

CHEMICAL BONDING PROJECT (TEST GRADE)

This project is designed to let you demonstrate your understanding of the different types of bonding. You will choose how you want to present the required information from the choices listed below:

-Project Options-

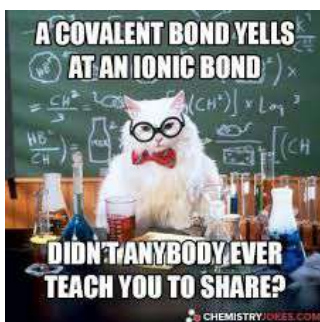
- **Sketchnotes**-draw/create sketch notes using google slides or google drawings to illustrate and explain the required information
- **Poster/Infographic**- create a poster using google slides or google drawings to illustrate and explain the required information [Template 1](#) [Template 2](#) [Template 3](#) [Template 4](#)
- **Screencastify/Video**- create a video to teach me about the different types of bonding (you can create a slides presentation to use in your video)
- **Magazine**- use the template provided to illustrate and explain the required information
- **One-pager**- use one of the templates provided to illustrate and explain the required information
- **Flipbook**- use the template provided to illustrate and explain the required information
- **Storyboard**- create a movie storyboard of the required information using the template provided
- **Digital Board Game**- use the template provided to create a board game using the required info
- **Portfolio**- use the template provided to create a digital portfolio of the required information

All project options must include the following information.

**Explanations should be in your own words. You may use your textbook and class slides/notes to accomplish your goal. You must include a list of all sources used.

-Required Information-

- Octet Rule
 - Why atoms form bonds
 - What the octet rule is
 - Octets in anions and cations
- Ionic Bonding
 - Explain what it is, and what type of atoms form this bond
 - Show 2 examples of an ionic bond forming (include electron dot structure diagram)
 - Explain how valence electrons are related to this type of bond
 - Structure and properties of ionic compounds
- Covalent Bonding
 - Explain what it is, and what type of atoms form this bond
 - Show 2 examples of a covalent bond forming (include electron dot structure diagram)
 - Explain how valence electrons are related to this type of bond
 - Octet rule in molecules
 - Types of covalent bonds
 - Properties of covalent compounds
- Metallic Bonding
 - Explain what it is, and what type of atoms form this bond
 - Properties of metals
- Electronegativity
 - Explain what it is
 - The trend it follows across a period and down a group/why
 - Electronegativity and bond polarity
- Names of formulas and compounds (HINT: Look at textbook pages)
 - How to name ionic compounds and 2 examples
 - How to name molecular compounds and 2 examples



All choices will be graded using the rubric below. Please be sure to reference it, and self evaluate when you are done (highlight what you think you earned in each category).

Component	5	4	3	2	1
Octet Rule (____/5)	Project fully includes and explains all required information for the octet rule	Project includes and explains a majority of the required information for the octet rule	Project partially includes and explains the required information for the octet rule	Project loosely includes or explains the required information for the octet rule	Project incorrectly includes and explains the required information for the octet rule
Ionic Bonding (____/5)	Project fully includes and explains all of the required information for ionic bonding	Project includes and explains a majority of the required information for ionic bonding	Project partially includes and explains the required information for ionic bonding	Project loosely includes or explains the required information for ionic bonding	Project incorrectly includes and explains the required information for ionic bonding
Covalent Bonding (____/5)	Project fully includes and explains all of the required information for covalent bonding	Project includes and explains a majority of the required information for covalent bonding	Project partially includes and explains the required information for covalent bonding	Project loosely includes or explains the required information for covalent bonding	Project incorrectly includes and explains the required information for covalent bonding
Metallic Bonding (____/4)		Project fully includes and explains all of the required information for metallic bonding	Project includes and explains some of the required information for metallic bonding	Project loosely includes or explains the required information for metallic bonding	Project incorrectly includes and explains the required information for metallic bonding
Electronegativity (____/5)	Project fully includes and explains all of the required information for electronegativity	Project includes and explains a majority of the required information for electronegativity	Project partially includes and explains the required information for electronegativity	Project loosely includes or explains the required information for electronegativity	Project incorrectly includes and explains the required information for electronegativity
Names and Formulas of Compounds (____/5)	Project fully includes and explains all of the required information for names and formulas of compounds	Project includes and explains a majority of the required information for names and formulas of compounds	Project partially includes and explains the required information for names and formulas of compounds	Project loosely includes or explains the required information for names and formulas of compounds	Project incorrectly includes and explains the required information for names and formulas of compounds
Neatness and Grammar (____/3)			Project is organized, visually pleasing, and free of errors	Project lacks some neatness, and/or has errors	Project lacks neatness, and/or has many errors

_____/32
+ (using class time wisely) ____/1
+ (self evaluating on the rubric above) ____/1
+ (including sources in the space below) ____/1

TOTAL: ____/35

Sources: