

NAME:

HONORS CHEMISTRY

SECTION:

Metallic Bonding HW

Go to <http://www.drkstreet.com/resources/metallic-bonding-animation.swf> and view the flash animation.

1. Describe the movement of the electrons under normal conduction.

2. Why are metals good conductors?

Go to

http://chemwiki.ucdavis.edu/Theoretical_Chemistry/Chemical_Bonding/General_Principles/Metallic_Bonding and use the information there to answer the following questions about metallic bonding.

3. Use the metallic bonding model to explain why metals are malleable and ductile. (Rephrase in your own words—don't just copy from the website)

4. Why are metals shiny?

5. Three things the strength of a metallic bond depends on:

Scroll down to the band theory section to answer the following questions

6. What are bands, and how are they related to orbitals?

7. What is a conduction band?

Continues →

8. What is a valence band?

9. What is the band gap? (No equations here...just a description)

10. Sketch the arrangements of the conduction and valence bands for conductors, semiconductors and insulators: