

Storyboard Template

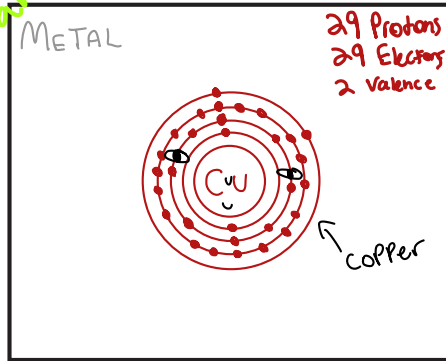
Start: a Human finds a Penny
On the ground [zoom into atomic level]



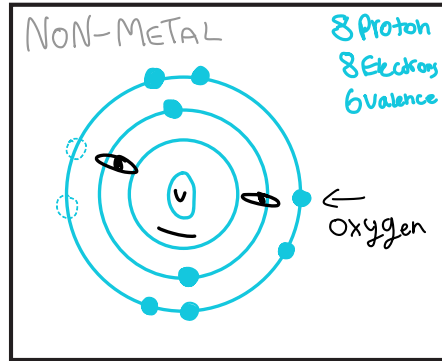
Name:

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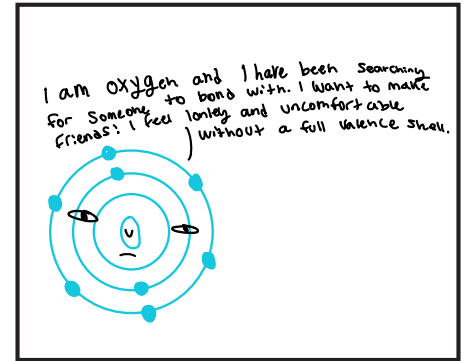
Ionic Bond
Copper Oxide



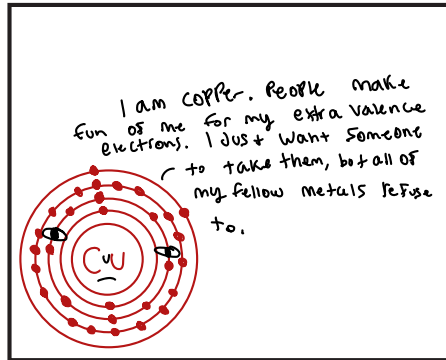
Character: Copper. Copper has two extra valence electrons that he has been trying to get rid of.



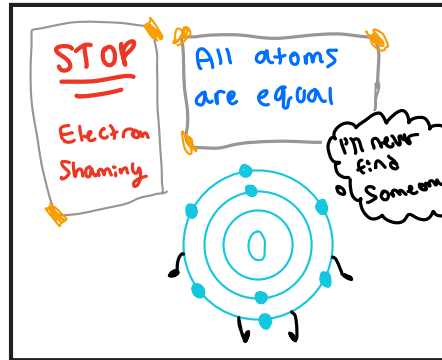
Character: Oxygen oxygen has been looking to find someone with two valence electrons.



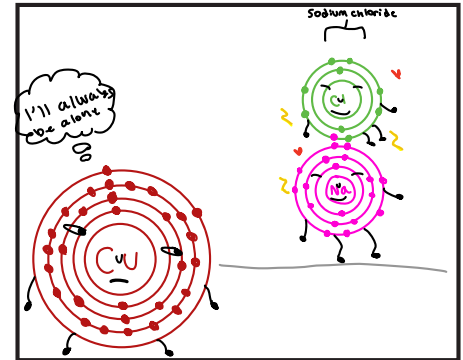
Everyone wants to find someone to help achieve a full valence shell so that they will feel complete



Copper, just like most atoms feels incomplete without a full valence shell.



Valence electron shaming occurs all the time. Other atoms who have achieved a successful ionic bond or that are noble gasses constantly make those who do not have full electron shells feel bad.

