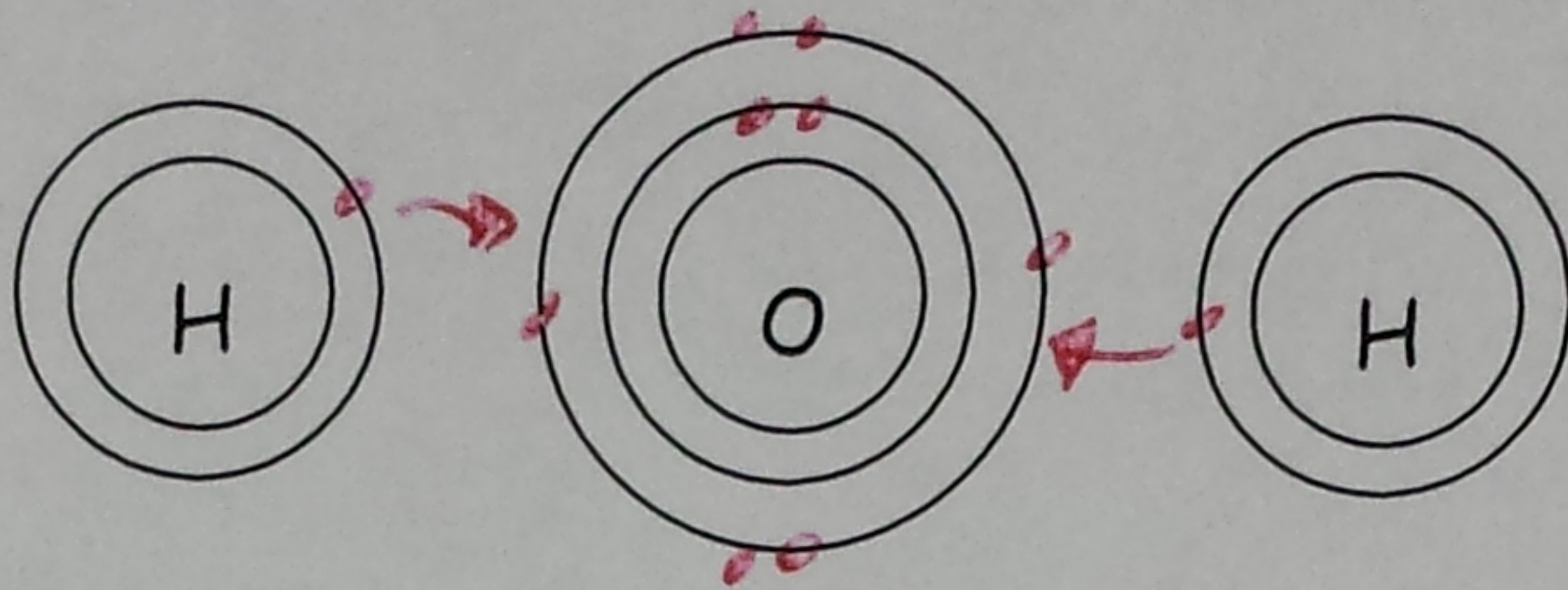


BONDING: (cont.)

The compound **dihydrogen monoxide** has been widely recognized to be hazardous to your health if you are exposed to this for prolonged periods of time!!

Hydrogen and Oxygen



Formula:  
H<sub>2</sub>O

What does this mean?  
2 hydrogen  
1 oxygen

nonmetal + nonmetal

THESE ATOMS WILL FORM Covalent BONDS

HOW? How does this affect atomic stability??

All 3 become more stable. molecule is polar

And now... a demonstration... WOW, THAT WATER IS REALLY STRONG!! HOW DOES IT DO THAT?

