LDF

Dipole-Dipole

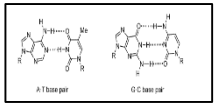
Hydrogen Bonding

Jumpstart 7-A

Identify the dominant IMF present in each molecule ***(LDF, dipole-dipole, or H-bonding)***

1) C_3H_8
2) C_3H_7OH
3) H_2S

Target: I can describe and explain special examples of IMFs and Bulk Solids

Important examples of hydrogen bonding	
DNA 	Proteins
Bulk Solids	
Definition	Ionic Lattice
Metallic	Network Covalent

K	**C**	**Q**

Special Examples of IMFs

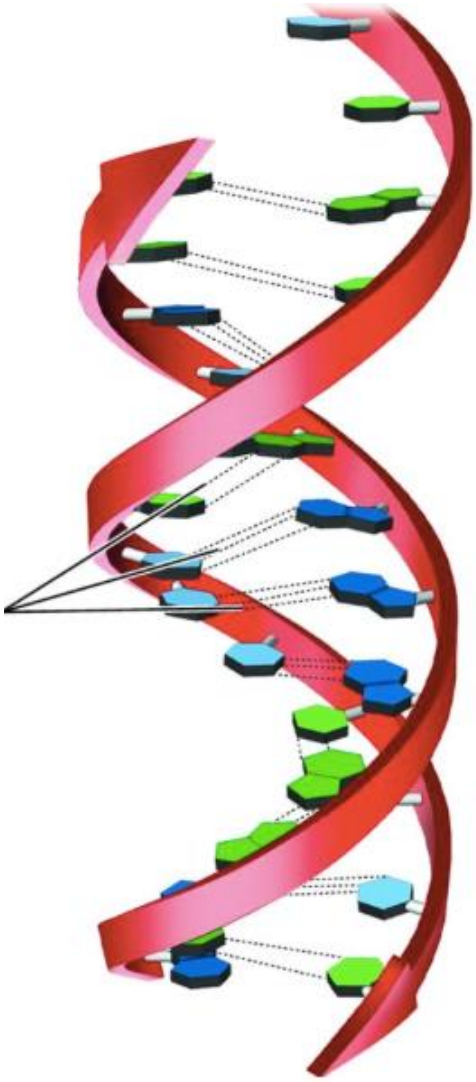
Important Example of H-Bonding

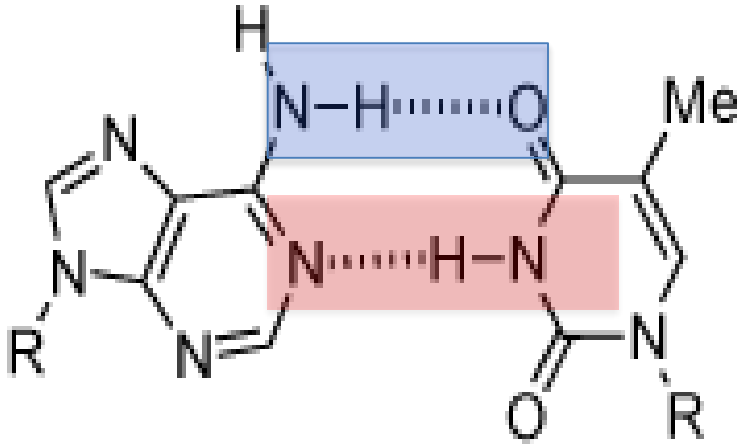
DNA Alpha helix shape-

Nucleic acids “bond” A to T and C to G

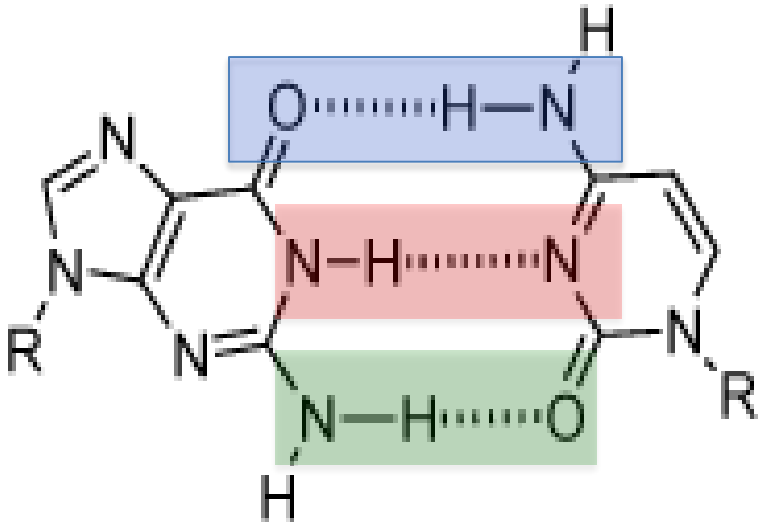
Generic DNA picture

