

Instructions for the day!

DO NOT KEEP THIS HANDOUT!

CLASS COPY

- Jumpstart is written on the whiteboard. Complete it.
- Set up KCQ notes on page _____ as shown on this handout
- Target: I can describe and explain special examples of IMFs and Bulk Solids
- Take your notes using this print out of the powerpoint
- Complete your KCQ boxes
- Show the sub and get your page stamped

- Take the gold colored reading handout from the sub – it is a collection of things found from the internet, all about other examples of IMFs in the real world.
 - DO NOT KEEP THE GOLD READING HANDOUT!
- Read the handout
- On the top of page _____ list the examples that were mentioned in the handout
- Pick three that were most interesting to you and summarize each of them in 3-5 FULL SENTENCES. Make sure you mention how they relate to IMFs!

List of examples from golden colored reading handout from the sub

Three top choices from the handout – summarize each one in 3-5 full sentences

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

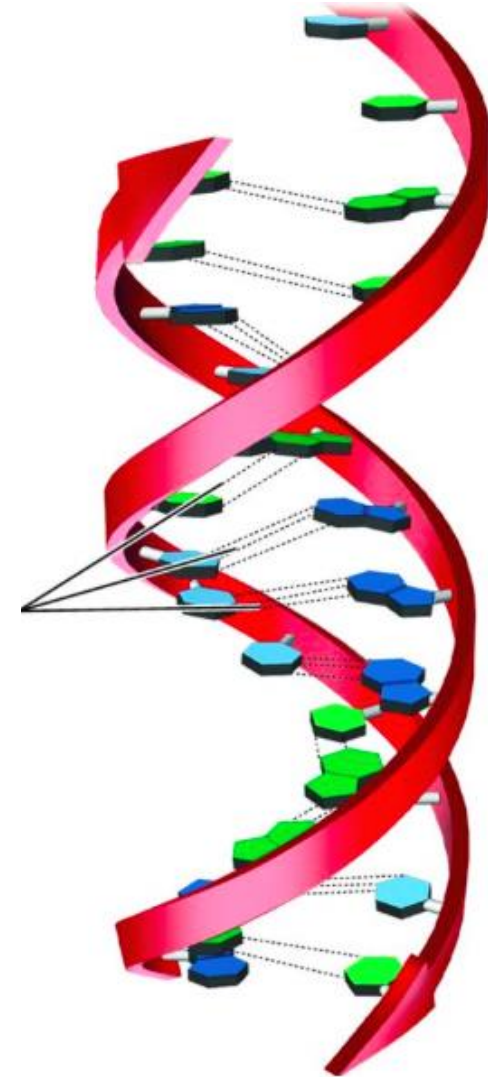
Important Example of H-Bonding

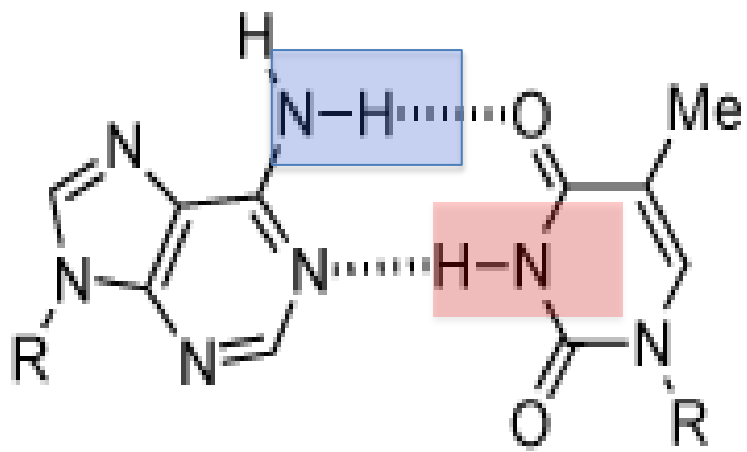
DNA Alpha helix shape-
Nucleic acids “bond” A to T and C to G



