

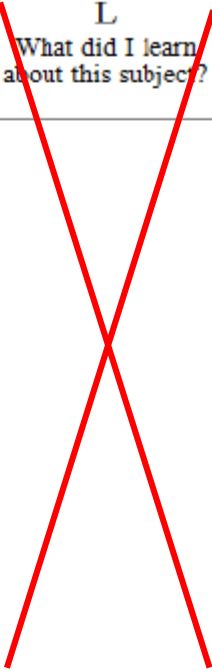


**Welcome to our
Matter Unit!**



**What comes to mind
when you hear the
word 'matter'?**

KWL Chart

K What do I already know about this subject?	W What do I want to learn about this subject?	L What did I learn about this subject?
		

Go to Google Classroom to answer the first two questions in our first Google Classroom assignment of this unit!



**Matter: Anything that
has mass and takes
up space.**

- Pg 5



You take up space.
You have mass.



You matter!

Go get a single square of toilet paper

Yep, seriously. Grab a square of toilet paper. :)





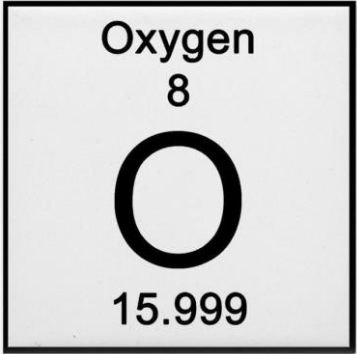
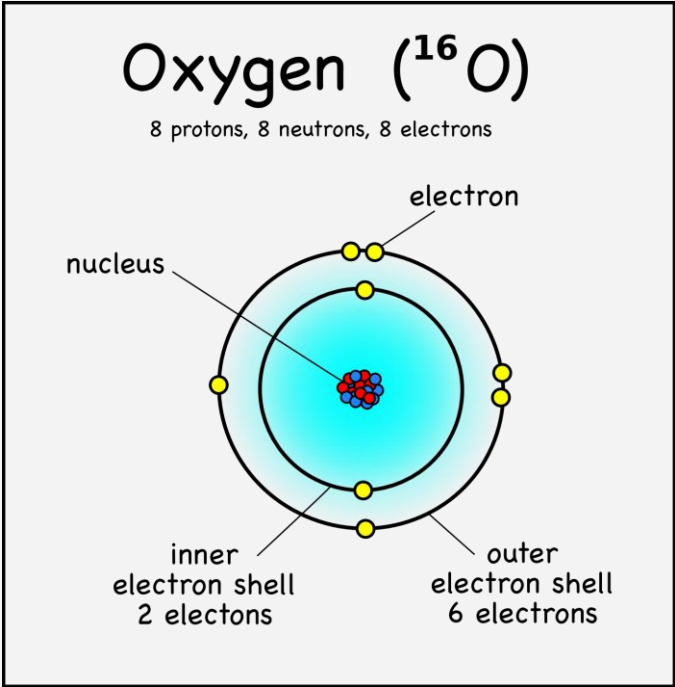
**Atoms - basic unit
from which all matter
is made.**

- Pg 8

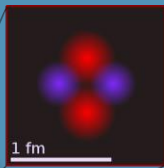
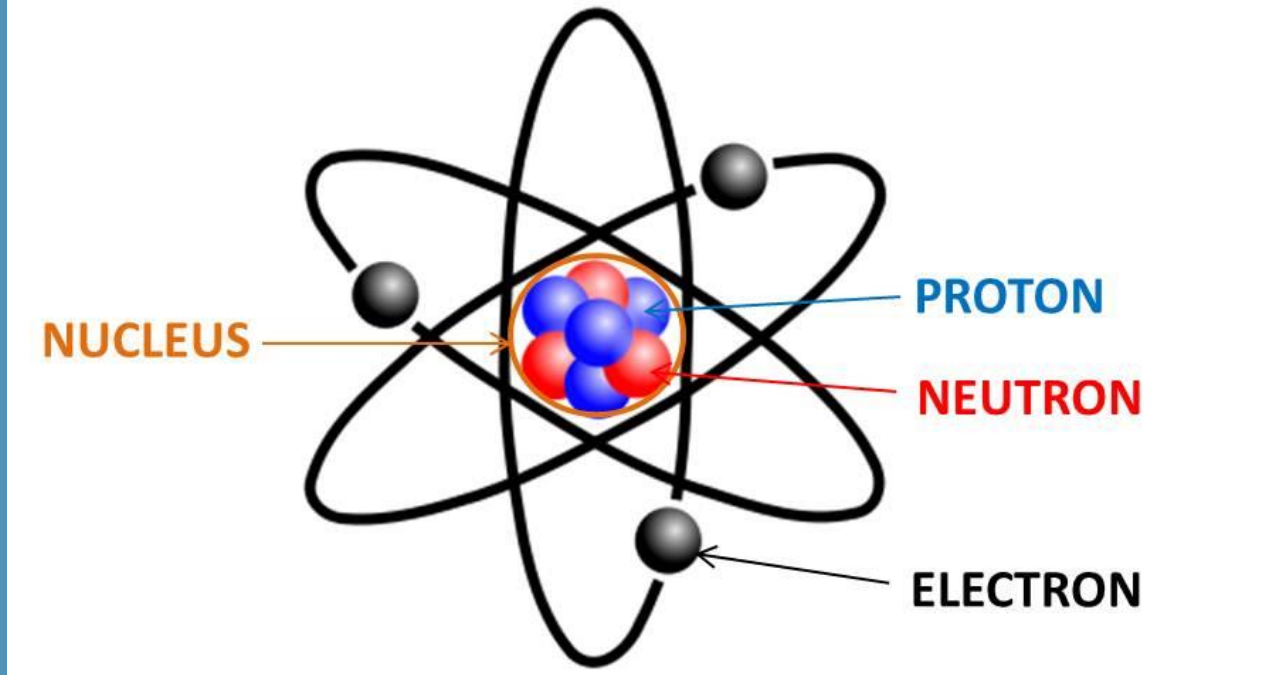





