


Respond appropriately in the space provided. Show all work, and work neatly.

Water is an abundant substance on the surface of earth, and is perhaps the single most important substance in terms all life, as well as for the formation and continuing changes of the earth's crust.

1. Draw a Lewis structure, and sketch a picture that represents a single water molecule.
2. Describe the chemical bonds of the water molecule.
3. Draw a picture of at least 15 water molecules in the *liquid phase*. Use a simple representation for water molecules, such as .
4. Describe the intermolecular forces that exist between water molecules in the *liquid phase*.
5. Draw a picture of at least 15 water molecules in the *solid phase*.
6. Draw a picture that shows what happens when water freezes (liquid to solid).

