

# INTERPRETING ATOMIC DIAGRAMS

Below and on the following page are diagrams of six different atoms. In the spaces provided to the right of each diagram, fill in the number of protons, neutrons, electrons, positive charges, negative charges, and the overall charge of each atom.

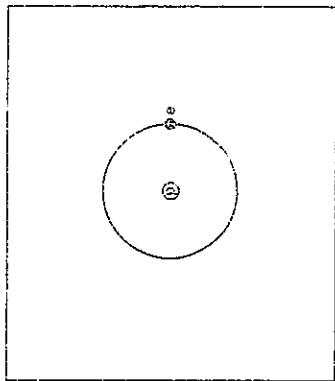


Figure D Hydrogen

Protons \_\_\_\_\_  
 Neutrons \_\_\_\_\_  
 Electrons \_\_\_\_\_  
 Positive charge \_\_\_\_\_  
 Negative charge \_\_\_\_\_  
 Overall charge \_\_\_\_\_

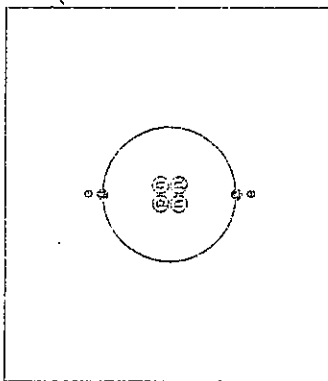


Figure E Helium

Protons \_\_\_\_\_  
 Neutrons \_\_\_\_\_  
 Electrons \_\_\_\_\_  
 Positive charge \_\_\_\_\_  
 Negative charge \_\_\_\_\_  
 Overall charge \_\_\_\_\_

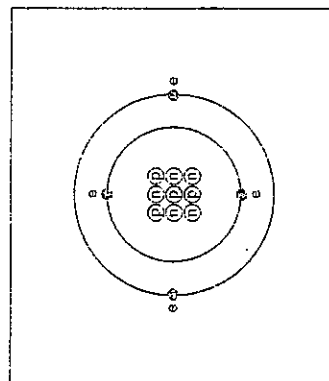


Figure F Beryllium

Protons \_\_\_\_\_  
 Neutrons \_\_\_\_\_  
 Electrons \_\_\_\_\_  
 Positive charge \_\_\_\_\_  
 Negative charge \_\_\_\_\_  
 Overall charge \_\_\_\_\_

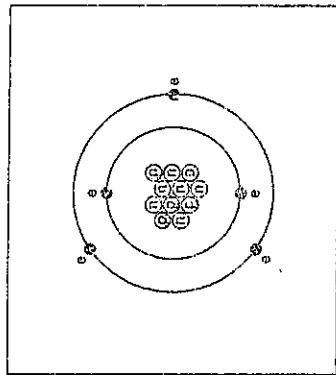


Figure G Boron

Protons \_\_\_\_\_  
 Neutrons \_\_\_\_\_  
 Electrons \_\_\_\_\_  
 Positive charge \_\_\_\_\_  
 Negative charge \_\_\_\_\_  
 Overall charge \_\_\_\_\_

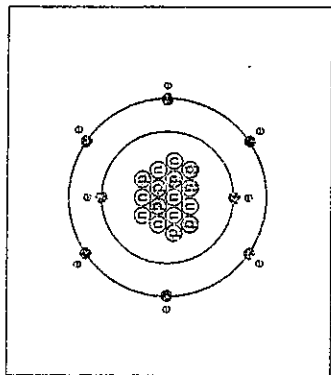


Figure H Oxygen

Protons \_\_\_\_\_  
 Neutrons \_\_\_\_\_  
 Electrons \_\_\_\_\_  
 Positive charge \_\_\_\_\_  
 Negative charge \_\_\_\_\_  
 Overall charge \_\_\_\_\_

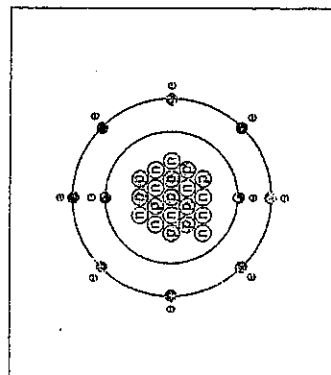


Figure I Neon

Protons \_\_\_\_\_  
 Neutrons \_\_\_\_\_  
 Electrons \_\_\_\_\_  
 Positive charge \_\_\_\_\_  
 Negative charge \_\_\_\_\_  
 Overall charge \_\_\_\_\_

## COMPLETE THE CHART

Complete the chart by filling in the missing information.

	Kind of Matter	Protons	Neutrons	Atomic Mass	Electrons	Atomic Number
1.	Oxygen	8		16	8	8
2.	Sodium			23	11	
3.	Carbon		6	12		
4.	Phosphorus		16			15
5.	Potassium	19	20			
6.	Iron	26		56		
7.	Copper	29	35	64		
8.	Chlorine			35		17
9.	Boron	5	6			
10.	Aluminum		14	27		

## TRUE OR FALSE

In the space provided, write "true" if the sentence is true. Write "false" if the sentence is false.

- \_\_\_\_\_ 1. An atom has no mass.
- \_\_\_\_\_ 2. An electron is the largest part of an atom.
- \_\_\_\_\_ 3. All atoms have the same mass.
- \_\_\_\_\_ 4. All protons have the same mass.
- \_\_\_\_\_ 5. All oxygen atoms have the same mass.
- \_\_\_\_\_ 6. An oxygen atom has the same atomic number as a hydrogen atom.
- \_\_\_\_\_ 7. To find the atomic mass of an atom, we add the protons and electrons.
- \_\_\_\_\_ 8. The atomic number of an atom is the number of neutrons it has.
- \_\_\_\_\_ 9. Atoms of the same kind that have different numbers of neutrons are called isotopes.
- \_\_\_\_\_ 10. Atomic number = atomic mass.