H bonds



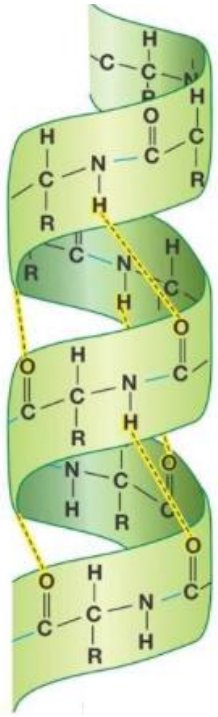


A·T base pair

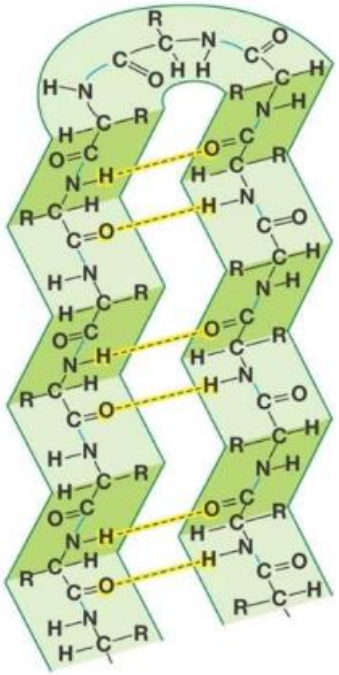


G·C base pair

H bonding in protein shapes



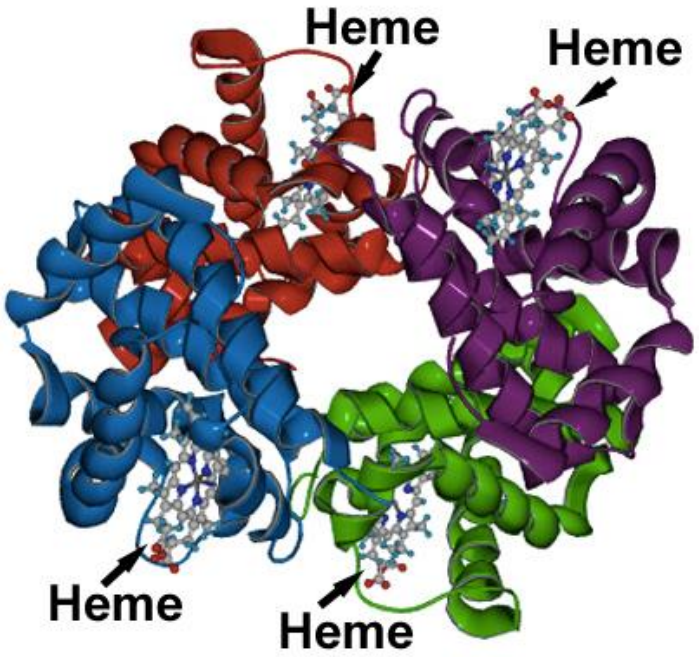
Alpha helix



Beta sheets

Proteins – chain of amino acids

Secondary structures: beta sheets and alpha helix



Hemoglobin protein

Bulk Solids

Interactions in solids

COMBINATION OF:

intramolecular AND intermolecular forces in a "large" or "bulk" scale

3 TYPES

Ionic Lattice

Metallic

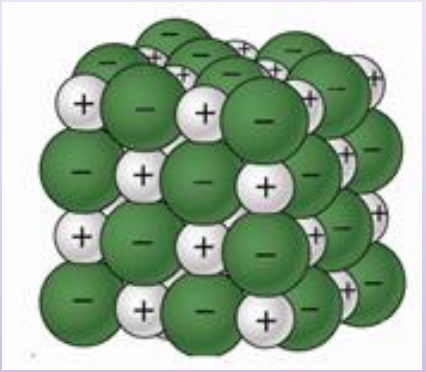
Network covalent

Bulk solids have very high melting/boiling points because there are so many inter and intra molecular forces holding the atoms close together

