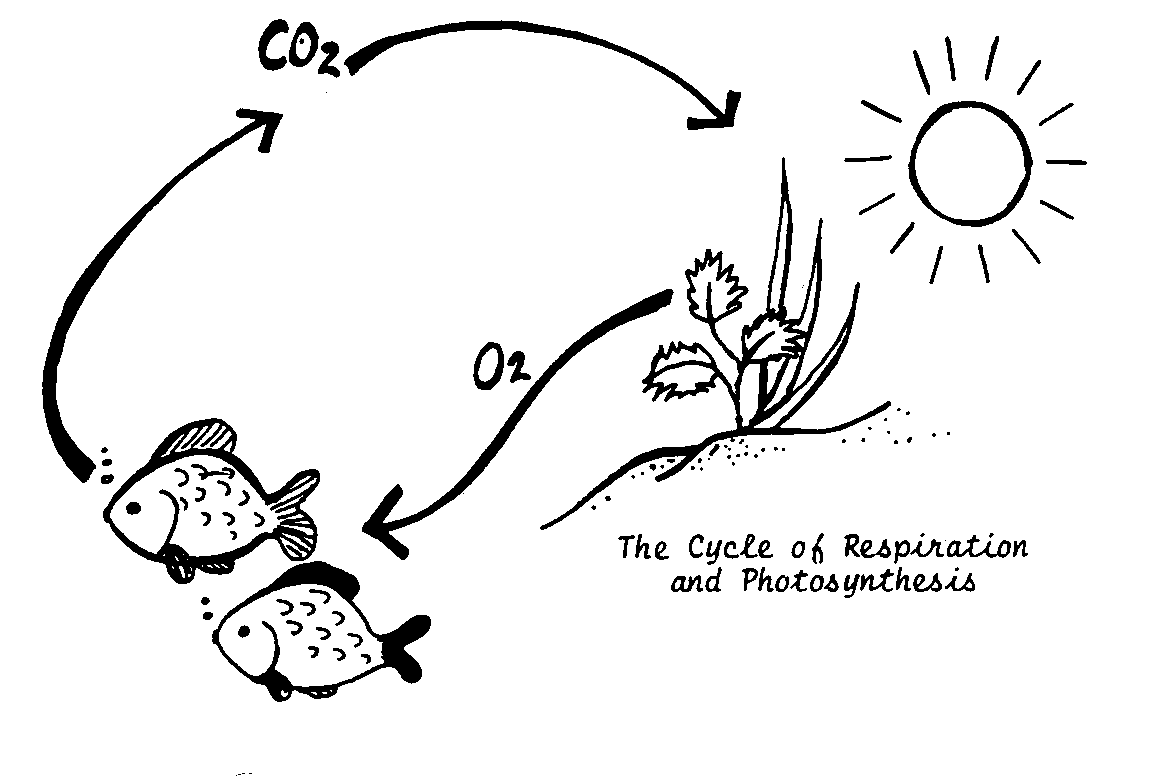
**Year 12 Chemistry – Shipwrecks**

*Dissolved gases in our oceans*

Read through pages 362-363 in Chemistry Contexts 2 to answer the following questions.

1. Describe the effects that temperature and pressure have on dissolved gases in the oceans.
2. What is partial pressure and how does that explain the concentration?
3. On the cross-section of the ocean below, give an indication of the relative amounts of dissolved O2 and CO2 at different depths in the oceans. Using appropriate drawings and text outline the processes that contribute to these differences. Some of these processes are provided in the box below.

**Concentration of dissolved oxygen is influenced by:**

* photosynthesis, which adds to dissolved oxygen;
* respiration by organisms, which consumes dissolved oxygen;
* chemical reactions that consume oxygen, such as decomposition and rusting of iron;
* exchange of dissolved gases between water and air

Depth

shallow

Very deep