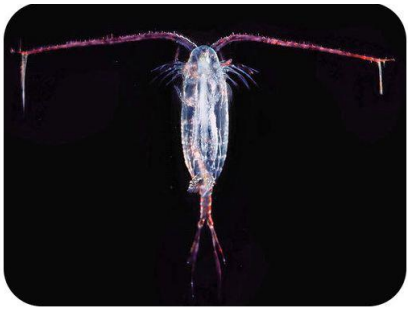
Types of Marine Organisms

Plankton

- There are two types of plankton: phytoplankton and zooplankton.
- **Phytoplankton** are tiny plants. Because plants require sunlight for photosynthesis, phytoplankton live in the photic zone. They are responsible for about half of the **primary productivity** (food energy) on Earth.
- **Zooplankton** consume phytoplankton. They are an important food source for many marine animals.

Study Tip

Covering 70% of the Earth's surface, oceans are home to the largest and smallest organisms on Earth.



Copepods are an example of zooplankton.

Plants and Algae

- Salt marsh grasses and mangrove trees are examples of the few true plants found in the ocean. Seaweed is also abundant. Plants and algae are found in the neritic zone.

Marine Invertebrates

- Marine invertebrates are some of the most common organisms living in the water. Some examples include sea slugs, octopuses, clams, crabs, lobsters, and jellyfish.

Some examples of marine invertebrates: mussels, a sea star, moon jelly, and a squid.

Fish

- Fish have the following characteristics:
  - Fins
  - Scales
  - Gills
  - Swim bladder
  - Ectothermic (cold-blooded), making their body temperature the same as surrounding water
  - Bioluminescence (method of attracting prey in dark water)
- Examples of fish include salmon, eels, and tuna.

Reptiles

- Marine reptiles live in warm water. Examples of marine reptiles include sea turtles, marine iguana, and sea snakes.

Seabirds and Shorebirds

- Many seabirds live on land but go fishing in the sea. Some seabirds come on land only to raise chicks. Shorebirds live in the intertidal zone and have long legs for wading and long bills for digging.

Marine Mammals

- Marine mammals share the common traits of mammals and have the following extra adaptations:
    - Fins, streamlined bodies, and slippery skin/fur for swimming
    - Fat, high metabolic rates, small surface areas, and specialized blood systems for warmt
    - Kidneys that excrete salt, and thick skin to prevent excess salt content from building up

Concept Check

- What is the difference between phytoplankton and zooplankton?
- Identify characteristics of each group of marine organisms.