Solids Homework

1)	Explain why solids are generally more dense than other states of matter.
2)	Explain the difference between an ionic solid and a covalent network solid.
3)	Why do molecular solids usually have lower melting and boiling points than metallic solids?
4)	Sketch the unit cell of a body-centered cubic crystal.
5)	Explain why metals are malleable despite the fact that metals are a type of crystalline solid. Shouldn't crystals be hard and brittle?
6)	If you wanted to construct a building, what type of solid would be the best to use? Explain your answer, using the general properties of the type of solid you selected.