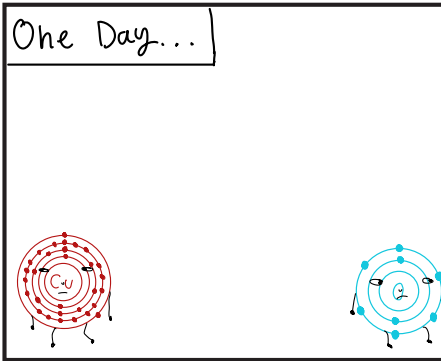


Copper constantly sees atoms that have formed ionic bonds. Copper has been searching for years for one, but everyone shuts him down because they simply don't need two extra electrons.

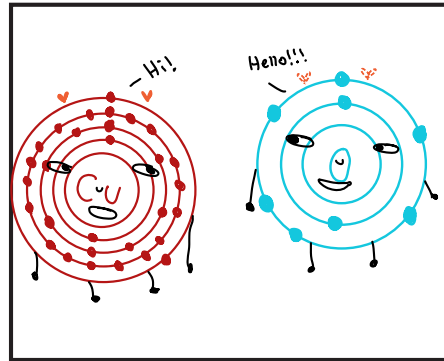
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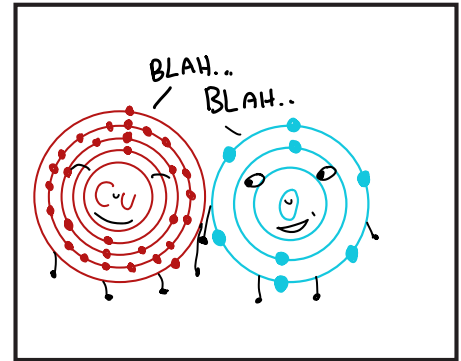
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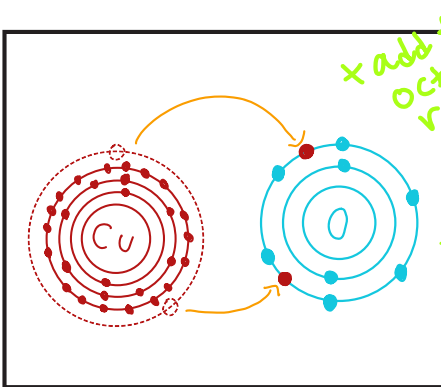
Copper and Oxygen were out walking and didn't notice each other at first



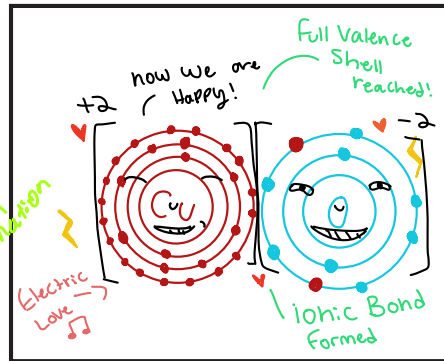
They ended up finding each other! The perfect match. With these two, they are now able to both feel complete if they bond.



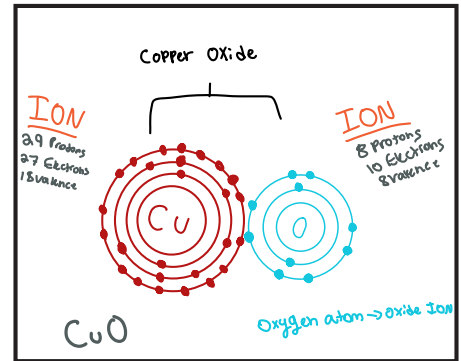
However, when they started talking, it was an instant connection. Before they knew it, they were already bonding.



The process of ionic bonding



They were both fully complete!



They became a compound by the name of "Copper Oxide" which makes up pennies!

