PENANG SANGAM HIGH SCHOOL
P.O.BOX 44, RAKIRAKI

LESSON NOTES

Subject: Basic Science **Year/Level: 10**

Week 13

Strand	1 : LIVING THINGS AND THE ENVIRONMENT
Sub Strand	1.3 : BIODIVERSITY,CHANGE AND SUSTAINABILITY
Content Learning Outcome	Research the importance of the marine ecosystem and investigate man's activities that have influenced the resources of the different communities of this ecosystem and describe measures taken to conserve them.

Types of Turtles

Tpes of	**Description**	**Colour**	**Habitat** **(Where they live?)**	**Feeding** **(What/How they eat?)**	**Reproduction**	**additional information**
Green Turtle (Vonu dina)	*largest and best known turtles in Fiji. *excellent source of food	greenish brown in colour with darker mar. (Green is the colour of the fat inside their bodies)	Found in shallow water where they find plenty of turtle grass and sea weed their main food.	herbivores although the young can be carnivores eating animal food such as crabs and jelly fish	lay their eggs in their eight years and continue for up to 60 years laying about 900 averages every 3 years	*listed as an endangered organism *Maybe their name came from what they look like on the inside *numbers have dropped since they and their eggs were captured by people

Loggerhead Turtle (Vonu damu)	most common of the turtles in Fiji	brown in colour and about a metre long when fully grown	move freely in the open sea and may be found in deep water	carnivorous, feeding on fish, crabs and other marine animals	their eggs are faintly pinkish in colour	*listed as an endangered organism *meat is not often eaten but its eggs are valued as food.
Tpes of Turtles	**Description**	**Colour**	**Habitat** **(Where they live?)**	**Feeding** **(What/How they eat?)**	**Reproduction**	**additional information**
Hawksbill Turtle (Taku)	*smaller species *has a distinctive and very beautiful shell. *have hooked jaws to enable them to get crabs out of crevices or to pull molluscs off the rocks	beautiful shell made up of brown and yellow overlapping plates	live near the shore	*omnivores, feeding on both plant and animal *eat sea grass, seaweed, shellfish, fish, jelly fish and other marine animals	lay about 100 to 140 eggs at a time	*listed as an endangered organism
Leathery Turtle (Ika dina)	*largest and most distinctive of the sea turtles *length of this turtle may exceed 2 metres and is sometimes mistaken for an upturned boat	relatively smooth leathery skin, which is spotted with white	lives in the deep sea and travels widely over the ocean			

Did You Know?

Sea turtles cry salty tears to get rid of the extra salt they drink from the sea.

IMPORTANCE OF MARINE ECOSYSTEM

- ✓ Ocean covers approximately 70% of Earth's surface, which means it is the largest environment for living things on Earth.
- ✓ 5 major ocean habitats:
    i. Tropical or reef habitat
    ii. Temperate waters
    iii. Open Ocean,
    iv. Deep sea
    v. Polar Regions.

- ✓ Most sea life lives in the top 150 meters (500 feet) of the ocean.
- ✓ From the warm, sunlit waters of coral reefs to the dark, cold waters of the deep sea, the ocean teems with life.

1) Habitat

- **Edges of the Sea**
  hatcheries and nurseries of many important organisms.

- **Coastal wetlands and estuaries (areas where rivers enter the ocean)**
  - ✓ nesting, feeding and resting spots for migratory waterfowl
  - ✓ reduce erosion and flooding inlands.

- **Along the intertidal zones**
  area between the high and low tide marks many kinds of plants and animals thrive.

- **Mudflats**
  - ✓ occur where the water moves slowly enough to deposit sediment of small particles.
  - ✓ Algae cover the particles and provide food for many burrowing molluscs, worms and crustaceans.

- **Sandy beaches**
  - ✓ less stable than mudflats for sand shifts constantly and dry out faster than mud when the tide is out.
  - ✓ Most of the tiny protists, worms and crustaceans that live between the sand grains eat marine plankton stranded when the tide goes out, or algae attached to the sand grains.
  - ✓ wide variety of shore birds feed on these organisms.

- **Rocky shores**
  - ✓ support a wider variety of organisms as they hide themselves in crevices, anchor themselves firmly to rocks or seaweeds.
  - ✓ Birds feed on these organisms during low tide.

- **Beaches**
  - ✓ provide feeding grounds for migratory birds
  - ✓ provide nesting habitat

- **Sea grass**
  - ✓ provides a range of ecosystem services including:
    - ❖ habitat
    - ❖ food services for coral reef fish and invertebrates

- **Mangroves**
  - ✓ important habitat
  - ✓ providing food
  - ✓ shelter
  - ✓ nursery areas for fish, birds, crustaceans and other marine life.

ACTIVITY:

1) Give the name of the turtle that is:
   a) Largest and best known?
      _____
   b) Smaller species?
      _____
   c) Most common?
      _____
   d) Largest and most distinctive?
      _____

2) Why do sea turtles cry salty tears?
   _____
   _____
   _____

3) List 5 major oceans habitat.
   i. _____
   ii. _____
   iii. _____
   iv. _____
   v. _____

4) Why do Hawksbill Turtles have hooked jaws?

_____

_____

_____

5) Name four habitats of marine organisms.
   a) _____
   b) _____
   c) _____
   d) _____

…STAY SAFE…