

= absorb - release - flood - fall - transpiration
soil erosion - tightly - reduce

A. Nutrient cycle : Role of plants in the water cycle.

1. Plants _____ water from the ground by roots and _____ it into atmosphere through _____.
2. Root of plants hold the soil _____ and make the structure of soil more compact. The flow of water underground slow down can prevents _____.
3. Forests can reduce the effects of _____ by absorbing water during heavy rainfall.
4. Leaves that _____ from trees and cover the surface of the earth will _____ the rate of evaporation and prevent the soil from becoming dry.

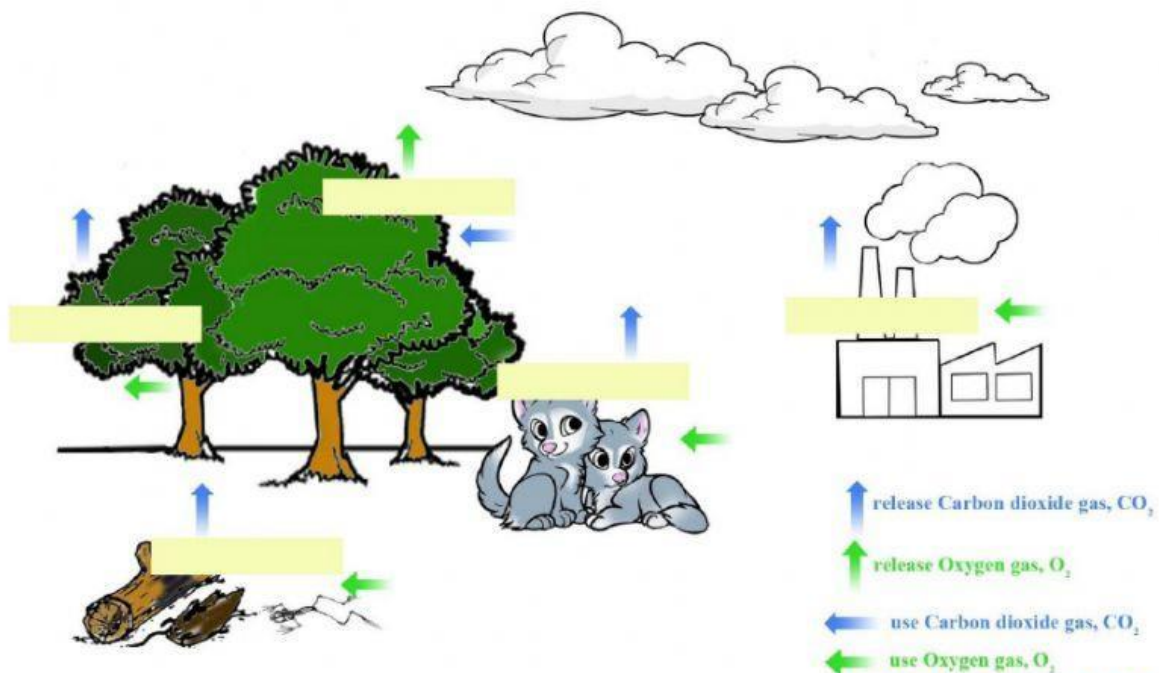
B. Nutrient cycle : Role of animals in the water cycle

1. Animals get water through _____ and _____.
2. Water is _____ by animals through _____, _____, and _____.
3. All these process _____ the water content in the atmosphere.



- release - food - drink - respiration - defecation - excretion - increase

C. Carbon Cycle and Oxygen Cycle



2.6 AKTIVITI
PERBINCANGAN

Penyesuaian organisma terhadap iklim habitat

Adaptation of organisms to the climate of habitats

PBD

Konstekstual

Discuss the adaptation of animals and plants with different climates. TP2

Buku teks m/s 32

Loss	Food	Water	Fat	Thick fat	Chlorophyll	Spines
Thick fur	Water	Tall	Fur	Straight	Absorb	Skin

1 Desert...hot and dry

(a) Camel

The hump stores _____ in the form of _____ which is oxidised to produce _____.



