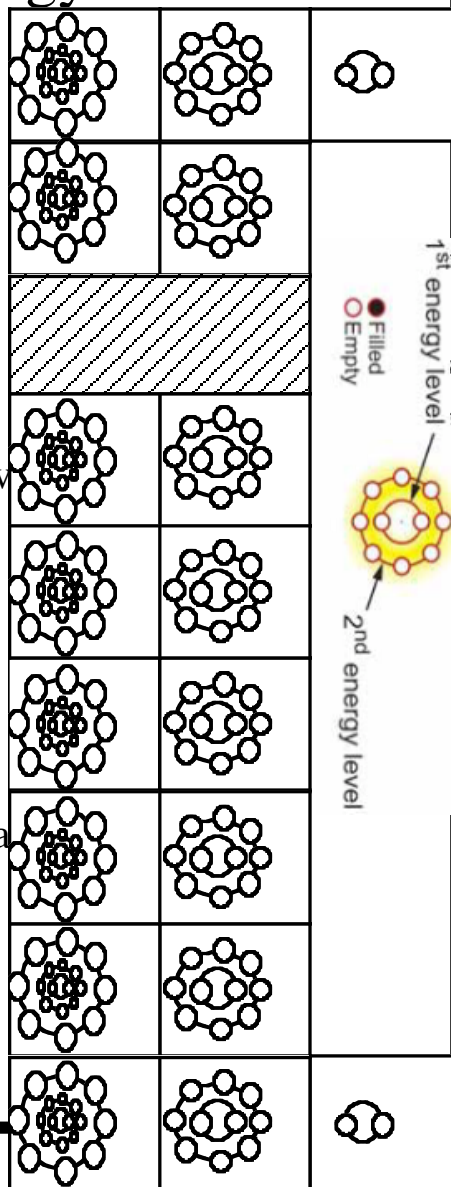


Periods and Energy Levels

- Each horizontal row is called a period.
- Periods tell us where electrons go.
- Elements in the 1st row have 1 energy level.
- Elements in the 2nd row have 2 energy levels.
- Etc.....

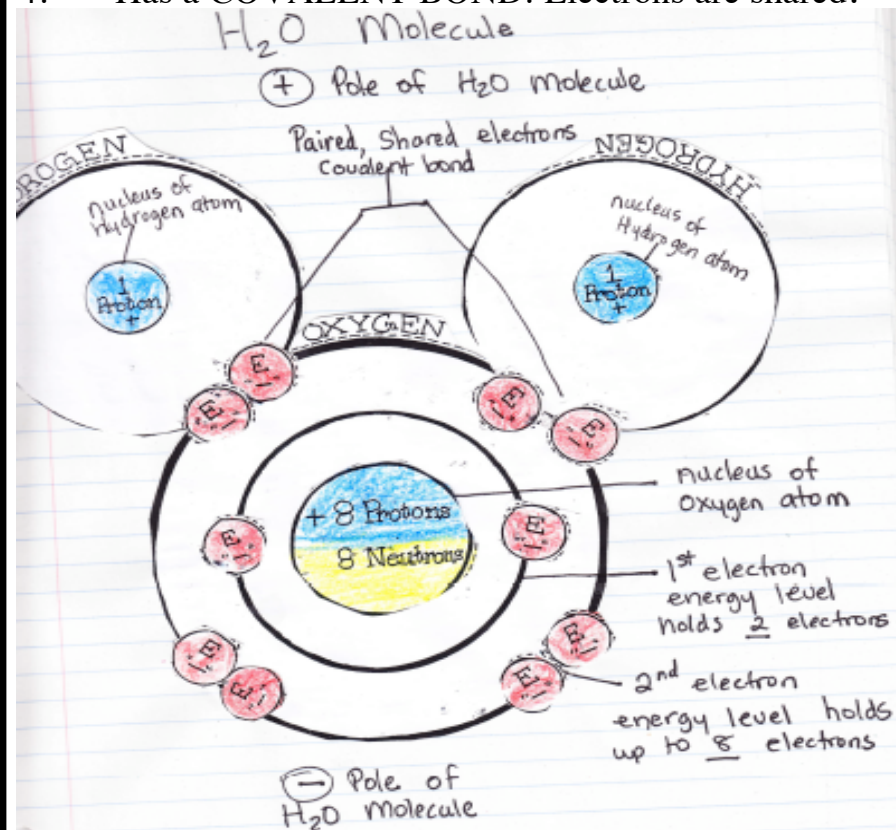
Each vertical column is a group or family.

What do they have in common?



Water / H₂O.....

1. Is a **COMPOUND**: Pure substance made of more than 1 type of atom
2. Is a **MOLECULE**: Group of atoms bonded together
3. Has 2 **CHEMICAL BONDS**: holds atoms together
4. Has a **COVALENT BOND**: Electrons are shared.



Science Notebook Layout **DON'T COPY UNDERLINED TEXT**

Mrs. Aguirre's Webpage: <http://www.quia.com/profiles/caguirre>

Drops on a Penny

Predict: How many drops of water will fit on a penny?

_____ drops

Try it: _____ drops actually fit

Person 1	Person 2	Person 3	Person 4	Average

- What was surprising about my prediction was.....
- Repeat the experiment with your partner. Do at least 4 trials.

Trial 1	Trial 2	Trial 3	Trial 4	Average

Draw pictures of the shape of the water on the penny as more drops are added.

Explain your results in terms of surface tension

- The only reason why _____ drops stayed on the penny was because of the surface tension or "cohesion". Surface tension is...
- **1 drop of water contains 2 million quadrillion molecules of water. (2,000,000,000,000,000,000)**
- **How do your results compare to the other groups in your class? Give at least 2 possible reasons for any similarities & differences you describe.**

Physical and Chemical Properties

Use pages 138 , 140 and 142	Physical Properties	Chemical Properties
DEFINITION		
EXAMPLES (at least 2 for EACH)		
Alkali Metals (use page 142)		
Noble Gases (use page 142)		
Halogens (use page 142)		
Metals (use page 140)		

In each box, take notes from the text- and also from your notebook pages.

For each group or family, find at least 2 properties for each- 2 physical ones and 2 chemical ones