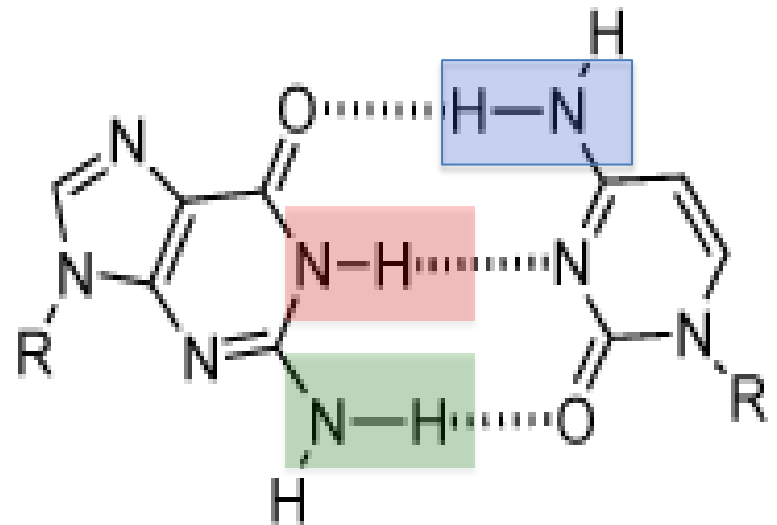
Generic DNA picture

H bonds



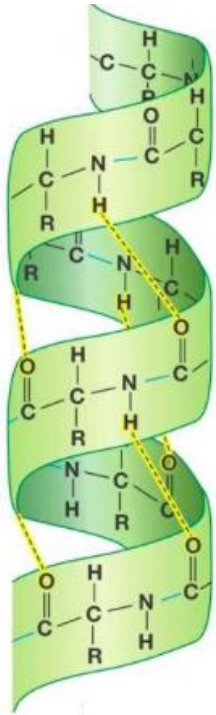


A·T base pair

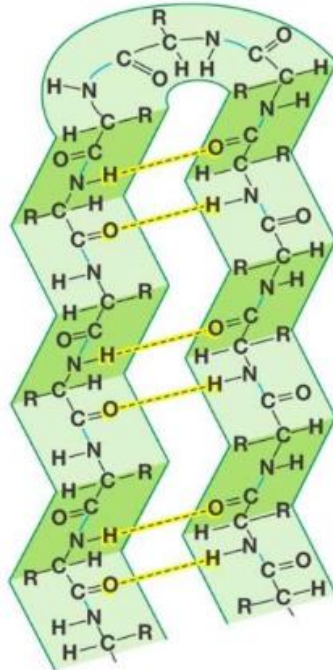


G·C base pair

H bonding in protein shapes

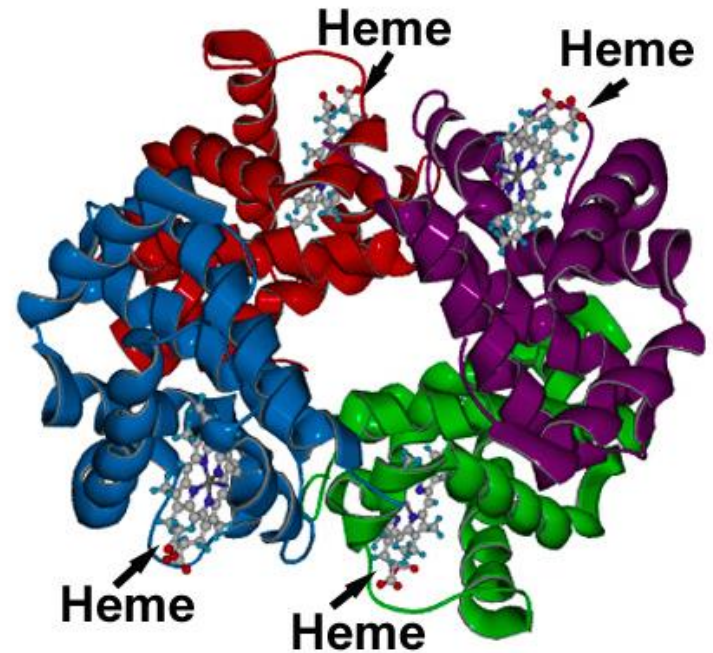


Alpha helix



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

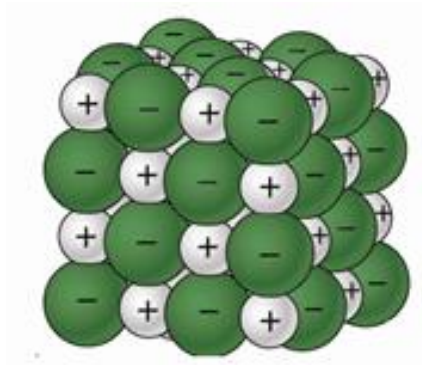
Ionic Lattice

Metallic

Network covalent

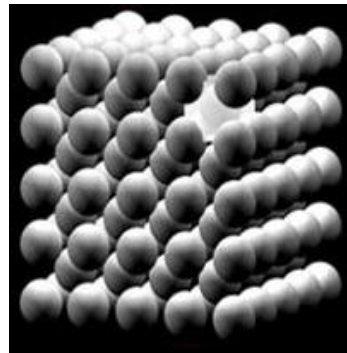