(b) Cactus

Leaves are adapted into _____ to reduce water _____ and the long roots grow deep into the soil to _____ water.

Its stems have _____ and are able to store _____.



2 Tundra...very cold

(a) Polar bears and seals

Have a layer of _____ under the _____ as a heat insulator.



(b) Polar bears

Have _____ as a heat insulator.

3 Tropical...hot and humid

(a) Elephant and hippopotamus

Have less _____ and stay in _____ to cool down their bodies.



(b) Tropical rainforest

The trees grow _____ and _____ to obtain sunlight.

2.7 AKTIVITI
PERBINCANGAN

Interaksi antara organisma

Interaction between organisms

PBD


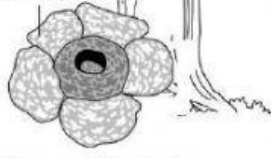
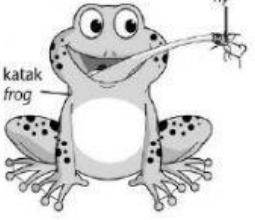
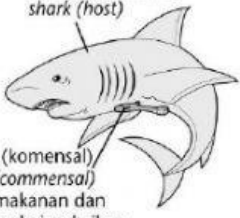
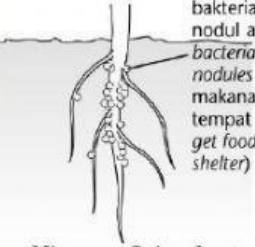
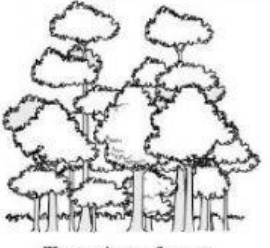


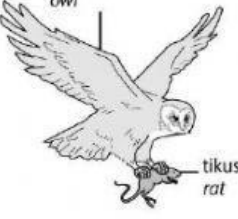
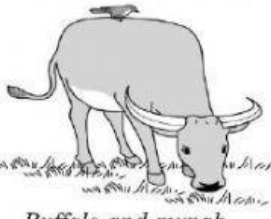

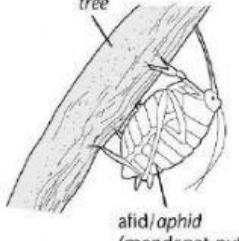
Konstekstual

Identify the types of interaction between organisms based on the given statements. TP1

Buku teks m/s 33 – 35

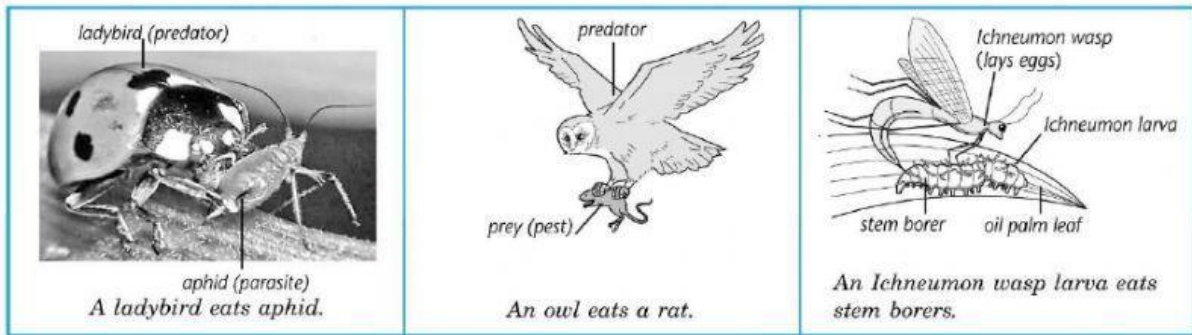
Type of interaction	Statement
(a) Prey - Predator	Occurs between two species of organisms that live together. One organism benefits while the other organism is negatively affected.
(b) Parasitisme	Organisms compete for the same basic needs.
(c) Competition	Occurs between two species of organisms that live together. One organism benefits while the other organism is not adversely affected.
(d) Mutualism	Organisms (predators) hunt and eat other organisms (prey) as food.
(e) Commensalism	Occurs between two species of organisms that live together whereby both organisms benefit.

