

LAST ONE!!! Ch. 10-12 Liquids, Solids, and Intermolecular Forces *This is EASILY the single most-tested topic on the AP exam. That's why there are so many videos from Bozeman. WATCH THESE VIDEOS! We are skipping the untested portions in the book, so pay attention to the page numbers.

Required Topics for Notes	Video Title	Video Link	Length	Problems	Pages
Intermolecular forces (I have no words for how important this term is *cringes*), crystalline, amorphous	Solids and Liquids	http://www.bozemanscience.com/ap-chem-013-physical-properties	7:28	-Using the models around 1:30 of the video draw a diagram with: 1. solid water particles 2. liquid water 3. water vapor *make sure to show how the molecules fill the container in different phases. -CC 11.1	485-489
None	Intermolecular Forces (IMFs)	http://www.bozemanscience.com/ap-chem-018-intermolecular-forces	7:00	-List the 5 properties starting at 1:50 in the video AND state one sentence of how they are effected by IMF's -CC 11.2	489-492
Instantaneous dipoles (London dispersion forces *cringes again*)	London Dispersion Forces	http://www.bozemanscience.com/ap-chem-016-london-dispersion-forces	5:01	-Draw and label temporary dipole at 2:52 of the film -Draw and label (and make sure you understand) figure 11.5 from p. 491 -FP 11.1, CC 11.3	489-492
Dipole-dipole force, permanent dipole, hydrogen bonds, ion-dipole force	Dipole Forces	http://www.bozemanscience.com/ap-chem-017-dipole-forces	7:31	From film: 1. draw hydrogen bonds between 4 water molecules 2. draw a dipole-induced dipole force 3. define polarizability	492-499 Skip 500-512 (start again at section 11.6)

				(around 5:35) 4. draw dipole-ionic forces -Draw (and make sure you understand) Table 11.4 from p. 498 -CC 11.4, SAQ #4 & #35	
Sublimation, deposition, fusion, heating curves, phase changes, molar enthalpy	Energy changing processes	http://www.bozemanscience.com/ap-chem-050-energy-changing-processes	6:27* *watch only first 6:27	Draw and label the parts of the heating curve of water (most importantly the molecular pictures at the top) on p. 515 in Figure 11.36 -CC 11.6, SAQ #7	512-516 We skip sections 12.1-12.4
Molecular solids	Molecular Solids	http://www.bozemanscience.com/ap-chem-026-molecular-solids	3:47	Answer this: 1. What holds molecular solids together? -SAQ #7 (show work) & #48	545-546
Ionic solids	Ionic Solids	http://www.bozemanscience.com/ap-chem-023-ionic-solids outrageous acts of science – triple pt!	5:05	List the five properties of ionic properties starting around 2:00 AND one sentence for each on how ionic bonding effects causes/effects them	547
Network solids, semiconductors, silicates (really interesting and of interest to you – REAL LIFE) <i>This is your last SG, so I just can't leave without a little electrochem:)</i>	Covalent Network Solids	http://www.bozemanscience.com/ap-chem-025-covalent-network-solids	6:58	Using the videos (might be easier) draw 1. an n-type semiconductor at the atomic level 2. a p-type semiconductor at the atomic level CC12.5	548, 550-551, 557