### **6.2 Explaining Solutions**

## **Definitions**

- Intermolecular force
- Intramolecular force

#### Dissociation

### **Explaining Water Mixtures**

• Intermolecular forces need to be used to explain solubility.

### **Molecular Substances in Water**

- Like dissolves like.
- Water slightly polar and capable of hydrogen bonds.

## The Effects of Polarity of Hydrogen Bonds

- Dipole-dipole bonds
- Hydrogen bonds
- E.g. Hydrogen bonding and dipole bonding with water (ammonia and water)

## **Ionic Compounds in Water**

• E.g. Sodium chloride and water.

## **Explaining Non-aqueous Mixtures**

- London dispersion forces hold non-polar in solution
- E.g. Two different non-polar molecules.

# Water - "The Universal Solvent"

• Water is nearly a perfect solvent.

#### Homework

- Practice 1-12
- Section Questions 1-5