

## Solutions to Exercises (p 36)

1.

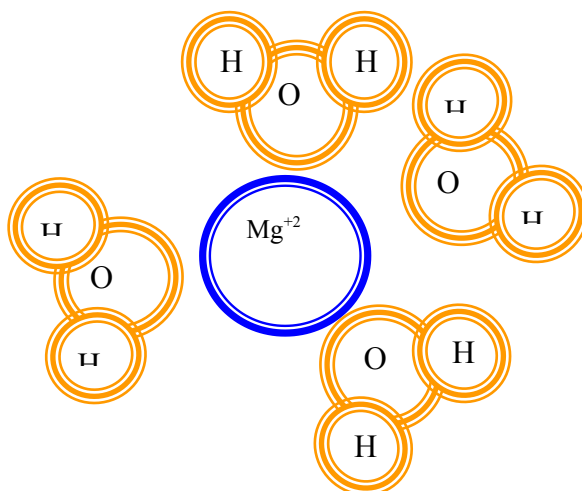
<i>Homogeneous Mixture</i>	<i>Solvent</i>	<i>Solute(s)</i>
a. 18 K gold (24 K is pure)	Gold	Copper, silver etc
b. Air	Nitrogen	Oxygen, argon, CO <sub>2</sub> , H <sub>2</sub> O
c. ocean water	water	Na <sup>+</sup> , Cl <sup>-</sup> , HCO <sub>3</sub> <sup>-1</sup> , Mg <sup>+2</sup> , Br <sup>-1</sup>
d. 7up	water	Sugar, CO <sub>2</sub> , flavours

2. Why does salt seem to disappear as it dissolves in water?

Water breaks up the crystal and separates the ions.

3. What part of the water molecule faces a dissolved Mg<sup>+2</sup> ion? Draw it.

The oxygen faces it



4. 4.0 grams. Mass is conserved: what goes in, comes out!