Oxygen Atom

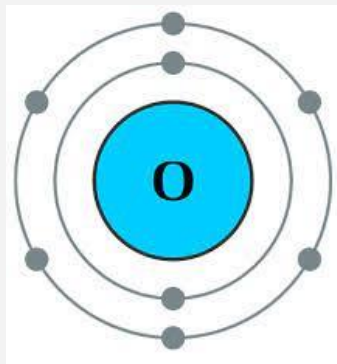


Atom - Smallest unit of ordinary matter that forms a chemical element



1 Å = 100 pm





Oxygen Element



Element - A substance that cannot be separated into simpler substances through chemistry

Elements





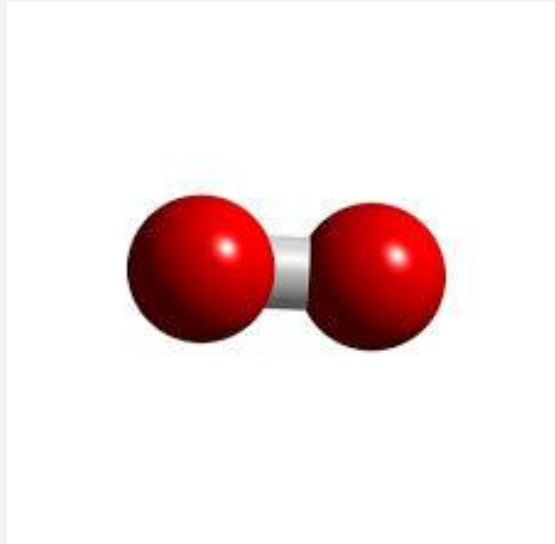
Periodic Table

Group Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1 H																	2 He
2	3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
3	11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
6	55 Cs	56 Ba	* 71 Lu	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
7	87 Fr	88 Ra	* 103 Lr	* 104 Rf	* 105 Db	* 106 Sg	* 107 Bh	* 108 Hs	* 109 Mt	* 110 Ds	* 111 Rg	* 112 Cn	* 113 Nh	* 114 Fl	* 115 Mc	* 116 Lv	* 117 Ts	* 118 Og
			* 57 La	* 58 Ce	* 59 Pr	* 60 Nd	* 61 Pm	* 62 Sm	* 63 Eu	* 64 Gd	* 65 Tb	* 66 Dy	* 67 Ho	* 68 Er	* 69 Tm	* 70 Yb		
			* 89 Ac	* 90 Th	* 91 Pa	* 92 U	* 93 Np	* 94 Pu	* 95 Am	* 96 Cm	* 97 Bk	* 98 Cf	* 99 Es	* 100 Fm	* 101 Md	* 102 No		

Cool version [here](#)

