- minimises increase in temperature within cells
- helps to prevent dangerous fluctuations in temperature in aquatic habitats

- **Temperate regulation** - relatively large latent heat of vaporisation as energy is required to break hydrogen bonds, providing a cooling effect with little loss of water
- helps some animals to maintain a constant body temperature as a high amount of heat energy is removed to evaporate sweat
- has a cooling effect in plants via transpiration

- **Support** - internal - strong cohesive forces between water molecules due to hydrogen bonding:
- support water columns in tube-like transport cells allowing transport from roots to leaves
- water isn't easily compressed and so provides support in non-woody plants via turgor pressure

- **Support** - external - strong cohesive water molecules due to hydrogen bonding:
- provide surface tension where water meets air
- provides buoyancy for aquatic organisms

Inorganic Ions

Inorganic ions occur in solution in the cytoplasm and body fluids of organisms. They all have specific roles, which determines whether it is fiyhd in hugh or low concentrations.

Iron:

- component of haemoglobin which transports oxygen

Hydrogen:

- important in determining pH and thus affecting protein structure and enzyme activity