Chemistry 115 Name

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Quiz 8a (20 points) November 25, 2008

1. (6 points) Write a nuclear equation for the indicted decay of each of the following nuclides
	1. Fr-221 by alpha emission
	2. Bi-213 by beta emission
2. (6 points) Fill in the missing particles in each of the following nuclear equations
	1. $ \rightarrow +$
	2. $\rightarrow +$
3. (5 points) Polonium-218 is an alpha emitter with a half-life of 4.0 minutes. How long will it take for a 512 g sample of polonium to decay to 1 gram?
4. (3 points) On the basis of kinetic-molecular theory, explain why vapor pressure increases with temperature.