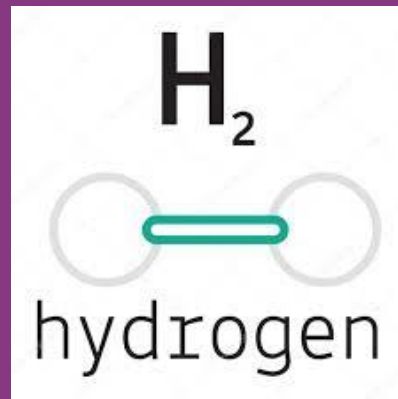
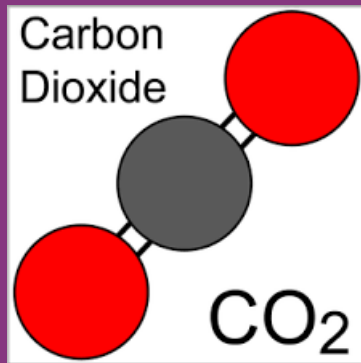
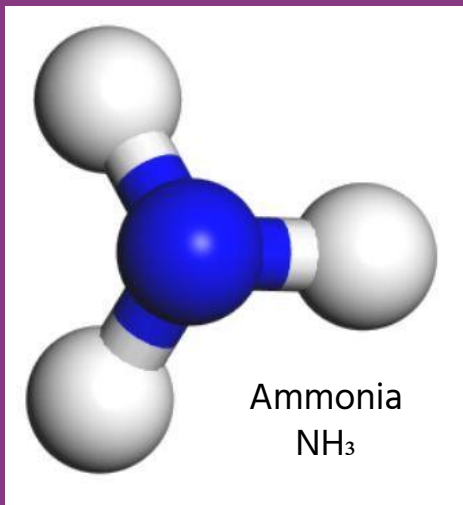


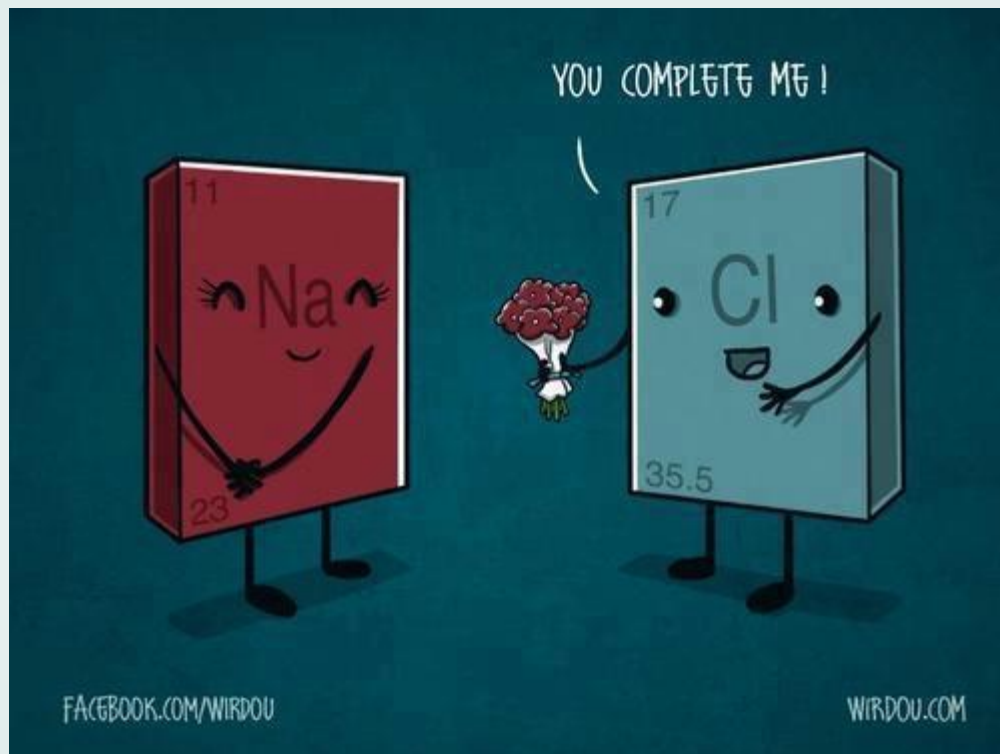
Oxygen Molecule



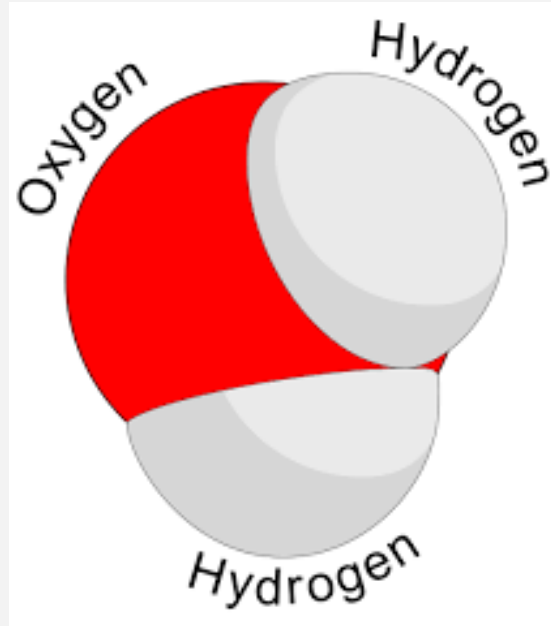
Molecule - The smallest particle of a substance that retains all the properties of that substance and is made of one or more atoms

