

Q: What is the name of the assessment for which I am studying?

**Unit 6: Chemical Bonding**

Q: When is the assessment?

**Friday, February 12**

Q: What concepts should I study?

- Why do elements form chemical bonds?
- What energy changes are associated with forming and breaking bonds? (BARF!)
- Ionic Bonding - what types of elements are involved? What do e- do? Be able to draw Lewis dot diagrams for compounds.
- Covalent Bonding - what types of elements are involved? What do e- do in polar vs. nonpolar bonds? Be able to draw Lewis dot diagrams for compounds.
- Determining partial charges in a Lewis Dot Diagram (if there's a polar covalent bond)
- Properties of substances based on type of bonding present (conductivity, mp, bp, hardness, solubility) ← memorize!
- Using electronegativity difference to determine more ionic character or more polar
- What type of substance can have both ionic and covalent bonds? (Hint: Table E)
- Metallic Bonding - what types of elements are involved? What do e- do?
- Molecular polarity (based on symmetry of a molecule - Oh SNAP!)
- What are the 4 types of intermolecular forces?
- What are the relative strengths of the IMFs (weakest to strongest)?
- How does the type of IMF determine the properties of matter (mp, bp, phase)?
- Why does water have an unusually high BP?
- How does particle size and affect the strength of an IMF?
- How does distance between particles affect the strength of an IMF?
- What is "like dissolves like"?

Q: What examples can I use to study?

Unit 6 - Chemical Bonding Note Packet / Google Slides

Practice Worksheets (Classwork/Homework)

Orange Review Book - Topic 6: Bonding (Answers posted on classroom)

Bonding Test Review Material on Classroom under Notes & Extra Practice

Create your own Castle Learning - Check entire "Chemical Bonding" tab

Chemistry Reference Tables - Table E, Table S, Periodic Table of Elements