved solid salt still in the bottom of the beaker.
(4) Homogeneous mixture

6.   Given the following miniaturized periodic table, fill in the blank with the correct letter. (8 pts, 4 pts each)

(A) period   (B) group   (C) main group (representative elements)   (D) transition metal elements
(E) lanthanide/actinide

7. Given the following list of chemical formulas, circle all which are *molecular* (ionic) compounds (8 pts total, 1 pt each)

typo

SO_2 Li_2O CCl_4 $CaCl_2$ K Cl CO_2 Sr_3P_2 MgF_2

8.   Name the binary compound shown.   Ca I_2 given the name of the elements (calcium, iodine) (4 pts)

Part III: Long Answers (31 pts) Show work on all questions for partial and full credit even on questions which do not specify.   Remember "attempt" points.

1. Convert the following. Show work.   (15 pts)

from 72.5 meters to feet (12 inches = 1 foot, 2.54 cm = 1 inch, 100 cm = 1 meter)

2.   Complete the following for the element symbols **F**   (16 pts, 2 pts each)

   a [(metal) or (nonmetal)] (circle one) (answer the following for the element given).

   b.   What is the atomic number ? _____   c. What is the atomic mass ? _____

   b.   How many protons ? _____   How many total electrons (for a neutral atom)? _____

   c.   What is the group number ? _____   d.   How many valence electrons ? _____

   e.   What is the period number ? _____

Name_____ (print) Name _____(sign)

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have no partial credit.   Please write anything you want graded legibly.   If I cannot read your work, I obviously cannot
grade it. (1 pts print AND sign exam) *extra credit exam redo*

Part I   MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.   (No Partial Credit for MC) (3 pts per question, 21 pts pts total)

1) Expressed in standard powers-of-10 notation and rounded to four   1) _____
   significant figures, the number 0.00023648 is

   A) 2.365×10^4 B) 2.365×10^{-4}.   C) 2.364×10^3.   D) 236.4×10^{-6}.

2) An example of an element which exists normally in its most stable form as diatomic molecules is: 2) _____
   A) N_2 B) P_4 C) CO   D) NO_2

3) The metric prefix that means one-hundredth (1/100) is   3) _____
   A) milli   B) kilo   C) centi   D) mega

4) Diamond and graphite are: 4) _____
   A) have the same crystalline structure   B) the same element
   C) bonded in the same way   D) similar in physical properties

5) Rounding the number 200.601 to three significant figures   5) _____
   A) gives 201   B) gives 200.   C) gives 200.601   D) gives 199

6) Solutions are   6) _____
   A) homogeneous mixtures   B) none of the above
   C) heterogeneous mixture   D) non uniform mixture

7) Density describes   7) _____
   A) volume per liter   B) weight per mass
   C) length per unit time.   D) mass per unit volume

Part II: **Short Answers** (48 pts) Show work on all questions for **partial and full credit** even on questions *which do not specify.*

1. Metric conversions _____ milligrams = 1 gram. (4 pts)

2. Significant Figures: (4 pts)

How many significant figures is in the following numbers ?

2.002 _____

3 Identify the following as **(A) element   (B) compound** (by filling in the blank with the letters. (6 pts, 3 pts each)

SO_2 _____   S _____

4. Fill in the blank with one of the letters.   (A) heterogeneous mixture   (B) homogeneous mixture

Iron filing mixed with sand _____   coffee with sugar and cream _____

5. Match the following with the definition or example below. (8 pts, 2 pts each)

a. solvent _____

b. solution _____

c. solute _____

d. saturated solution ____

(1) The substance which you have less of in a solution..
(2) The substance which you have more of in a solution.
(3) A solution in which you dissolved K Cl into water with some undissolved solid salt still in the bottom of the beaker.
(4) Homogeneous mixture

6. Given the following miniaturized periodic table, fill in the blank with the correct letter. (8 pts, 4 pts each)

(A) period   (B) group   (C) main group (representative elements) (D) transition metal elements
(E) lanthanide/actinide

7. Given the following list of chemical formulas, circle all which are covalent (ionic) compounds (8 pts total, 1 pt each)

typo

Sr_3P_2 MgF_2 SO_2 $K\ Cl$ CO_2 Li_2O CCl_4 $CaCl_2$

8.   Name the binary compound shown. $K\ Cl$ given the name of the elements (potassium, chlorine)(4 pts)

Part III: Long Answers   (31 pts) Show work on all questions for partial and full credit even on questions which do not specify.   Remember "attempt" points.