IONIC LATTICE

ions stack in an ordered fashion to form crystals

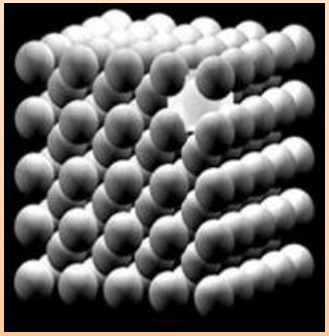
Example: NaCl



METALLIC

Metal ions stack in an ordered fashion held together by the “sea of electrons” and the positive metal ions

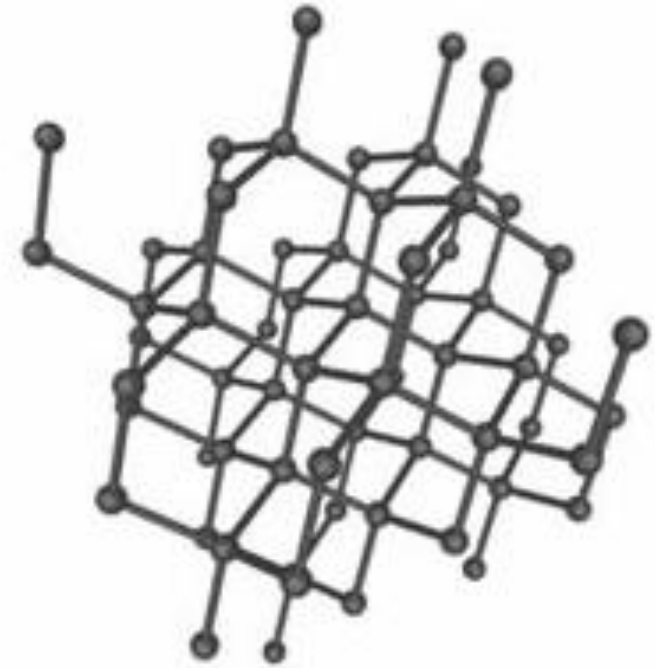
Example: Fe



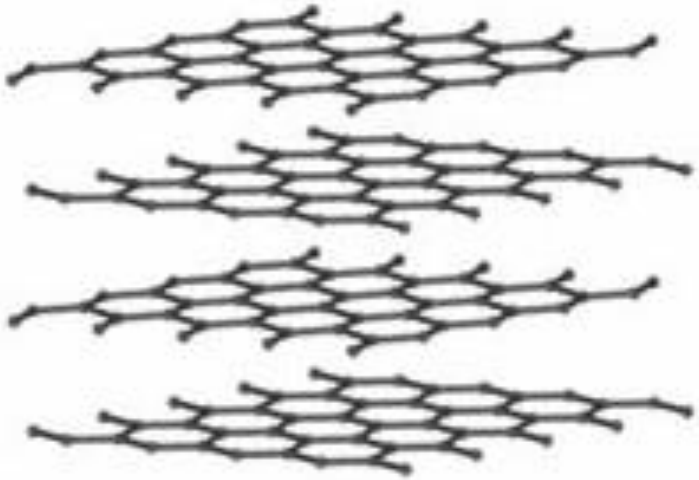
NETWORK COVALENT

covalently bonded atoms in a continuous network

Example: Carbon



DIAMONDS



GRAPHITE

https://www.youtube.com/watch?v=YeSuQm7KfaE

p. 140 – Reading

- Highlight key points/terms
- DON'T HIGHLIGHT EVERYTHING!
- Take notes in the margin
- Talk about what you are reading in your groups. This will make the next part easier!

#1
#2
#3

Pocket with reading.

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