

Unit 3: Periodicity - Find Someone Who Knows

You will find a classmate who can offer a concise, yet correct answer to each of the questions below. They should answer on your page and initial at the end of the answer. Each question must have a different classmate answer it.

QUESTION	ANSWER
What is the name of group 7A?	Halogens
What is a period equivalent to on the periodic table?	A Row
What is the name of group 8A?	Noble Gases
What is a group equivalent to on the periodic table?	A Column
What is the name of group 1A?	Alkali Metals
What orbitals are being filled by transition metals and inner transition metals, respectively?	D & F
What groups are included in the Representative Elements?	Group A Elements
Who created the first modern periodic table and what on which property did he base it?	Mendeleev
What is the name of group 2A?	Alkaline Metals
What property is the modern periodic table based on and who made it?	Atomic number/mass
What broad class of elements are lustrous, malleable, ductile, and good conductors of heat and electricity.	metals
What broad class of elements has intermediate properties and is very versatile?	metalloids
What is the valence electron configuration of the alkali metals?	$1 \text{ or } s^1$
What broad class of elements is mostly gases. generally brittle, and has several insulators.	Non metal
What is the valence electron configuration of the noble gases?	$s^2 p^6 \text{ or } 8$
What are the group and period trends for 1st ionization energy, respectively?	\uparrow period \downarrow group
What is the valence electron configuration of the halogens?	\uparrow or $s^2 p^5$
What are the group and period trends for electronegativity, respectively?	\uparrow period \downarrow group
What are the group and period trends for atomic radius?	\uparrow group \downarrow period
How does the size of a cation compare to its parent atom?	cations are smaller
What are the group and period trends for ionic radius, respectively?	\uparrow group \downarrow period
How does the size of an anion compare to its parent atom?	anions are larger
How do successive ionization energies compare to the ones before them?	they are greater
Which ionization energy for magnesium is the greatest, the first second or third? Why?	the third
How does shielding change in groups? In periods?	\uparrow groups \downarrow periods
How does effective nuclear charge change in periods? In groups?	\uparrow periods \downarrow groups