

Name Key
(print name)

Name _____ blue
(sign name)

Please show all work for full credit and to get partial credit.

1. If the density of an unknown is 2.789 g/mL and you have 1.8 grams of the substance, what is the volume of the substance in mL? (density = mass/volume) (4 pts)

$$1.8 \text{ g} \times \frac{\text{ml}}{2.789 \text{ g}} = 0.65 \text{ ml}$$

2. Given the periodic table and the element with the symbol **Kr**, (the following letters all refer to the same element given here) (6 pts)

a. Number of protons in the element 36 protons (1 pt)

b. Number of electrons for a neutral atom is 36 electrons (1 pt)

c. Number of neutrons is 48 neutrons. (1 pt) Show work. (1 pt)

$$83.8 \rightarrow 84 - 36 =$$

d. Atomic number for the element is 36 (1 pt)

e. Atomic mass for the element is 83.80 (1 pt)

3. In the periodic table give the symbol for **any one lanthanide or actinide element** Ce to Lu (2 pt)

4. Elements from **B to Tl** is the group III A (give the exact symbol from the provided periodic table) (2 pts)

5. Naming: (6 pts)

a. The symbol for the element **Silicon** is Si (3 pts)

b. The name of the element **Fe** is iron (3 pts)

Extra Credit (2 pts)

The element **Sr** is in group II A (1/2 pt) the charge on the normal ionic form of **Sr** is

+2 (1 pt) explain. (1/2 pt) left side periodic table

charge = +(group #)

↓
in main group elements

Name Key Name _____
 (print name) (sign name)

Please show all work for full credit and to get partial credit.

1. If the density of an unknown is 1.987 g/mL and you have 0.78 grams of the substance, what is the volume of the substance in mL? (density = mass / volume) (4 pts)

$$0.78 \cancel{\text{g}} \times \frac{\text{ml}}{1.987 \cancel{\text{g}}} = 0.39 \text{ ml}$$

2. Given the periodic table and the element with the symbol Cu, (the following letters all refer to the same element given here) (6 pts)

- a. Number of protons in the element is 29 protons (1 pt)
- b. Number of electrons for a neutral atom is 29 electrons (1 pt)
- c. Number of neutrons is 35 neutrons. (1 pt) Show work. (1 pt)
 $63.546 \rightarrow 64 - 29 = 35$
- d. Atomic number for the element is 29 (1 pt)
- e. Atomic mass for the element is 64 (1 pt)

any group IA, IIA, IIIA to VIIA element

3. In the periodic table give the symbol for any one Main Group element _____ (2 pt)

4. Elements from Na to Ar is the period 3 (give the exact symbol from the provided periodic table) (2 pts)

Li, Ca etc.

5. Naming (6 pts)

- a. The symbol for the element phosphorus is P (3 pts)
- b. The name of the element Na is sodium (3 pts)

Extra Credit (2 pts)

The element Se is in group VIA (1/2 pt) the charge on the normal ionic form of Se is -2 (1 pt) explain. (1/2 pt)

$6 - 8 = -2$
 element on right side of periodic table
 charge = (group # - 8) in main group elements

Name Key
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Please show all work for full credit and to get partial credit.

1. Write the symbol of the element Cr in the format ${}^A_Z X$ ${}^{52}_{24} Cr$ (4 pts)

periodic table 24 Cr 51.9961

${}^{52}_{24} Cr$

2. Given the periodic table and the element with the symbol Ca, (the following letters all refer to the same element given here) (6 pts)

a. Number of protons in the element is 20 protons (1 pt)

b. Number of electrons for a neutral atom is 20 electrons (1 pt)

c. Number of neutrons is 20 neutrons. (1 pt) Show work. (1 pt)

$40.078 \rightarrow 40 - 20 = 20$

d. Atomic number for the element is 20 (1 pt)

e. Atomic mass for the element is 40 (1 pt)

3. In the periodic table give the symbol for any one Main Group element (2 pt)

4. Elements from H to Fr is a [(group) or (period)] (circle one) (2 pts)

5. Naming: (6 pts)

a. The symbol for the element platinum is Pt (3 pts)

b. The name of the element K is potassium (3 pts)

any group IA, II, IIIA to VIIA element
B, O, Na etc.

Extra Credit (2 pts)

The element Rb is in group IA (1/2 pt) the charge on the normal ionic form of Rb is

+1 (1 pt) explain. (1/2 pt) elements on left of

periodic table + group # = charge (in main group elements)

Name Key Name _____
 (print name) (sign name)

Please show all work for full credit and to get partial credit.

1. Write the symbol of the element **Au** in the format ${}^A_Z X$ ${}^{197}_{79} Au$ (4 pts)

periodic table 79
Au
196.96655 → 197

2. Given the periodic table and the element with the symbol **P**, (the following letters all refer to the same element given here) (6 pts)

- a. Number of protons in the element is 15 protons (1 pt)
- b. Number of electrons for a neutral atom is 15 electrons (1 pt)
- c. Number of neutrons is 16 neutrons. (1 pt) Show work. (1 pt)
 $30.973761 \rightarrow 31 - 15 = 16$

d. Atomic number for the element is 15 (1 pt)

e. Atomic mass for the element is 31 (1 pt)

3. In the periodic table give the symbol for **any one Transition Metal element** Mn (2 pts)

4. Elements from **K to Kr** is a [(group) or (period)] (circle one) (2 pts)

5. Naming: (6 pts)

a. The symbol for the element **bromine** is Br (3 pts)

b. The name of the element **Hg** is mercury (3 pts)

any group 3 B to 2 B + many more element

Extra Credit (2 pts)

The element **Rb** is in group VII A (1/2 pt) the charge on the normal ionic form of **Rb** is -1 (1 pt) explain. (1/2 pt)

$7 - 8 = -1$ main group elements on right side of periodic table group # $-8 = -1$

Quiz II General Chemistry I Lecture Spring 15 Dr. Hahn 20 pts 1/27 T 8:30am form A quiz # _____

Name _____ Name _____
(print name) (sign name)

Please show all work for full credit and to get partial credit.