1. WHAT IS THE CHEMICAL FORMULA FOR WATER? H<sub>2</sub>O

2. HOW DOES THE WATER HOLD THE PAPER CLIP UP?

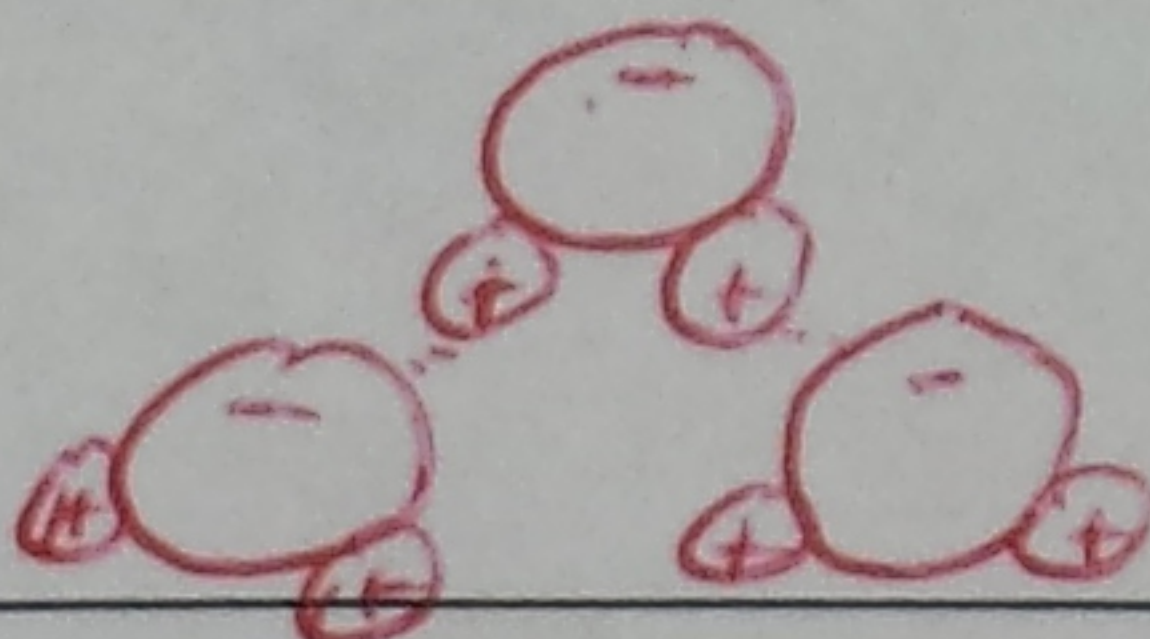
3. DOES THE CHEMICAL COMPOSITION OF THE WATER MOLECULE HELP IT HOLD THIS PAPER CLIP UP? EXPLAIN!!