1. Convert the following. Show work.   (15 pts)

from 25.7 cups to milliLiter (4 cups = 1 quart, 1 liter = 1.06 quart, 1000 mL = 1 Liter)

2. Complete the following for the element symbols __Ca__   (16 pts, 2 pts each)

a [(metal) or (nonmetal)] (circle one) (answer the following for the element given).

b.   What is the atomic number ? _____   c. What is the atomic mass ? _____

b.   How many protons ? _____   How many total electrons (for a neutral atom)? _____

c.   What is the group number ? _____   d.   How many valence electrons ? _____

e.   What is the period number ? _____

Name_____ (print) Name _____(sign)

Please show work for partial credit on the Long Answers and in some of the Short Answer Questions. Multiple choice questi
have no partial credit. Please write anything you want graded legibly. If I cannot read your work, I obviously cannot gr
it. (1 pts print AND sign exam) *extra credit exam redo (blue)*

Part I MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question. (No Partial Credit for MC) (3 pts per question, 21 pts pts total)

1) Density describes
   A) mass per unit volume   B) length per unit time.
   C) weight per mass   D) volume per liter

1) _____

2) An example of an element which exists normally in its most stable form as diatomic molecules is:
   A) N_2 B) NO_2 C) P_4 D) CO

2) _____

3) Diamond and graphite are:
   A) bonded in the same way   B) the same element
   C) have the same crystalline structure   D) similar in physical properties

3) _____

4) Rounding the number 200.601 to three significant figures
   A) gives 200.   B) gives 201   C) gives 200.601   D) gives 199

4) _____

5) The metric prefix that means one-hundredth (1/100) is
   A) kilo   B) mega   C) centi   D) milli

5) _____

6) Expressed in standard powers-of-10 notation and rounded to four significant figures, the number 0.00023648 is

   A) 2.364×10^3.   B) 2.365×10^4 C) 2.365×10^{-4}.   D) 236.4×10^{-6}.

6) _____

7) Solutions are
   A) none of the above   B) non uniform mixture
   C) homogeneous mixtures   D) heterogeneous mixture

7) _____

Part II: **Short Answers** (48 pts) Show work on all questions for **partial and full credit** even on questions which do not specify.

1. Metric conversions _____ decimeter = one meter (4 pts)

2. Significant Figures: (4 pts)

How many significant figures is in the following numbers ?

782.03 _____

3 Identify the following as **(A) element** **(B) compound** (by filling in the blank with the letters. (6 pts, 3 pts each)

P _____   PCl₃ _____

4. Fill in the blank with one of the letters. (A) heterogeneous mixture (B) homogeneous mixture

Sweet tea _____   tea leaves with dry instant coffee, no water _____

5. Match the following with the definition or example below. (8 pts, 2 pts each)

a. solute _____

b. saturated solution ___

c. solution _____

d. solvent _____

(1) The substance which you have less of in a solution..
(2) The substance which you have more of in a solution.
(3) A solution in which you dissolved K Cl into water with some undissolved solid salt still in the bottom of the beaker.
(4) Homogeneous mixture

6. Given the following miniaturized periodic table, fill in the blank with the correct letter. (8 pts, 4 pts each)

(A) period (B) group (C) main group (representative elements) (D) transition metal elements (E) lanthanide/actinide

7. Given the following list of chemical formulas, circle all which are covalent (ionic) compounds (8 pts total, 1 pt each)

SO₂   Li₂O   K Cl   CO₂   MgF₂   CCl₄   CaCl₂   Sr₃P₂

8.   Name the binary compound shown.   Ag   Br given the name of the elements (silver, bromine)(4 pts)

Part III: Long Answers (31 pts) Show work on all questions for partial and full credit even on questions which do not specify.   Remember "attempt" points.

1. Convert the following. Show work.   (15 pts)

from   262 feet to meters (12 inches = 1 foot, 2.54 cm = 1 inch, 100 cm = 1 meter)

2. Complete the following for the element symbols **N**   (16 pts, 2 pts each)

a [(metal) or (nonmetal)] (circle one) (answer the following for the element given).

b.   What is the atomic number ? _____   c. What is the atomic mass ? _____

b.   How many protons ? _____   How many total electrons (for a neutral atom)? _____

c.   What is the group number ? _____   d.   How many valence electrons ? _____

e.   What is the period number ? _____