Biology Notes

# Topic Molecules, Transports And Health

## 1A Chemistry For Biologists

### 1 The Chemistry Of Life

#### Ionic And Covalent Bonding

The chemical bonds within and between molecules affect the properties of the compounds they form.

Ionic Bonding. One atom, or part of the molecules, gains one or more electrons and becomes and anion(a negative ion). The other atom, or part of the molecule, loses one or more electrons and becomes a cation(a positive ion).

e.g. sodium atom and chlorine atom becomes sodium ion(+) and chloride ion(-).

Covalent Bonding. Covalent bonds are very strong and the molecules formed are usually neutral.

## 1B Mammalian Transport Systems

### 1 The Principles of Circulation

#### The Need For Transport

### 2 The Roles Of The Blood

#### The Components of The Blood and Their Main Functions

#### Plasma

#### Erythrocytes(Red Blood Cells)

#### Leucocytes(White Blood Cells)

#### Platelets

#### Transport of Oxygen

#### Transport Of Carbon Dioxide

##### The Bour Effect

#### Fetal Haemoglobin

#### The Clotting of The Blood

##### Forming a Clot

##### The Blood Clotting Process