

CHEMISTRY
HOMEWORK 2b.

Name: _____

1. Write the *s,p,d,f* electron notation for each of the following:

nitrogen

phosphorus

selenium

zirconium

osmium

meitnerium

2. Naturally occurring oxygen is

99.762% ${}^8_{16}\text{O}$ (atomic mass 15.995) and

0.038% ${}^8_{17}\text{O}$ (atomic mass 16.999) and

0.200% ${}^8_{18}\text{O}$ (atomic mass 17.999). Calculate the average atomic weight of oxygen.

3. Calculate the mass of:

6.022×10^{23} atoms of a natural sample of oxygen

6.022×10^{23} atoms of ${}^8_{16}\text{O}$

6.022×10^{23} atoms of ${}^8_{18}\text{O}$