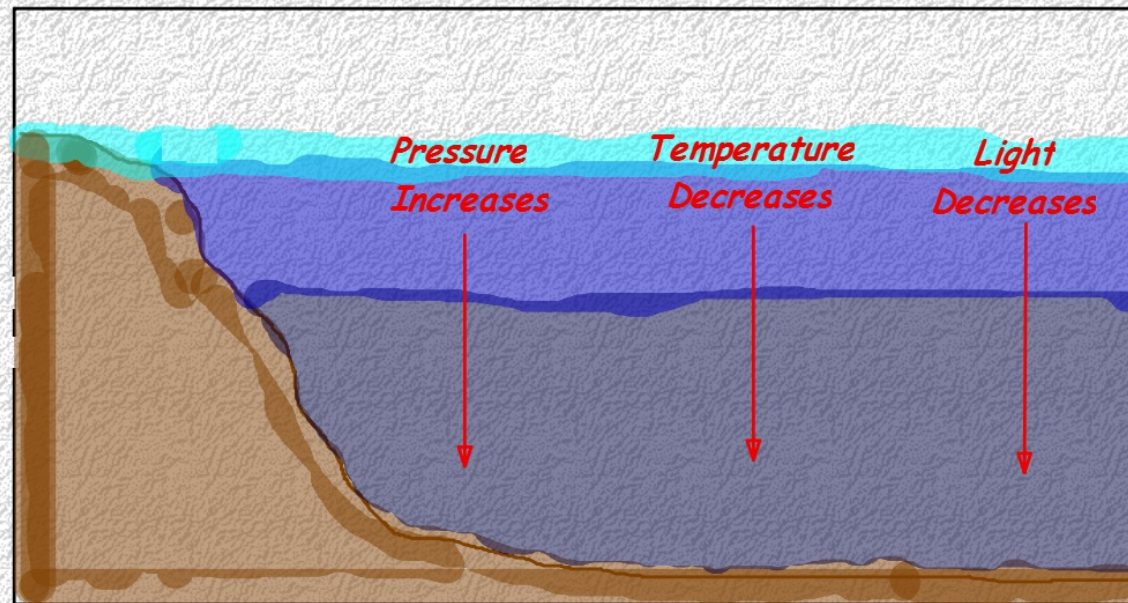


OCEAN LIFE
SOL 5.6

K. Benzie
CSES

OCEAN LIFE

As the depth of the ocean water increases, the temperature decreases, the pressure increases, and the amount of light decreases. These factors influence the type of life forms that are presents at a given depth. The ocean can be divided from its surface to its depth into three zones based on the amount of light received.



Sunlight Zone

This is the top layer, nearest the surface. It is also called the euphotic zone. Here there is enough light to support photosynthesis. Because photosynthesis occurs here, more than 90% of all marine life lives in the sunlit zone. The sunlit zone goes down about 600 ft. Most fish live in this zone. Plankton occurs in this zone.



Click here to see a video of animals in the sunlight zone

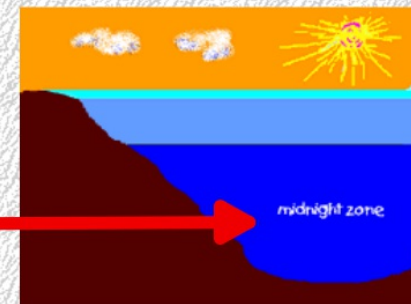
Twilight Zone

Only a small amount of light can penetrate water at this depth. Plants do not grow here. Only animals that have adapted to little light survive. The twilight zone is also known as the disphotic zone. Animals that live in the twilight zone include lantern fish, rattalk fish, viperfish, and mid-water jellyfish. This murky part of the ocean begins at about 600 feet under the water and extends to about 3000 feet down.



Midnight Zone

90% of the ocean is in the midnight zone. It is entirely dark, there is no light. The water pressure is extreme and temperature is near freezing. This zone is also called the aphotic zone. The living things in the zone live close to cracks in the Earth's crust. Living things in the midnight zone include angler fish, sea cucumbers, snipe eel, and vampire squid.



Click here to see video about these 2 zones.

OCEAN LIFE

Plant-like plankton (phytoplankton) produce much of the Earth's oxygen and serve as the base of the ocean ecosystem. Plankton flourish in areas where nutrient-rich water upwells from the deep. An upwell is where cold water rises from deep in the ocean to replace the surface water. Phytoplankton are eaten by animal-like plankton (zooplankton), swimming organisms, and those things that live on the ocean bottom.



