Hydrogen bonds

- Polar covalent bonds that form between hydrogen atoms and other atoms
- Cohesion between neighboring molecules creates surface tension
- Occurs between dissimilar substances such as air v. water
- Individually these bonds are weak but collectively are strong

Chemical Reaction occurs when new bonds form or old bonds break between atoms

- Reactants- starting substances
- Products- ending substances
- Metabolism- all the chemical reactions occurring in the body
- Energy- the capacity to do work
- Potential energy- stored
- **Kinetic energy** motion
- Notesale.co.uk Chemical energy potential energy stored in bonds
- Law of conservation of energy Conversion of one form of epercy to another. Free converted to various forms of kinetic energy and heat
- **Exergonic** release energy
- **Endergonic** absorb energy
- Energy that is released is used to drive an Endergonic reaction
- Activation energy- the collision energy needed to break the chemical bonds of the reactants. Atoms are in continuous motion and colliding with one another. Affected by temperature and concentration
- Catalyst- chemical compounds that speed up chemical reaction lowering the activation energy. Most important are enzymes. They do not alter the difference in potential energy . . .
- Synthesis Reactions Anabolism
 - \circ A + B \rightarrow AB