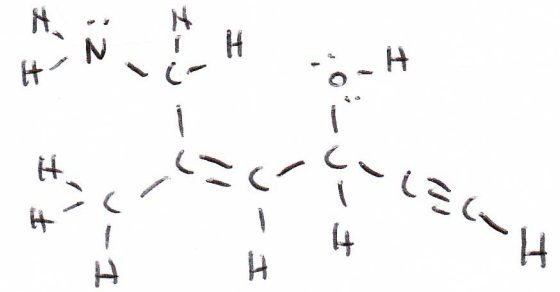
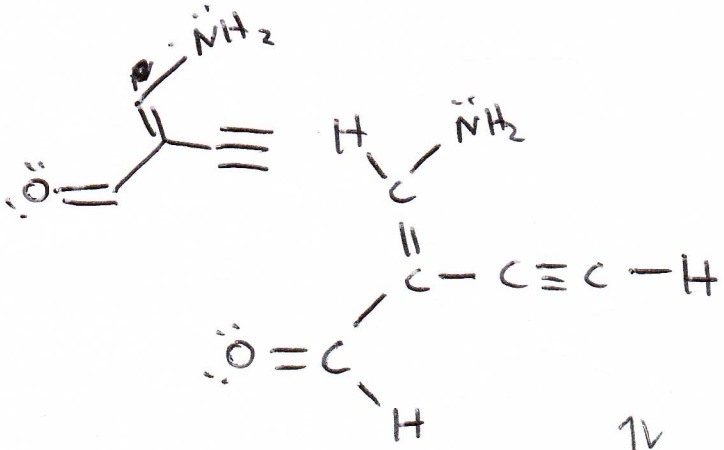
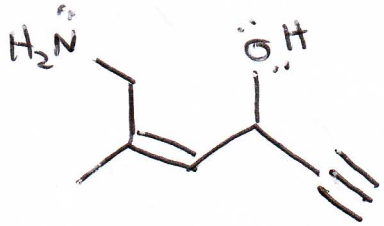
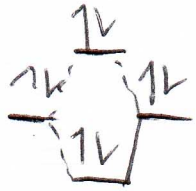


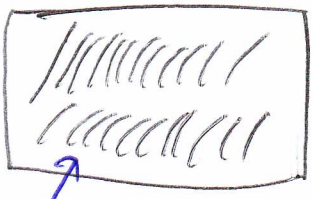






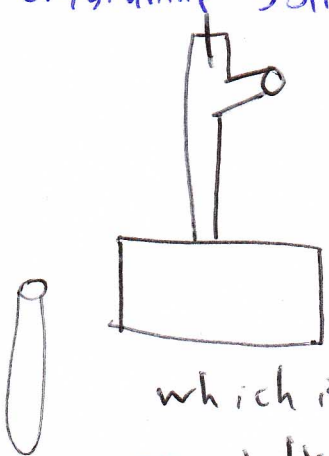
Solids

- crystalline – has a periodic, ordered geometric pattern
- amorphous – "without shape" – no regular crystal structure



an idealized crystalline solid

When thermal energy (internal KE) exceeds the ability of the IMF to hold molecules together, a phase change occurs.



In this experiment, if a solid is heated too rapidly when measuring the melting point, the M.P. will appear too low, since not enough time was given for the thermometer to reach thermal equilibrium, which is a state in which all molecules have roughly the same energy.

An impurity will interfer with the IMF between molecules in the crystal, causing lower IMF. Less energy is therefore needed to overcome the IMF, so the M.P. is lower.