Identify the types of interaction between organism below. TP2

<p>(a) buran/sea anemone (dapat makanan/gets food)</p>  <p>umang-umang/hermit crab (mendapat perlindungan/ gets protection)</p> <p><i>Sea anemone and hermit crab</i></p> <input type="text"/>	<p>(b) Rafflesia/Rafflesia (parasit menyerap nutrien pokok/ parasite absorbs the tree nutrients)</p>  <p>pokok (perumah) tree (host)</p> <p><i>Tree and Rafflesia</i></p> <input type="text"/>	<p>(c)</p>  <p>katak frog</p> <p>lalat fly</p> <p><i>Frog and fly</i></p> <input type="text"/>
<p>(d) ikan yu (perumah) shark (host)</p>  <p>ikan remora (komensal) remora fish (commensal) (mendapat makanan dan perlindungan daripada ikan yu/gets food and protection from the shark)</p> <p><i>Shark and remora fish</i></p> <input type="text"/>	<p>(e) tumbuhan/plant (mendapat nitrat/ gets nitrate) bakteria dalam nodul akar bacteria in the root nodules (mendapat makanan dan tempat tinggal/ get food and shelter)</p>  <p><i>Nitrogen-fixing bacteria and leguminous plant</i></p> <input type="text"/>	<p>(f) pokok/trees (mendapat mineral dan cahaya matahari/ get minerals and sunlight)</p>  <p><i>Trees in a forest</i></p> <input type="text"/>
<p>(g) tumbuhan/plant (mendapat mineral dan cahaya matahari/ gets minerals and sunlight)</p>  <p><i>Flowering plants and weeds</i></p> <input type="text"/>	<p>(h) paku-pakis langsuir (komensal) bird's nest fern (commensal) (mendapat cahaya matahari/gets sunlight)</p>  <p>pokok (perumah) tree (host)</p> <p><i>Tree and bird's nest fern</i></p> <input type="text"/>	<p>(i) burung hantu owl</p>  <p>tikus rat</p> <p><i>Owl and rat</i></p> <input type="text"/>
<p>(j) burung tiung/mynah (makan pacat pada badan kerbau/eats leeches on the body of the buffalo)</p>  <p><i>Buffalo and mynah</i></p> <input type="text"/>	<p>(k) paku-pakis tanduk rusa staghorn fern (mendapat cahaya matahari/ gets sunlight)</p>  <p><i>Tree and staghorn fern</i></p> <input type="text"/>	<p>(l) pokok tree</p>  <p>afid/aphid (mendapat nutrien/ gets nutrients)</p> <p><i>Tree and aphid</i></p> <input type="text"/>

Study the diagrams given.

Buku teks m/s 36



- Method: _____ TP1
- Explanation of the method: A _____ is used for controlling the population of a pest without using a pesticide. TP2
- Justify the use of biological control in agricultural sector. TP5/KBAT

Difficult
Safe
Time
Pollute
Kill
Cheap

Biological control	
Advantages	Disadvantages
(a) _____ and _____ to be used.	(a) More _____ to control because living organisms are used.
(b) Does not _____ the environment.	(b) A longer _____ is required to control the population of the pests.
(c) Does not _____ other organisms except the pests.	

- Pak Ali faces rats problem in his palm oil estate. Suggest how he can control the population of rats using environmentally friendly method. TP3/KBAT

Pak Ali can use _____ method. He can rear _____ of rats such as _____ and _____. Rats are the _____ of _____ and _____.

Buku teks m/s 37 – 38

- State the factors that affect the size of a population in an ecosystem. Choose the correct answers. TP2

Predator	(a)	<input type="text"/>	Parasites may cause diseases and (slow down, speed up) the growth of organisms.
Disease	(b)	<input type="text"/>	As the population of predators increase, the size of the population of preys will (increase, decrease).
Source of Food		<input type="text"/>	Lack of sources of food will (increase, decrease) the size of a population.
Change of Weather		<input type="text"/>	Drought causes the population of organisms to (increase, decrease).