

CHAPTER 3: BIODIVERSITY

3.1 THE VARIETY OF LIVING ORGANISM

1. The living things found on Earth are humans, animals and plants.
2. A living things is known as an organism.
3. Animals and plants have various shapes, sizes and habitats.
4. The differences that exist between the same species of living things are called variations/diversity of life or biodiversity.

HABITAT OF LIVING THINGS

1. A natural place where plants and animals live is called a habitat.
2. Different animals and plants live in different habitats.
3. A habitat is important to an organism because
 - a. it provides the organism with food,
 - b. protection
 - c. space for breeding.

habitat of living things			
Animals		plants	
Animal	habitat	plant	habitat
<i>Bird</i>	<i>tree</i>	<i>lotus</i>	<i>lake</i>
<i>Snake</i>	<i>bushes</i>	<i>mushroom</i>	<i>wood</i>
<i>Amoeba</i>	<i>pond</i>	<i>Durian tree</i>	<i>orchard</i>
<i>Whale</i>	<i>sea</i>	<i>duckweed</i>	<i>pond</i>
<i>Camel</i>	<i>desert</i>	<i>Coconut tree</i>	<i>seashore</i>
<i>Termite</i>	<i>wood</i>	<i>cactus</i>	<i>desert</i>

CLASSIFICATION OF LIVING ORGANISM

Go to http://anthro.palomar.edu/animal/animal_1.html describe the Linnaeus's system of classification used in Science to classify all living organisms.

For easy access, go to www.icd.com.my

1. Classification can be classified based on common characteristics.
2. Examples of classification of animal based on their habits and their breathing organs are shown below.

classification of animals					
Habitat			breathing organs		
land	water	water and land	gills	lungs	moist skin
↓	↓	↓	↓	↓	↓
Examples ↓					
eagle	prawn	crab	Turtle	horse	frog
chicken	whale	seahorse	crocodile	duck	Toad _{PMR10}
snake	crab	eel	Frog _{PMR10}	cow	?

3.2 CLASSIFICATION OF ANIMALS **PMR 04** **PMR 2010**

http://www.indianchild.com/animal_kingdom.htm (classification of animals)

Go to <http://animaldiversity.ummz.imich.edu>. To learn about animal, type the name of the animal into the site's own search engine.

1. Animals can be classified into two big groups:
 - a. Animals with backbones.
 - b. Animals without backbones.
2. Animals with backbones are known as vertebrates.
3. Animals without backbones are known as invertebrates.
4. Vertebrates are divided into five main groups. The five groups are :
 - a. Fish **PMR 07**
 - b. Bird
 - c. mammal **PMR 06**
 - d. reptile **PMR 04, 07**
 - e. amphibian **PMR 04, 07**
5. Classification of vertebrates and their characteristic; **PMR 2010**

<http://www.kidport.com/Reflib/Science/Animals/AnimalindexInv.htm>

6. Invertebrates can be broadly classified into two groups. The two groups are:
- with jointed legs
 - without jointed legs.

<http://www.kidport.com/Reflib/Science/Animals/AnimalindexInv.htm>

Invertebrates	
invertebrates with jointed legs	invertebrates without jointed legs
↓	↓
Examples	
crab, spider, centipede, millipede, butterfly	earthworm, flatworm, sea anemone, starfish, snail

3.3 CLASSIFICATION OF PLANTS

Go to www.perspective.com/nature/plantae/index.html observe the description of the classification and the divisions in the plant kingdom.

For easy access, go to www.icd.com.my

- Plants can be divided into groups based on some common features.
- Plants can be divided into two groups. The two groups are those which
 - produce flowers, flowering plants
 - do not produce flowers, non flowering plants.

salin m/s 67

- Flowering plants are divided into dicotyledons and monocotyledon.
 - Flowering plants
 - this type of plants produces flowers, seeds and fruits. The flowers normally become fruits.
 - This type of plants produces flowers for reproduction.
 - Examples of dicotyledons are rubber trees, durian trees, hibiscus plants and rambutan trees.
 - Characteristics of dicotyledons:
 - leaves with network veins
 - have taproot system

- stems are usually woody
- seeds have two cotyledons
- v. Examples of monocotyledons are paddy plants, grass and oil palm.
- vi. Characteristics of monocotyledons:
 - leaves with parallel veins
 - have fibrous root system
 - have soft stem
 - seeds with one cotyledon

lukis dan salin m/s 68

b. Non-flowering plants

<http://www.zephyrus.co.uk/nonfloweringplants.html>

- i. Non-flowering plants do not produce flowers, fruit and seeds.
- ii. These plants reproduce by spores or binary fission.
- iii. Non-flowering plants are divided into four groups:
 - algae
 - moss
 - fungus
 - ferns

3.4 THE IMPORTANT OF BIODIVERSITY TO THE ENVIRONMENT.

Go to http://www.journeymalaysia.com/m_rain.htm Gather information about Malaysian wild jungles, rainforest, ecotourism, nature travel, forest and wildlife guided tours.

For easy access, go to www.icd.com.my

Buat nota sendiri m/s 69 text book

.....tamat.....

