

Covalent Bonds 101 Video Review

1. Why do atoms form bonds? _____

2. What is a Lewis Dot Structure? _____

3. Draw the examples of Lewis Dot Structures below.
4. What is a covalent bond? _____

5. What do you need to know in order to make covalent bonds? _____
6. Draw the example of a Covalent Bond below.
7. How many more electrons does each Hydrogen need in order to be stable? ____ How many valence electrons does Oxygen need in order to be stable? ____
8. Draw the covalent bond for Methane below using your periodic table.
9. How do you know that Methane is a covalent bond? _____
10. Draw the covalent bond for O₂ below.

11. Complete the chart for each element.

Element	# of Protons	# of Electrons	# of Valence electrons	# of Valence electrons needed to fill outer electron level
Carbon				
Chlorine				
Hydrogen				
Oxygen				

Practice making the following covalent bonds

12. Hydrogen + Hydrogen

13. Chlorine + Chlorine

14. Oxygen + Carbon + Oxygen