Molecules



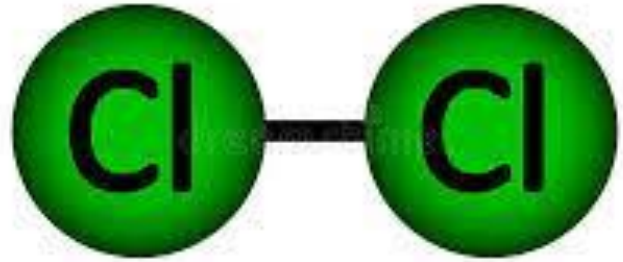


Oxygen Compound



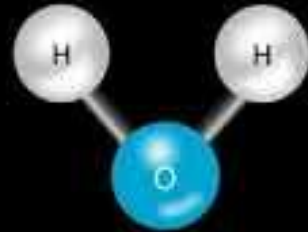
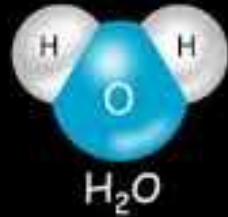
Compound - A substance formed when two or more elements are chemically bonded together in a specific ratio

All compounds are molecules BUT not all molecules are compounds



Chlorine Molecule
(NOT a compound)

Atoms





Make Fun Atoms and Molecules!

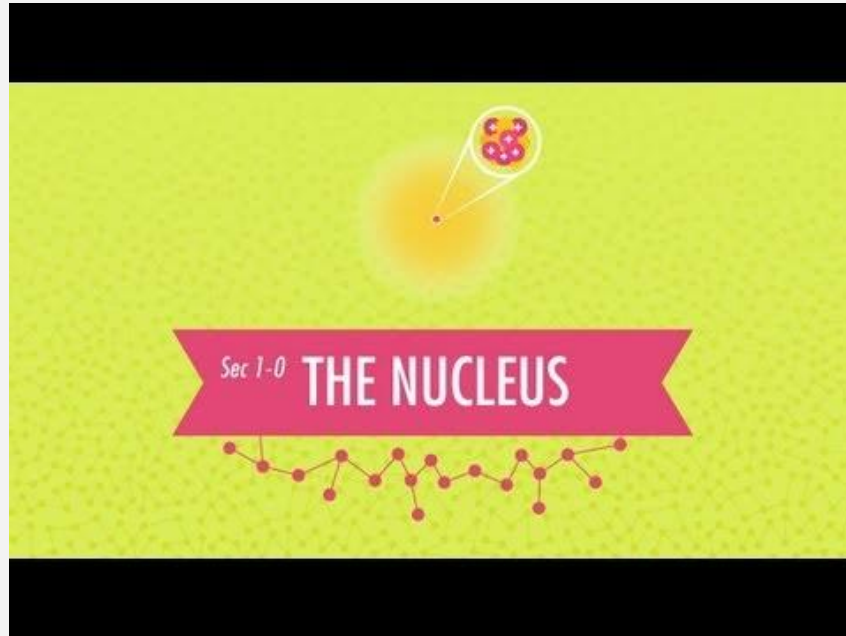
Build an Atom [here](#)

Build a Molecule [here](#)

See Molecule Shapes [here](#)



Want to learn more about atoms?





Items for Tomorrow

Food article type things that have different colors or shapes



Take one item out
This is an atom



**Put all of the same
colored items or
shapes together**



This is an element



**Now make a
molecule of two of
the same items**



**Now the
fun part!**



Now create some molecules!

You are going to be put into groups.
Your job is to research molecules and make them with your items.

You should research in the molecules posted in Google Classroom and create five different molecules.

Questions on what to do?





Share what you made!



**How are models
accurate and not
accurate?**



**Now you can eat
your molecules!**



Fun Game!

Proper versus improper atomic symbols

Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Period 1	1 H																	2 He
Period 2	3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
Period 3	11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
Period 4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
Period 5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
Period 6	55 Cs	56 Ba	* 71 Lu	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
Period 7	87 Fr	88 Ra	* 103 Lr	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Cn	113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og
			* 57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb		
			* 89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No		



Done early

Have more time? Check out [this](#) website to create more molecules!

