## Protons, Neutrons \& Electrons

Name: $\qquad$

1) How many protons and electrons are present in a vanadium atom?
2) How many protons and electrons are present in a niobium atom?
3) What is the name of the element that has atoms that contain 5 protons? atoms that contain 22 protons?
4) Write the chemical symbol and charge for the ion with 12 protons and 10 electrons.
5) Write the chemical symbol and charge for the ion with 23 protons and 20 electrons.
6) Write the chemical symbol and charge for the ion with 16 protons and 18 electrons.
7) How many protons, neutrons and electrons are present in ${ }_{28}^{59} \mathrm{Ni}^{+2}$ ?
8) How many protons, neutrons and electrons are present in ${ }_{40}^{92} Z r^{+4}$ ?
9) How many protons, neutrons and electrons are present in ${ }_{58}^{139} \mathrm{Ce}^{+3}$ ?
10) How many protons, neutrons and electrons are present in ${ }_{15}^{31} P^{-3}$ ?
11) Write the complete chemical symbol for the ion with 84 protons, 125 neutrons and 80 electrons
12) Write the complete chemical symbol for the ion with 27 protons, 32 neutrons and 24 electrons
13) Write the complete chemical symbol for the ion with 43 protons, 54 neutrons and 38 electrons
14) Write the complete chemical symbol for the ion with 84 protons, 122 neutrons and 86 electrons