Ionic lattice - ions stack in an ordered fashion to form crystals

Example: NaCl



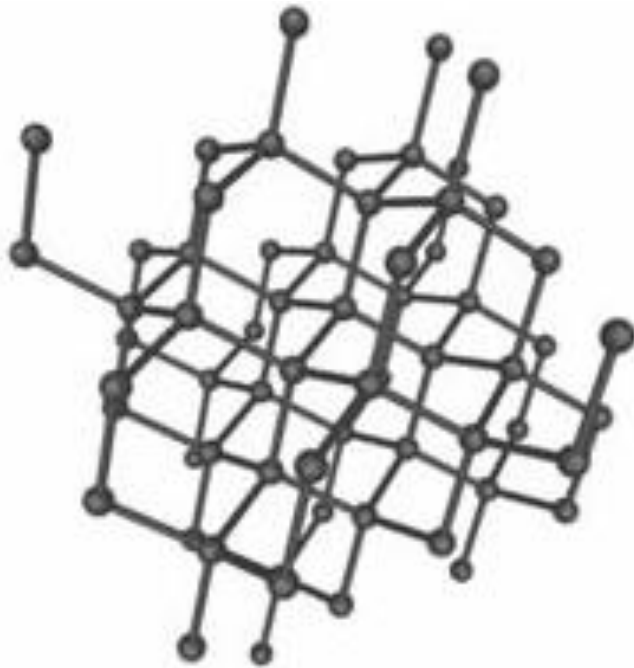
Metallic – Metal ions stack in an ordered fashion held together by the “sea of electrons” and the positive metal ions

Example: Fe

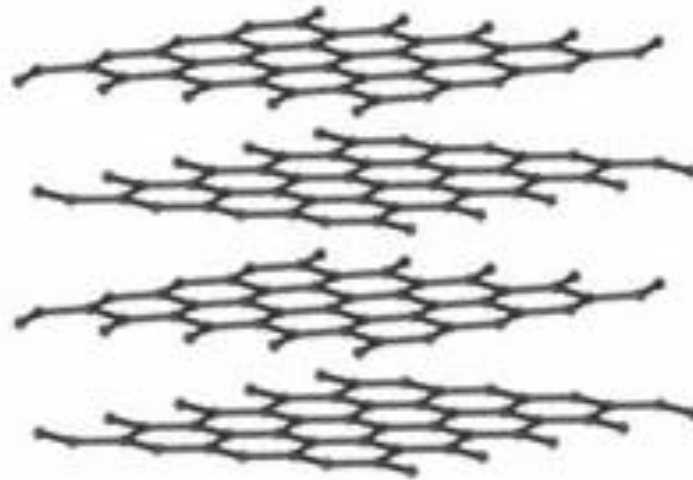


Network covalent – covalently bonded atoms in a continuous network

Example: Carbon



Diamonds



graphite

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