

Ions Worksheet

NAME KEY

For each of the following ions, indicate the total number of protons and electrons. When given the protons and electrons, indicate the ion with the correct charge.

Ion	Protons	Electrons	Protons	Electrons	Ion
Cl ⁻	17	18	56	54	Ba ²⁺
K ⁺	19	18	87	86	Fr ⁺
S ²⁻	16	18	84	86	Po ²⁻
Sr ²⁺	38	36	50	46	Sn ⁴⁺
Al ³⁺	13	10	32	36	Ge ⁴⁻
P ³⁻	15	12	55	54	Cs ⁺
Si ⁴⁻	14	18	12	10	Mg ⁺

Use your periodic table to complete the table below. The first one has been done for you.

Element	Atomic #	Mass	Protons	Neutrons	Electrons	Symbol
Iodine	53	127	53	74	54	I ⁻
Chlorine	17	35	17	18	18	Cl ⁻
Hydrogen	1	1	1	0	0	H ⁺
Bromine	35	80	35	45	36	Br ⁻
Boron	5	11	5	6	2	B ³⁺
Oxygen	8	16	8	8	10	O ²⁻
Nitrogen	7	14	7	7	10	N ³⁻
Aluminum	13	27	13	14	10	Al ³⁺
Iron	26	56	26	30	24	Fe ²⁺
Copper	29	64	29	35	28	Cu ⁺
Copper	29	64	29	35	27	Cu ²⁺

Match each of the positive ions listed with the total number of electrons that ion contains. Use your periodic table. The same answer may be used more than once.

- A) 2 B) 10 C) 21 D) 23 E) 24
 F) 25 G) 36 H) 48 I) 76 J) 81

- B Al³⁺ D Fe³⁺ B Mg²⁺ H Sn²⁺
A Li⁺ C Cr³⁺ G Rb⁺ I Pt²⁺