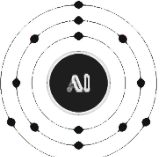
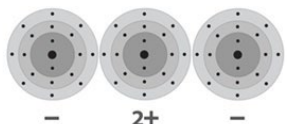

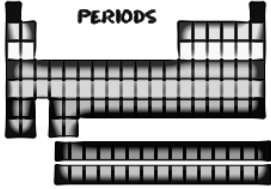
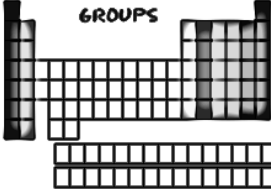
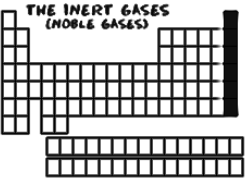
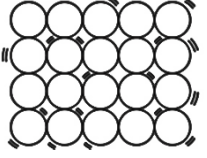
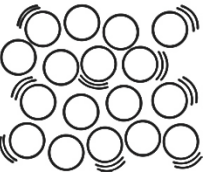
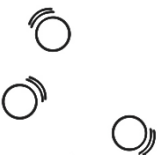



where are the metals found on the periodic table?	where are the non-metals found on the periodic table?	name the three subatomic particles that make up the atom	what do you call the outer electron shell around an atom?
left hand side and middle	right hand side	protons, neutrons & electrons	the valence shell
up to how many electrons can the first energy level / shell hold?	up to how many electrons can the second energy level / shell hold?	up to how many electrons can the third energy level / shell hold?	what is the charge on a proton?
2	8	8 (rule holds at level 1 NCEA)	positive
what is the charge on an electron?	what is the charge on a neutron?	if an atom has 6 electrons, how many protons does it have?	what does the mass number of an atom tell you?
negative	no charge / neutral	6	number of protons plus neutrons
what does the atomic number of an atom tell you?	in ${}^A_Z X$ notation, A is the ... number	in ${}^A_Z X$ notation, Z is the ... number	in ${}^A_Z X$ notation, A - Z tells you...
number of protons	mass	atomic	the number of neutrons

<p>in ${}^A_Z X$ notation, X is ..</p>	<p>atoms with the same atomic number but different mass number are called</p>	<p>${}^{12}_6 C$ & ${}^{14}_6 C$ are ___ of each other</p>	<p>${}^{35}_{17} Cl$ & ${}^{37}_{17} Cl$ have a different number of ___</p>
<p>the symbol for the element</p>	<p>isotopes</p>	<p>isotopes</p>	<p>neutrons</p>
<p> the electron arrangement is</p>	<p>the elements are listed in the periodic table in order of increasing ___</p>	<p>a charged particle formed when atoms lose or gain electron(s) is called an</p>	<p> ionic formula for calcium chloride is</p>
<p>2 , 8 , 3</p>	<p>atomic number</p>	<p>ion</p>	<p>$CaCl_2$</p>
<p>metal and non-metal ions combine to produce an orderly arrangement of ions called a ___</p>	<p> NaCl or ___</p>	<p>the ionic compound NaCl is made up of sodium, Na^+ and chloride, Cl^- ions in a ___ to ___ ratio</p>	<p>an ion is a ___ particle formed when an atom loses or gains electron(s)</p>
<p>crystal lattice</p>	<p>sodium chloride</p>	<p>one one</p>	<p>charged</p>
<p>in the formation of ionic compounds there is a ___ of electrons from a metal to a non-metal</p>	<p>metals ___ electrons to form ___ ions</p>	<p>non-metals ___ electrons to form ___ ions</p>	<p>an ___ bond is electrostatic attraction between oppositely charged ions</p>
<p>transfer</p>	<p>lose positive</p>	<p>gain negative</p>	<p>ionic</p>

over 99.9% of the mass of an atom is found in its ___	the centre of an contains most of the ___ of an atom	most of the atom is consists of ___ space	an atom of oxygen has 8 protons. how many electrons does it have?
nucleus	mass	empty	8
 <p>periods go ___</p>	 <p>groups go ___</p>	 <p>group 18 have....</p>	 <p>arrangement of atoms in a ___</p>
across	down	full valence shells	solid
 <p>arrangement of atoms in a ___</p>	 <p>arrangement of atoms in a ___</p>	S, atomic number 16, has an electron arrangement of...	O, atomic number 8, forms an ion with an electron arrangement of...
liquid	gas	2 , 8 , 6	2 , 8
when atoms form ions, the full valence shell gives them a ___ arrangement	what electron arrangement gives atoms/ions a stable structure?	the charge on a fluorine ion (atomic number of atom is 9) is....	the charge on a calcium ion (atomic number of atom is 20) is....
stable	full valence shell	1-	2+

what do we call a substance made up of only one type of atom?	what do we call substances made of 2 or more elements bonded together?	elements in group 18 are called the rare, ___ or ___ gases	elements in group 1 called the ___ metals
element	compound	noble / inert	alkali
how many valence electrons in an atom from group 2 of the periodic table?	how many valence electrons in an atom from group 13 of the periodic table?	how many valence electrons in an atom from group 17 of the periodic table?	elements in group 17 called the ___
2	3	7	halogens
elements with different mass numbers but the same atomic number are ___	Neon (2,8), F ⁻ (2,8) and Na ⁺ (2,8) are described as ___	Na, atomic number 11, forms <u>an ion</u> with an electron arrangement of...	Cl, atomic number 17, forms <u>an ion</u> with an electron arrangement of...
isotopes	isoelectronic	2 , 8	2 , 8 , 8
particles found in the nucleus (p & n) are known as ___	electron configuration is another name for electron ___	positive ions are called ___, negative ions are called ___	
nucleons	arrangement	cations anions	