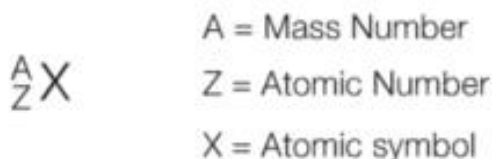


Discovering the Concepts

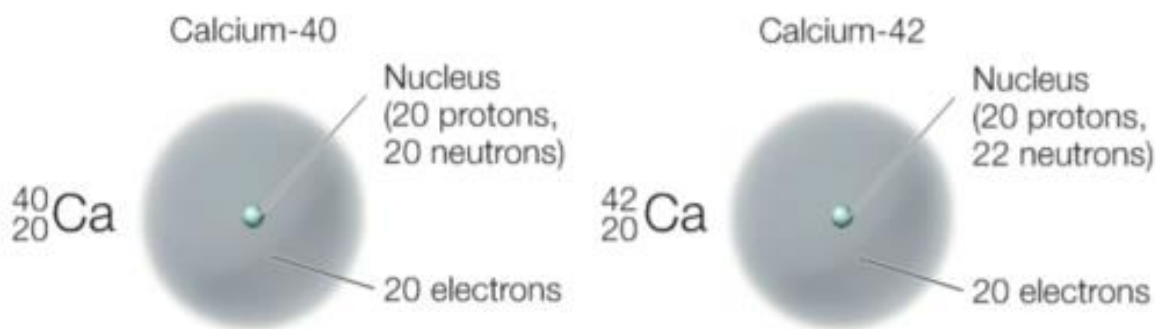
Inquiry Activity—Isotopes

Information

Symbolic Notation for Isotopes



Isotopes of Calcium and the Number of Particles in Each



Questions

1. How many protons are found in calcium-42 and calcium-40?
2. How many neutrons are found in calcium-42 and calcium-40?
3. What is the relationship between the number of protons and the number of electrons in an atom?
4. Based on the information, what is common to all calcium atoms?
5. What could the atomic number Z indicate?
6. How is the mass number A determined?
7. How would you define *isotope*?
8. Where are the protons, neutrons, and electrons located in an atom?
9. What do calcium *isotopes* have in common? How do they differ?
10. Where is most of the mass of an atom?
11. For the following isotopes, determine the number of protons, neutrons, and electrons.



Protons = _____

Neutrons = _____

Electrons = _____



Protons = _____

Neutrons = _____

Electrons = _____