

7.4 Drawing Bohr Models

Through a long and complex process, chemists have been able to determine types of _____ that various elements can form. The good news is that you can simply access this information from your _____.

We can illustrate the arrangements of electrons in atoms and ions by drawing a _____.

To do this we need to draw the _____ and the _____ with _____.

Rather than draw the _____ in the nucleus, we usually summarize the information. You should include: the

_____, _____ (if you are drawing an ion),

and number of _____. Sometimes the number of neutrons are included also.

Bohr diagrams tell us a lot about the properties of various elements. Remember for our purposes:

1st electron orbital: full with ___ electrons

2nd electron orbital: full with ___ electrons

3rd electron orbital: full with ___ electrons (even though it really isn't)

The reactivity of an atom depends on the _____

electrons. An atom can either _____

electrons or _____ electrons. The most

stable set up for an atom is either a _____ outer shell.

Atoms that are 1 electron away from being full or empty are

the _____ reactive. Atoms with full outer shells are very unreactive.

The ion charges from the periodic table are based on if an atom tends to give away or take on electrons, and that is based on

the _____.

You can tell which atoms will combine with other atoms based on their _____.

The process of transferring electrons is called electron transfer. This created a _____ between the two atoms called an _____.

If you recall, a molecule consists of two or more atoms that are chemically bonded to one another. Many molecules are formed

between two _____ (like water). When you

have an ionic molecule (_____ and _____) you don't really have one individual particle. Many ions clump together. Imagine it like a handful of magnets: two will stick together, but so will 50.