Gen Chem I (CHM 201) Fall 18 Dr. Hahn   MWF 8 am Quiz II form A   9/7 F Exam # _____

Name ___Key___   Name _BA = bad attempt_
Sign   Print (bc I can't read signatures)
Please **show work on all questions** for **full credit & partial credit.** (20 total pts)

NA = not attempt   NW = no work

1.   Use density as a conversion factor to convert from 0.000234 quarts of a liquid pharmaceutical (density of pharmaceutical = 2.309 g/mL) to grams of the medicine.   You are the person who accurately weighs out the medicine into small cups (which will be diluted with water in the medicine cup for patients and if you give the patient too much, the patient will go into cardiac arrest and die. (1 Liter = 1.06 quart)   (8 pts)

$$0.000234 \text{ quart} \times \frac{1 \text{ L}}{1.06 \text{ quart}} \times \frac{1000 \text{ mL}}{1 \text{ L}} \times \frac{2.309 \text{ g}}{\text{mL}}$$

(2 pt) (2 pt) (2 pt) (2 pt)

$$= 0.510 \text{ gram pharmaceutical}$$

BA –4
extra step –1

2.   What element symbol has atomic number of **34** ?   Se   (4 pts)

3.   For the element   **Mn**

a.   Give the atomic number 25 (1 pt)   b.   Give the atomic mass number 54.94 (1 pt)

c.   Write out the symbol for the element in the format $^A_Z E$ $^{55}_{25} Mn$ (2 pts) } upside down –1

d.   How many protons does the element have ? 25   (1 pt)

e.   How many electrons does the element have ? 25 (1 pt)

f.   How many neutrons does the element have ? 30 (1 pt) (29 ok)

g.   Show work for # neutrons _____ (2 pts)   55 – 25 = 30

Extra Credit Question   (3 pts)

1.   What is the likely charge for the element **Ba** ? +2 Show work or explain. (1 pt)
        Group # 2 A → (+2)   NW –½

2.   What is the group number for the element ? 2A (1/2 pt)

3.   What is the period number for the element ? 6 (1/2 pt)

4.   Is the element a [(metal) or (nonmetal)] (circle one) ? (1/2 pt)

5.   Name the compound given below (given the element names).   K₂ S   (1/2 pt)

(potassium sulfur)+ide   potassium sulfide
(rewriting above –½ pt)   Spelling –(sp) no pts off

Gen Chem I (CHM 201) Fall 18 Dr. Hahn MWF 8 am Quiz II form B 9/7 F Exam # _____

Name _____Key_____ Name __BA = bad attempt__
Sign   Print
Please **show work on all questions** for **full credit & partial credit**. (20 total pts) green

NA = not attempted   NW = no work

1.   Use density as a conversion factor to convert from 0.00789 quarts of a liquid pharmaceutical (density of pharmaceutical = 1.292 g/mL) to grams of the medicine.   You are the person who accurately weighs out the medicine into cups (which will be diluted with water in the medicine cup for patients and if you give the patient too much, the patient will go into cardiac arrest and die. (1 Liter = 1.06 quart)   (8 pts)

$$0.00789 \text{ quart} \times \frac{1 L}{1.06 \text{ quart}} \times \frac{1000 mL}{1 L} \times \frac{1.292 g}{1 mL}$$

(2pt)   (2pt)   (2pt)   (2pt)

9.62 g

BA - 4
extra step -1

2.   What element symbol has atomic number of **36** ? Kr (4 pts)

3.   For the element **Ba**
a.   Give the atomic number ___56___ (1 pt)   b.   Give the atomic mass number _137.3_ (1 pt)

    c.   Write out the symbol for the element in the format $^A_z E$ $^{137}_{56} Ba$ (2 pts) } (-1 pt)

    d.   How many protons does the element have ? __56__ (1 pt)

    e.   How many electrons does the element have ? __56__ (1 pt)

    f.   How many neutrons does the element have ? __81__ (1 pt)   137 - 56 = 81

    g.   Show work for # neutrons _____ (2 pts)

Extra Credit Question   (3 pts)

1.   What is the likely charge for the element **Te** ? _−2_ Show work or explain. (1 pt)
       6 − 8 = −2   NW − ½ pt

2.   What is the group number for the element ? 6A (1/2 pt)

3.   What is the period number for the element ? 5 (1/2 pt)

4.   Is the element a [(metal) or (nonmetal)] (circle one) ? (1/2 pt)   Spelling = sp no pts off

5.   Name the compound given below (given the element names). **Mg₃P₂** (1/2 pt)
(magnesium phosphorus) ide   magnesium phosphide

Name _____   Name _____
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Please **show work on all questions** for **full credit & partial credit.** (20 total pts)

1.   Use density as a conversion factor to convert from 0.000234 quarts of a liquid pharmaceutical (density of pharmaceutical = 2.309 g/mL) to grams of the medicine.   You are the person who accurately weighs out the medicine into small cups (which will be diluted with water in the medicine cup for patients and if you give the patient too much, the patient will go into cardiac arrest and die. (1 Liter = 1.06 quart) (8 pts)

2.   What element symbol has atomic number of **34** ? _____   (4 pts)

3.   For the element   **Mn**

   a.   Give the atomic number _____ (1 pt)   b.   Give the atomic mass number _____ (1 pt)

   c.   Write out the symbol for the element in the format $^A_Z E$ _____ (2 pts)

   d.   How many protons does the element have ? _____ (1 pt)

   e.   How many electrons does the element have ? _____ (1 pt)

   f.   How many neutrons does the element have ? _____ (1 pt)

   g.   Show work for # neutrons _____ (2 pts)

Extra Credit Question   (3 pts)

1.   What is the likely charge for the element **Ba** ? _____ Show work or explain. (1 pt)

2.   What is the group number for the element ? _____ (1/2 pt)

3.   What is the period number for the element ? _____ (1/2 pt)

4.   Is the element a [(metal) or (nonmetal)] (circle one) ? (1/2 pt)

5.   Name the compound given below (given the element names).   **K$_2$ S**   (1/2 pt)

(potassium   sulfur)

Name _____   Name _____
Sign   Print
Please **show work on all questions** for **full credit & partial credit**. (20 total pts)

1.   Use density as a conversion factor to convert from 0.00789 quarts of a liquid pharmaceutical (density of pharmaceutical = 1.292 g/mL) to grams of the medicine.   You are the person who accurately weighs out the medicine into cups (which will be diluted with water in the medicine cup for patients and if you give the patient too much, the patient will go into cardiac arrest and die. (1 Liter = 1.06 quart)   (8 pts)

2.   What element symbol has atomic number of **36** ? _____ (4 pts)

3.   For the element **Ba**
a.   Give the atomic number _____ (1 pt)   b.   Give the atomic mass number _____ (1 pt)

   c.   Write out the symbol for the element in the format $^A_Z E$ _____(2 pts)

   d.   How many protons does the element have ? _____ (1 pt)

   e.   How many electrons does the element have ? _____ (1 pt)

   f.   How many neutrons does the element have ? _____ (1 pt)

   g.   Show work for # neutrons _____ (2 pts)

Extra Credit Question   (3 pts)

1.   What is the likely charge for the element   **Te** ? _____ Show work or explain. (1 pt)

2.   What is the group number for the element ? _____ (1/2 pt)

3.   What is the period number for the element ? _____ (1/2 pt)

4.   Is the element a [(metal) or (nonmetal)] (circle one) ? (1/2 pt)

5.   Name the compound given below (given the element names).   **Mg₃ P₂** (1/2 pt)

(magnesium   phosphorus)