[End with zoom out to penny]

COVALENT

Bond



Story

Board

Info to add (for both)

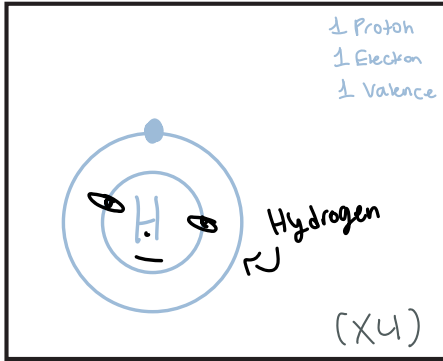
- Octate rule
- Opposites attract
- Define: Ions, Atoms, Polyatomic, Valence Shells, both bonds
- Positions on the Periodic table
- Properties of non-metals & metals

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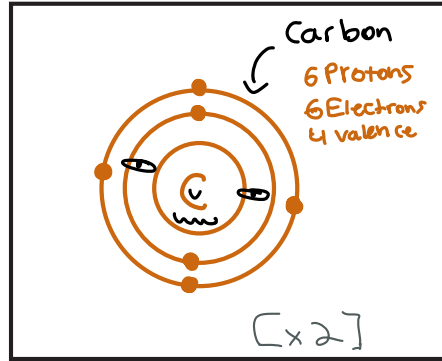
[Vinegar is used to Polish the Penny → vinegar reacts and removes oils that react with Penny.]

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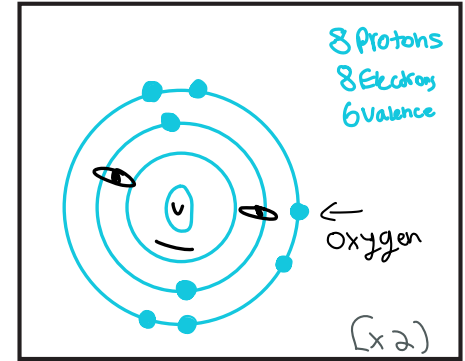
Covalent Bond Vinegar



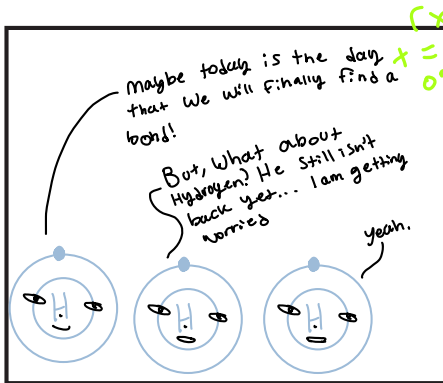
Hydrogen is an atom that has only one valence electron (and, only one electron total), and is looking to find someone to share it with!



Carbon has four valence electrons, and is looking to share with someone to achieve a full valence shell.

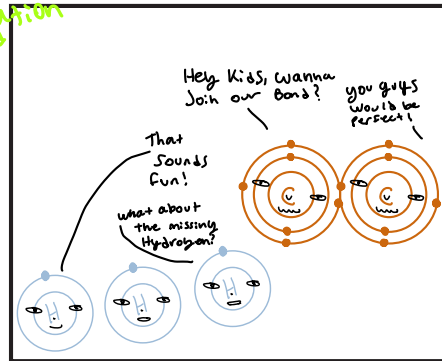


Oxygen has six valence electrons, and would love to bond with someone in order to achieve a full valence shell.

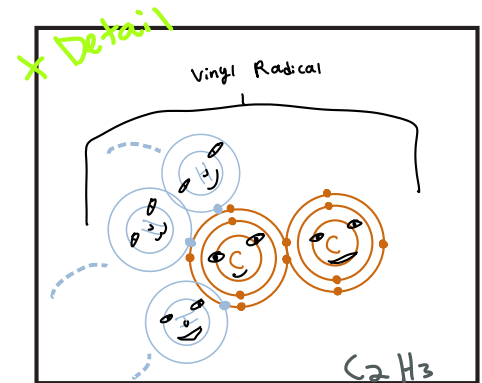


Three hydrogen atoms are looking to find a bond, however, they worry about their brother, hydrogen who has not come back from hanging out with the "Noble Gases" for several atomic days.

(x = Placeholder of bond)



Two carbon atoms are also looking to bond with someone to form a compound, since they were still just an element together.



