

# Seawater Chemistry

## Mineral Composition of Oceanwater

- Because  $H_2O$  is a polar molecule, it has the ability to dissolve many different substances.

### Study Tip

Both the salinity and the density of water are responsible for the currents in the deep ocean.

## Salinity

- The salt in seawater comes from ions that water picks up as it flows over rocks and soil.
- The **salinity**, or the salt content, varies from location to location.
- The salinity is higher if there is a lot of evaporation and little circulation of water.

## Water Density

- Water density increases if:
  - Salinity or pressure increases
  - Pressure decreases
- Differences in water density are responsible for deep ocean currents.

## Minerals in Ocean Water



The diagram above displays the concentrations of minerals inside the ocean's waters.

## Concept Check

- In general, what kinds of minerals are present in seawater?
- What is salinity? When will the salinity rise or fall?
- How does the density of water change? What does the density affect?