# Spring 2018 Chem 211 quiz 1 (take-home) Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name these elements. For each, fill the number of protons, neutrons, and electrons; identify the element as a metal, nonmetal, or metalloid.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Name | # of protons | # of neutrons | # of electrons | Write in: Metal, Non-Metal, or Metalloid? |
| 80Se |  |  |  |  |  |
| 54Fe |  |  |  |  |  |
| 56Fe |  |  |  |  |  |
| 31P |  |  |  |  |  |
| 119Sn |  |  |  |  |  |
| 41K |  |  |  |  |  |
| 65Cu |  |  |  |  |  |

1. A slug of Ba (molar mass = 137.33 g/mol) weighs 27.28 g.

What is the name of material? \_\_\_\_\_\_\_\_\_\_\_\_\_

Is it a metal, metalloid, or nonmetal? \_\_\_\_\_\_\_\_\_\_\_\_\_

Does the group comprising Ba have a name? If yes, what? \_\_\_\_\_\_\_\_\_\_\_

How many moles of Ba are there? \_\_\_\_\_\_\_\_\_\_\_\_\_

How many Ba atoms are there? \_\_\_\_\_\_\_\_\_\_\_\_\_

1. A piece of Si (molar mass = 28.09 g/mol) contains 5.30 x 1018 atoms.

What is the name of material? \_\_\_\_\_\_\_\_\_\_\_\_\_

Is it a metal, metalloid, or nonmetal? \_\_\_\_\_\_\_\_\_\_\_\_\_

Does the group comprising Si have a name? If yes, what? \_\_\_\_\_\_\_\_\_\_\_\_\_

How many moles of Si are there? \_\_\_\_\_\_\_\_\_\_\_\_\_

How many grams of Si are there? \_\_\_\_\_\_\_\_\_\_\_\_\_

Info: *N*A = 6.022 x 1023