- If the density of an unknown is 2.789 g/mL and you have 1.8 grams of the substance, what is the volume of the substance in mL? (density = mass/volume) (4 pts)
- Given the periodic table and the element with the symbol **Kr**, (the following letters all refer to the same element given here) (6 pts)
 - Number of protons in the element _____ protons (1 pt)
 - Number of electrons for a neutral atom is _____ electrons (1 pt)
 - Number of neutrons is _____ neutrons. (1 pt) Show work. (1 pt)
 - Atomic number for the element is _____ (1 pt)
 - Atomic mass for the element is _____ (1 pt)
- In the periodic table give the symbol for **any one lanthanide or actinide element** _____ (2 pt)
- Elements from **B to Tl** is the group _____ (give the exact symbol from the provided periodic table) (2 pts)
- Naming: (6 pts)
 - The symbol for the element **Silicon** is _____ (3 pts)
 - The name of the element **Fe** is _____ (3 pts)

Extra Credit (2 pts)

The element **Sr** is in group _____ (1/2 pt) the charge on the normal ionic form of **Sr** is _____ (1 pt) explain. (1/2 pt)

Name _____ Name _____
(print name) (sign name)

Please show all work for full credit and to get partial credit.

1. If the density of an unknown is 1.987 g/mL and you have 0.78 grams of the substance, what is the volume of the substance in mL? (density = mass / volume) (4 pts)

2. Given the periodic table and the element with the symbol **Cu**, (the following letters all refer to the same element given here) (6 pts)
 - a. Number of protons in the element is _____ protons (1 pt)
 - b. Number of electrons for a neutral atom is _____ electrons (1 pt)
 - c. Number of neutrons is _____ neutrons. (1 pt) Show work. (1 pt)

 - d. Atomic number for the element is _____ (1 pt)
 - e. Atomic mass for the element is _____ (1 pt)
3. In the periodic table give the symbol for any **one Main Group element** _____ (2 pt)
4. Elements from **Na to Ar** is the period _____ (give the exact symbol from the provided periodic table) (2 pts)
5. Naming (6 pts)
 - a. The symbol for the element **phosphorus** is _____ (3 pts)

 - b. The name of the element **Na** is _____ (3 pts)

Extra Credit (2 pts)

The element **Se** is in group _____ (1/2 pt) the charge on the normal ionic form of **Se** is _____ (1 pt) explain. (1/2 pt)

Name _____ Name _____
(print name) (sign name)

Please show all work for full credit and to get partial credit.

1. Write the symbol of the element **Cr** in the format ${}^A_Z X$ _____ (4 pts)

2. Given the periodic table and the element with the symbol **Ca**, (the following letters all refer to the same element given here) (6 pts)
 - a. Number of protons in the element is _____ protons (1 pt)
 - b. Number of electrons for a neutral atom is _____ electrons (1 pt)
 - c. Number of neutrons is _____ neutrons. (1 pt) Show work. (1 pt)

 - d. Atomic number for the element is _____ (1 pt)
 - e. Atomic mass for the element is _____ (1 pt)

3. In the periodic table give the symbol for **any one Main Group element** _____ (2 pt)

4. Elements from **H to Fr** is a [(group) or (period)] (circle one) (2 pts)

5. Naming: (6 pts)
 - a. The symbol for the element **platinum** is _____ (3 pts)
 - b. The name of the element **K** is _____ (3 pts)

Extra Credit (2 pts)

The element **Rb** is in group _____ (1/2 pt) the charge on the normal ionic form of **Rb** is _____ (1 pt) explain. (1/2 pt)

Name _____ Name _____
(print name) (sign name)

Please show all work for full credit and to get partial credit.

1. Write the symbol of the element **Au** in the format ${}^A_Z X$ _____ (4 pts)

2. Given the periodic table and the element with the symbol **P**, (the following letters all refer to the same element given here) (6 pts)

- a. Number of protons in the element is _____ protons (1 pt)
- b. Number of electrons for a neutral atom is _____ electrons (1 pt)
- c. Number of neutrons is _____ neutrons. (1 pt) Show work. (1 pt)

d. Atomic number for the element is _____ (1 pt)

e. Atomic mass for the element is _____ (1 pt)

3. In the periodic table give the symbol for **any one Transition Metal element** _____ (2 pt)

4. Elements from **K to Kr** is a [(group) or (period)] (circle one) (2 pts)

5. Naming: (6 pts)

a. The symbol for the element **bromine** is _____ (3 pts)

b. The name of the element **Hg** is _____ (3 pts)

Extra Credit (2 pts)

The element ~~Rb~~^I is in group _____ (1/2 pt) the charge on the normal ionic form of ~~Rb~~^I is _____ (1 pt) explain. (1/2 pt)