

3. WHAT ANIMALS ARE FOUND ON A REEF?

CURRICULUM LINKS

Suggested Learning Area:

Natural Science Grades 7 & 8

Life Sciences Grade 10



Knowledge Area:

Life & Living

Environmental Studies

Learning Outcomes:

Grade 7 & 8 LO2 - Constructing Scientific Knowledge

Grade 10 LO2 - Construction & Application of Knowledge

Assessment Standards:

Grade 7 & 8 LO2 - AS 2 Categorize information

 - AS 3 Interpret information

Grade 10 LO 2 - AS 2 Interpret and make meaning of knowledge

Coral reefs provide **habitats** for a large variety of organisms. These organisms rely on corals as a source of food and shelter. Some organisms that use corals through mutualism, **commensalism** and **parasitism** are in the groups of the Porifera (sponges), Polychaeta (worms), Gastropoda (snails), Crustacea (lobsters & Crabs), Echinodermata (sea stars, sea urchins & sea cucumbers) and Pisces (Fish).

Sponges (Porifera) are found inhabiting cavities in the reef. They remove small chips of calcium carbonate from corals. These sponges can cause **bioerosion** in corals. Sponges inhabit corals for the purpose of protection from **predators**.

Polychaetes and some Gastropods depend on corals for food. Crustaceans such as shrimps and crabs depend on corals for shelter. Fish also depend on corals for protection against predators, such as the parrot fish. Echinoderms can be coral predators, like the crown-of-thorns starfish that relies on corals for food.

There are many other species of fungi, sponges, sea worms, crustaceans and molluscs that **bore** into coral skeletons. Other organisms that inhabit the coral reefs include sea urchins, jellyfish, oysters, clams, turtles and sea anemones.

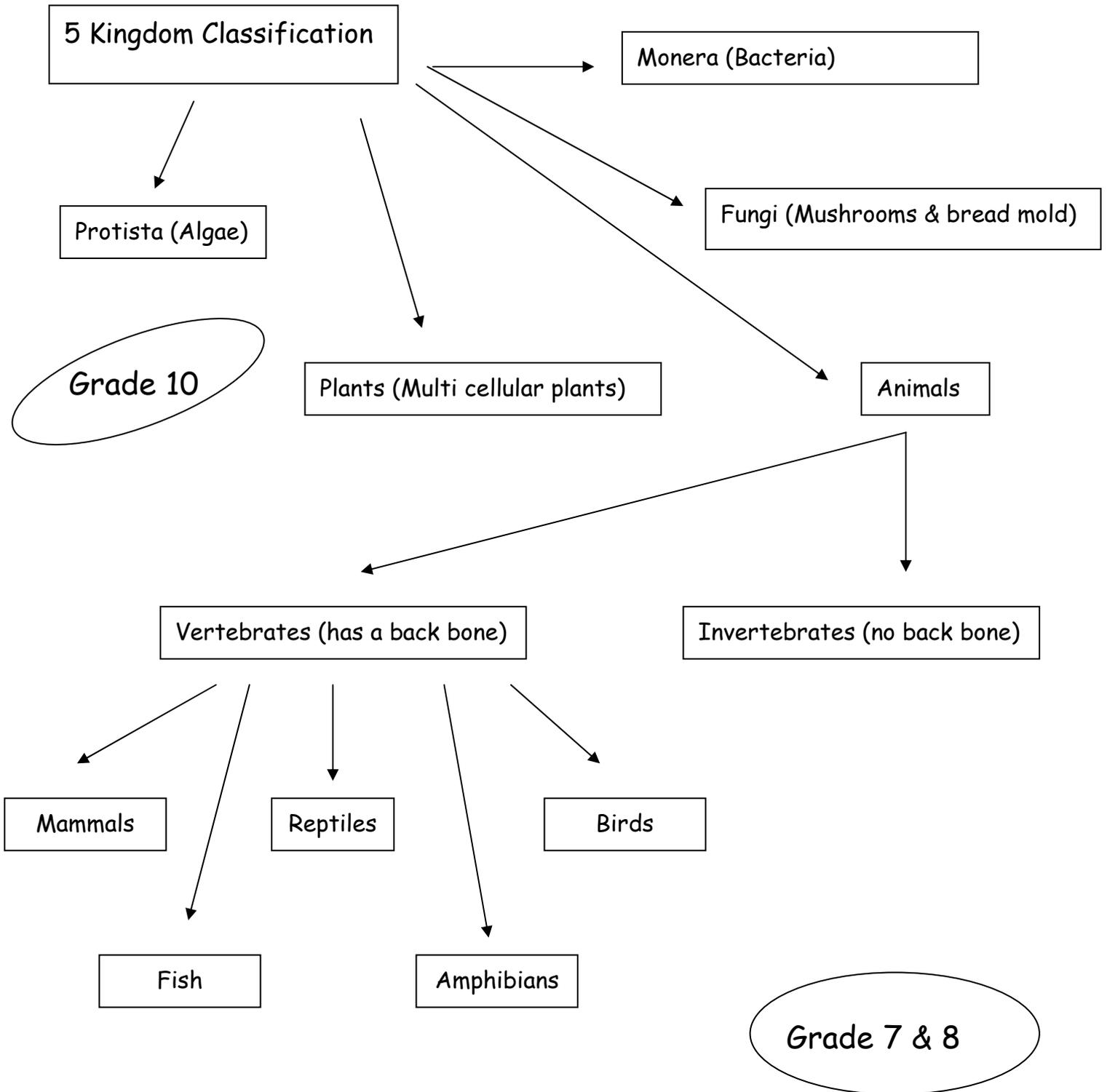
All of these animals are closely linked through the food web and each one is important in keeping the ecosystem in balance.

Rocky Reefs are fascinating habitats that are rich in life. Many marine animals and plants need to attach themselves to something solid for their survival.

Reefs are found where rocks occur above or below the waterline. As the rocks are eroded by the action of water, cracks and holes appear which increase the availability of shelter for living things. Different rock types weather in different ways and may have different species. Rocky reefs are also important because they provide habitat for many species of fish, and rock lobster and the abalone.

Rocky reefs that are exposed at low tide are great places to explore as there are many animals and some plants that can survive out of the water for some time. The presence of rockpools, crevices, and boulders increases the diversity of life because of the shelter provided.

Classification Outline



Scientists classify living things into groups called Kingdoms. Organisms that are related are grouped together. Within each Kingdom the organisms are divided into groups called Phyla (singular Phylum). The Phylum is further divided into more closely related classes, which then contain orders and families, genera and species. (*Coastal Care Fact Sheet*)