



# Protons, Neutrons, Electrons, and Atomic Mass



1. Using the periodic table, fill in the blanks.

Element	Symbol	Protons	Neutrons	Electrons	Atomic Mass (amu)
	H	1		1	
Helium	He				4
		6		6	
Nitrogen	N		7		
Oxygen	O				
Sodium	Na				
Chlorine	Cl				
Iron	Fe				

2. Uranium-235 (U-235) atom consists of how many protons, neutrons, and electrons?
3. Determine the atomic mass of an atom with 18 protons, 22 neutrons, and 18 electrons. What element is it?
4. A Sodium-23 (Na-23) atom has how many protons, neutrons, and electrons?
5. Calculate the number of protons, neutrons, and electrons in an atom of Aluminum-27 (Al-27).



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## 1. **Answers**

Element	Symbol	Protons	Neutrons	Electrons	Atomic Mass (amu)
Hydrogen	H	1	0	1	1
Helium	He	2	2	2	4
Carbon	C	6	6	6	12
Nitrogen	N	7	7	7	14
Oxygen	O	8	8	8	16
Sodium	Na	11	12	11	23
Chlorine	Cl	17	18	17	35
Iron	Fe	26	30	26	56

2. Uranium-235 (U-235) atom consists of how many protons, neutrons, and electrons?

Protons: 92

Neutrons: 143

Electrons: 92

3. Determine the atomic mass of an atom with 18 protons, 22 neutrons, and 18 electrons. What element is it?

Atomic Mass: 40

Argon

4. A Sodium-23 (Na-23) atom has how many protons, neutrons, and electrons?

Protons: 11

Neutrons: 12

Electrons: 11

5. Calculate the number of protons, neutrons, and electrons in an atom of Aluminum-27 (Al-27).

Protons: 13

Neutrons: 14

Electrons: 13