4. WHAT DOES IT MEAN FOR A MOLECULE TO BE POLAR? IS WATER A POLAR MOLECULE? Yes

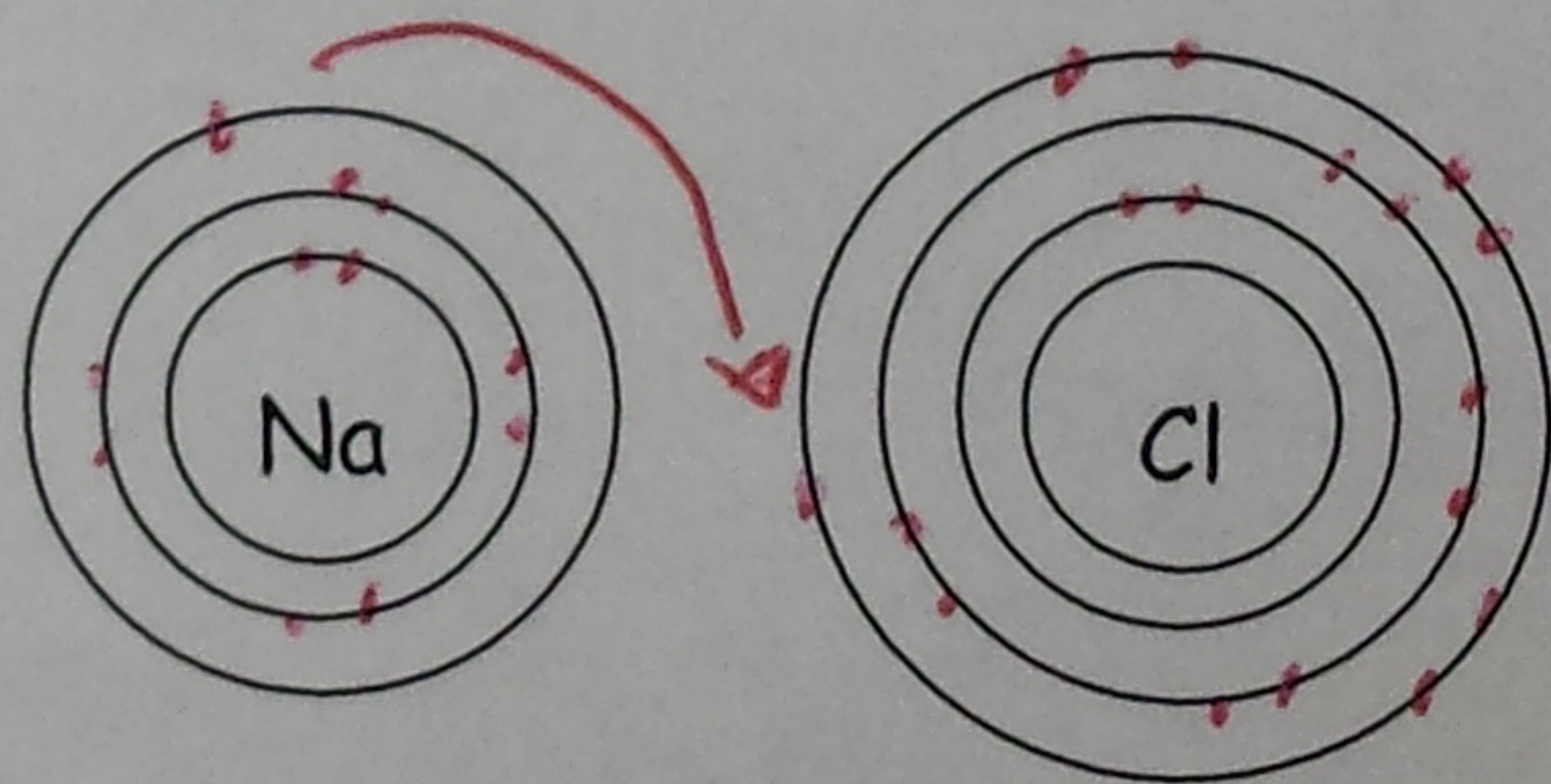
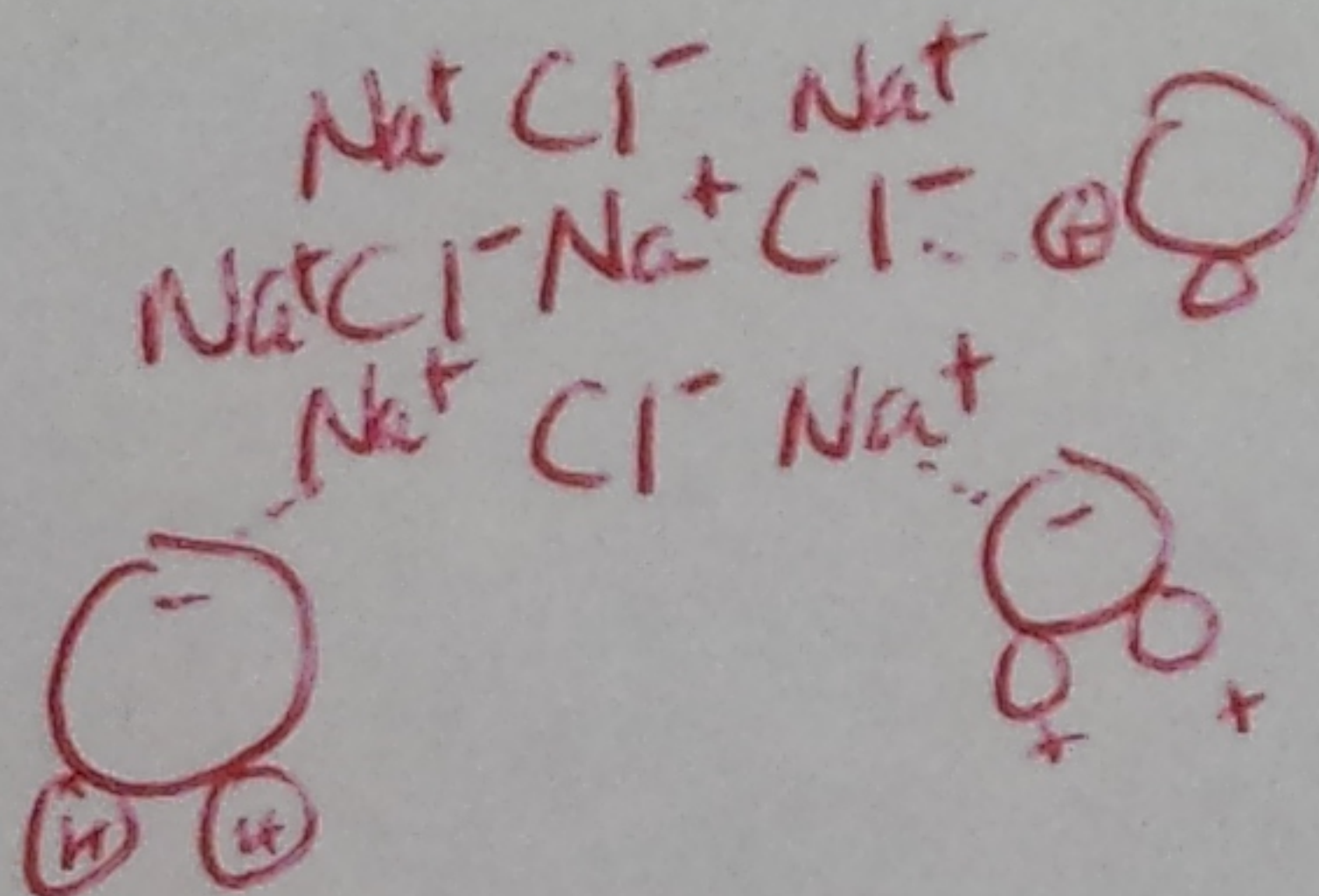
A molecule is polar when ~~the~~ the elements in the molecule do not share e<sup>-</sup>s evenly.

5. WHAT IS HYDROGEN BONDING? CAN YOU DRAW A DIAGRAM WHICH EXPLAINS HOW DIFFERENT WATER MOLECULES BOND TOGETHER? WHAT DOES HYDROGEN BONDING HAVE TO DO WITH SURFACE TENSION?

Hydrogen bonding occurs when 2 polar molecules are ~~attracted~~ attracted to each other.



SALT (NaCl) AND WATER



WHAT TYPE OF BONDS WILL THESE ATOMS FORM?

Ionic

WHY DOES SALT DISSOLVE IN WATER??

H<sub>2</sub>O pulls at the charged ions in salt and breaks the structure of salt apart.