

**CHEM 101-080 Fall 2004**  
**Problem-Solving Session 5**  
**Chapters 9, 10, 11**  
**November 8, 2004**

**Ch. 11: Aqueous Solutions**

(1) Percent by Mass (Sec. 11-3)

<b>Group</b>	<b>Problem No. p. 346</b>	<b>Solution</b>
1	14	
2	16	
3	20	
4	22	

(2) Molarity (Sec. 11-4)

<b>Group</b>	<b>Problem 24 - p. 346</b>	<b>Solution</b>
1	b, c	
2	d, e	
3	f, g	
4	h, i	

(3) Molarity - continued

<b>Group</b>	<b>Problem No. p. 346</b>	<b>Solution</b>
1	25	
2	26	
3	27	
4	30	

**Ch. 10: Solids & Liquids** Ref. [Chem101\\_Thermo.PDF](#)

(1) Solid and Liquid States

<b>Group</b>	<b>Problem No. p. 318</b>	<b>Solution</b>
1	21	
2	29	
3	34	
4	36	

(2) Heats of Fusion and Vaporization

<b>Group</b>	<b>Problem No. p. 319</b>	<b>Solution</b>
1	52	
2	54	
3	56	
4	58	

(3) Heating Curve

<b>Group</b>	<b>Problem No. p. 319</b>	<b>Solution</b>
1	62	
2	70, 71, 73, 74	
3	66	
4	75	

**Ch. 9: Gas Laws** Ref. [Chem101\\_Ideal Gas Laws.PDF](#)

(1) Stoichiometry

<b>Group</b>	<b>Problem No. - p. 287</b>	<b>Solution</b>
1	91	
2	92	
3	93	
4	94	

(2) Molar Volume and Density

<b>Group</b>	<b>Problem No. - p. 287</b>	<b>Solution</b>
1	80	
2	82	
3	85	
4	87	

(3) Ideal Gas Law

<b>Group</b>	<b>Problem No. - p. 286</b>	<b>Solution</b>
1	59	
2	61	
3	62	
4	64	

(4) Avogadro's Law

<b>Group</b>	<b>Problem No. - p. 286</b>	<b>Solution</b>
1	54	
2	55	
3	56	
4	58	

(5) Combined Gas Law

<b>Group</b>	<b>Problem No. - p. 285</b>	<b>Solution</b>
1	46	
2	47	
3	48	
4	49	