

Answer then tape into your notebook

### Questions for Investigation 6A:

Get a periodic table-or a lab manual and open to page 27

1. Isotopes of an atom are written by listing the symbol for the atom and their mass number.

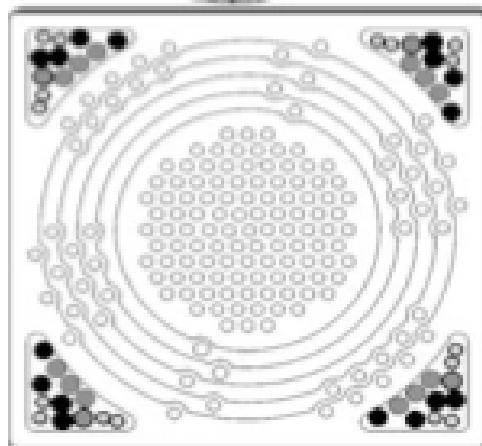
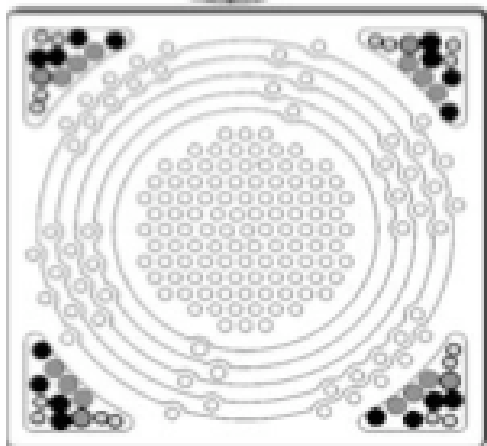
For example, Lithium has two isotopes, Li-6 and Li-7.

A. How many isotopes does Neon (Ne) have? \_\_\_\_\_

B. How would you write them? \_\_\_\_\_

2. Atoms which are not shown on the periodic table may exist in nature but they are radioactive and unstable. For example, carbon-14 (C14) is unstable and is not listed although C12 and C13 are stable.

A. Fill in one picture of the atom building model to show an atom of Carbon -12 and the other to show Carbon- 14. Label protons, electrons, and neutrons correctly.



3. What four elements make up almost all of the mass in your body?

4. How many stable isotopes does oxygen have? List them.

5. Find one element on the chart that has no stable isotopes.

6. What element has atoms with 26 protons in the nucleus?

7. On most periodic tables a single atomic mass is listed instead of the mass numbers for all the stable isotopes. How is this mass related to the different isotopes? Hint: look at the periodic table in your notebook- Find Lithium- how does the mass listed there compare?