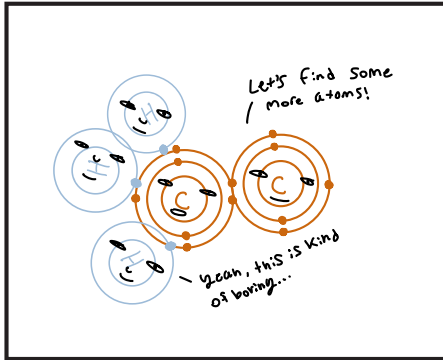
Together, the three hydrogen atoms and two carbon atoms formed the compound "Vinyl Radical", and went on their way to find more atoms to bond with!

(x = Detail)

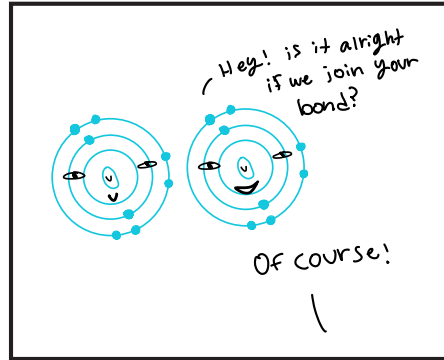
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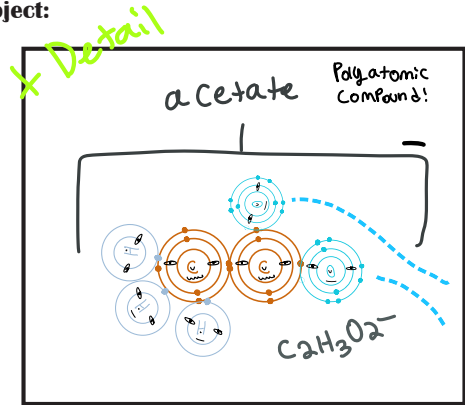
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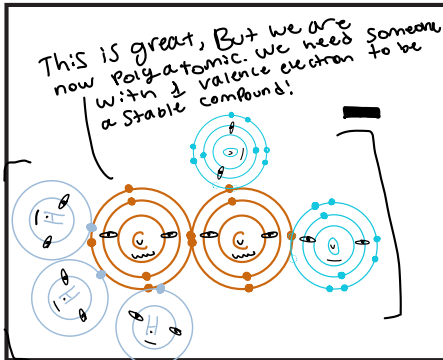
They were feeling a bit bored.. spending time with your siblings isn't very interesting- they were off to find another atom to bond with!



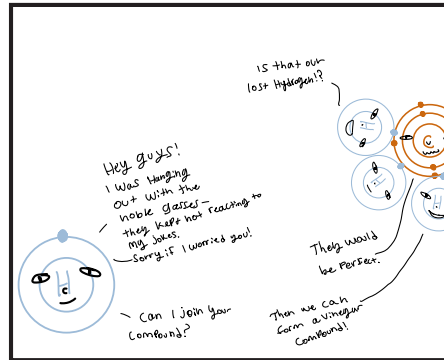
They just happened to bump into oxygen, who was happy to join their compound and form a new one.



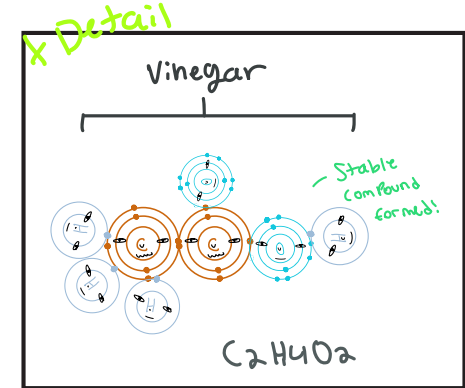
Together, they created "Acetate" a polyatomic compound that has an overall negative charge.



They were finally happy, but they were still missing one valence electron! They went off to find the missing hydrogen brother.



When they found him, he was quick to join! Hanging out with the noble gases made him want a full valence shell more than ever.



With the hydrogen atom, they were complete! They finally formed the compound "Vinegar".

[End with Penny being shiny because of the vinegar]