Unit 4 - Populations and the environment

2 ATP

- ATP is used as the energy source to carry out essential processes
- Energy is the ability to do work
- Organisms need energy for:
 - metabolism reactions in the body involving energy
 - movement within (circulation of blood) and of the organism (locomotion)
 - active transport
 - maintenance, repair and division of cells and organelles
 - production of substances enzymes, hormones
 - maintenance of body temperature in birds and mammals, endothermic, need energy to replace that lost as heat
- Flow of energy
 - 1. Light energy from Sun converted by plants into chemical energy during photosynthesis
 - Chemical energy in the form of organic molecules converted into ATI during respiration in all cells
 ATP used by cells to perform work
- Bonds between phosphate groups in ATP or upsable and so have a low activation e energy. Usuall only the terminal phosphate is energy. When they break they re removed.