Click here to see a video about plankton



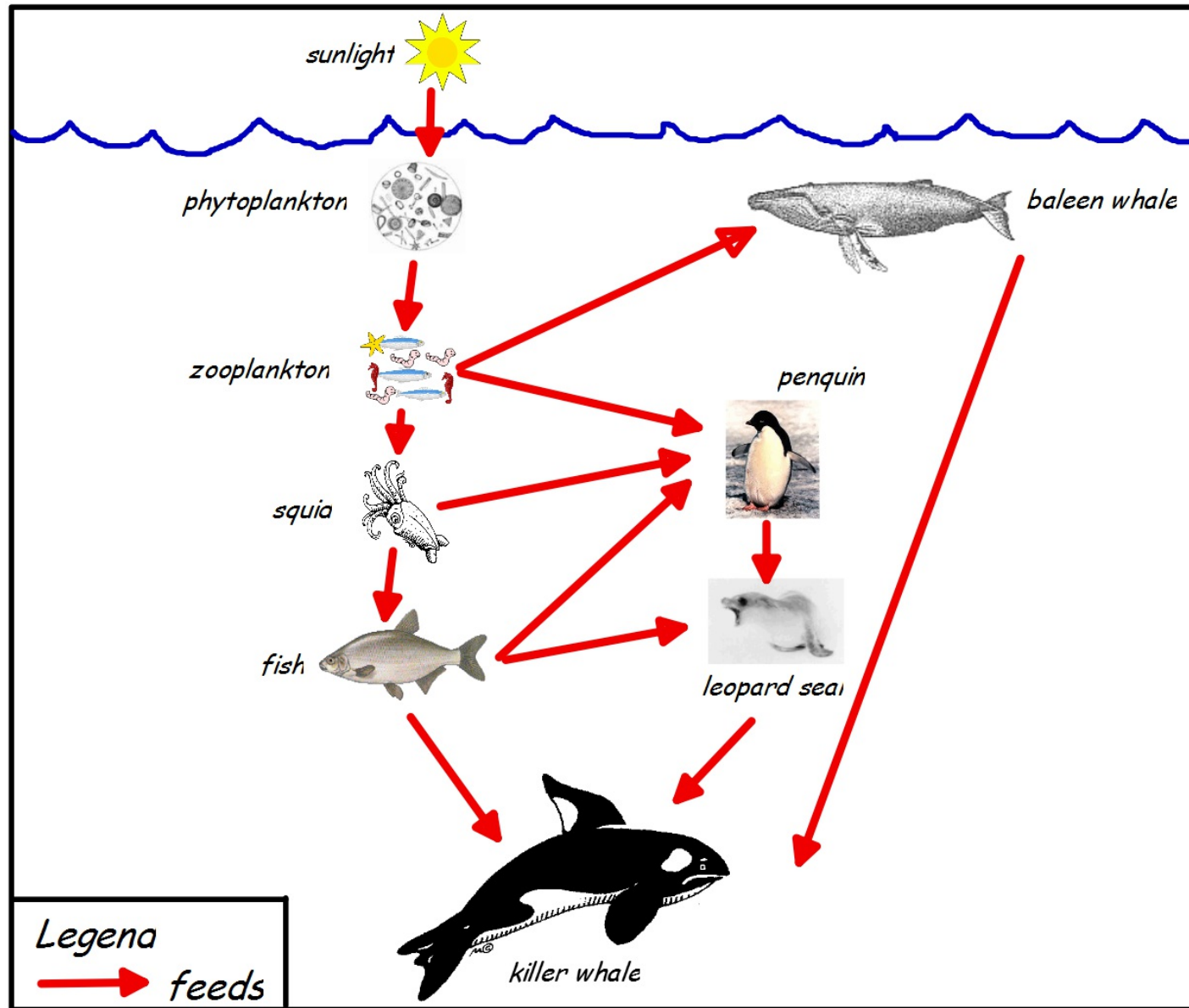
OCEAN LIFE

Plankton is the most abundant form of life on Earth. It makes up over 90% of all living things in the ocean. Plankton supply 75% of all the oxygen we breathe. Dead plankton buried on the ocean floor compressed for million of years to form oil.

There are 2 types of plankton:

- 1. Phytoplankton - plant drifters. Many kinds. The two most common are diatoms and dinoflagellates.*
- 2. Zooplankton - animal drifters. One of the most important kinds are copepods which are more abundant than insects.*

OCEAN FOOD WEB



Images from:

http://www2.ocean.washington.edu/seabreeze/sb03/pix/100_0085.JPG

<http://www.mbgnet.net/salt/oceans/zone.htm>

<http://www.mangosteen-xanthones-juice.com/phytoplankton.jpg>

<http://www.nhptv.org/natureworks/nwep6d.htm>

<http://school.discovery.com/clipart/images/squid.gif>

<http://school.discovery.com/clipart/clip/orca.html>

http://polarmet.mps.ohio-state.edu/ASPIRE_99/seals/images/pb332.gif

<http://wildlife.wisc.edu/extension/coop/images/penguin.jpg>

<http://www.marinemammalstrandingcenter.org/images/hwhale.gif>

Video from:

United Streaming, *Ocean Habitats: Light and Dark Zones*

United Streaming, *Oceans Alive: Plankton*