

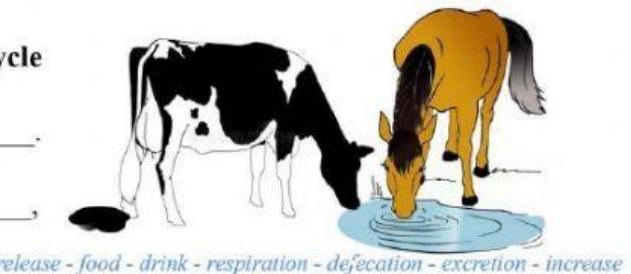
= absorb - release - flood - fall- transpiration  
soil erosion - tightly - reduce

#### 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.

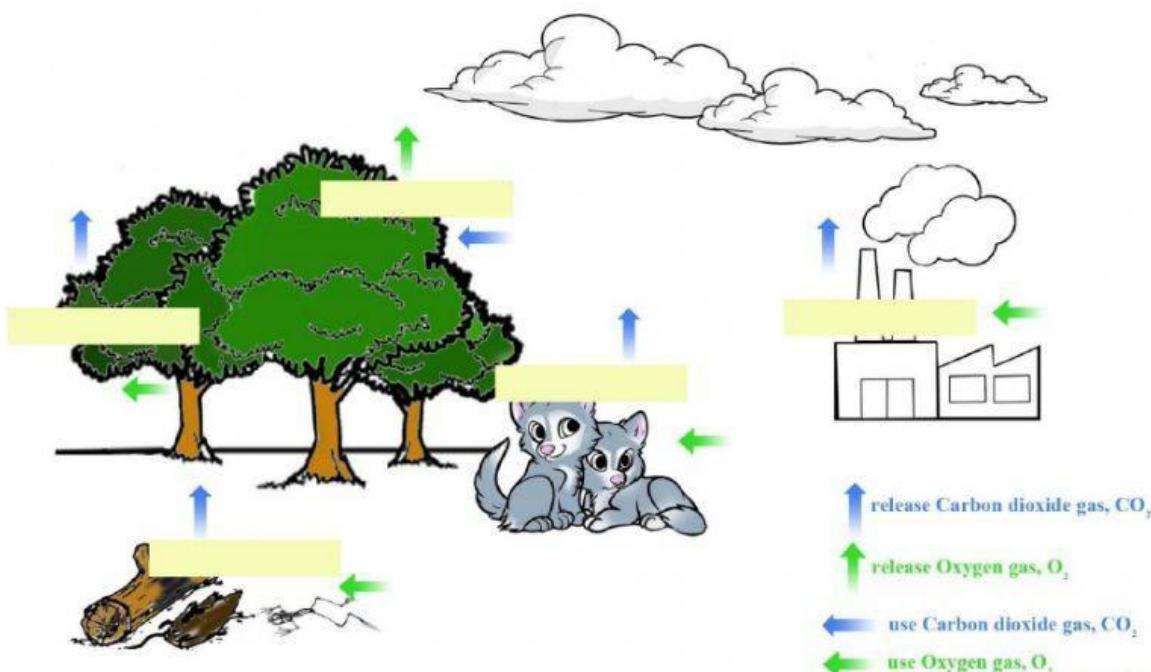
#### B. Nutrient cycle : Role of animals in the water cycle

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**

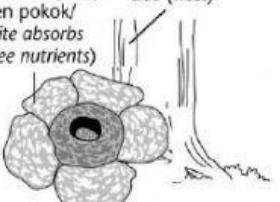
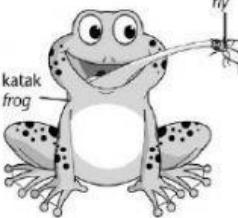
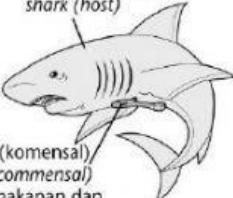
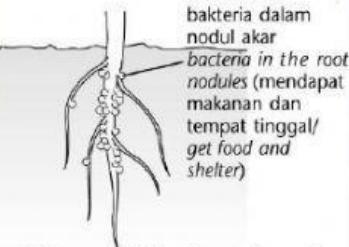
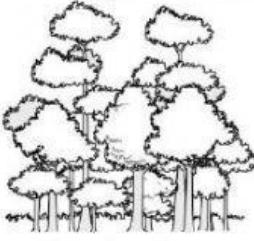
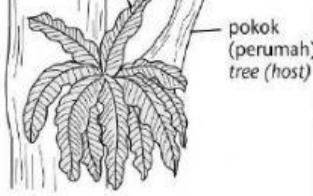
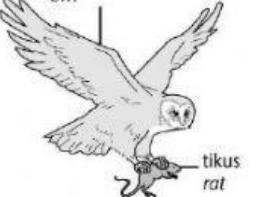
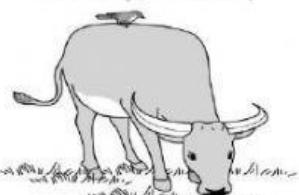
Buku teks m/s 33 – 35

Type of interaction
(a) Prey - Predator
(b) Parasitism
(c) Competition
(d) Mutualism
(e) Commensalism

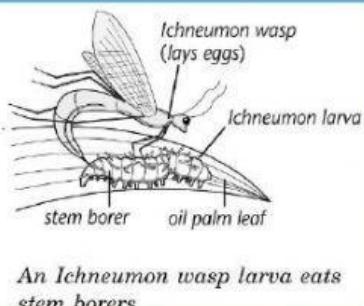
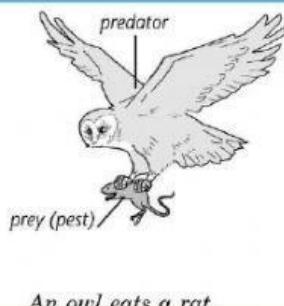
Statement
Occurs between two species of organisms that live together. One organism benefits while the other organism is negatively affected.
Organisms compete for the same basic needs.
Occurs between two species of organisms that live together. One organism benefits while the other organism is not adversely affected.
Organisms (predators) hunt and eat other organisms (prey) as food.
Occurs between two species of organisms that live together whereby both organisms benefit.

Identify the types of interaction between organism below. **TP2**

Buku teks m/s 33 – 35

<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>	<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>	<p>(c) katak frog (lalat fly)</p>  <p><i>Frog and fly</i></p>
<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>	<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>	<p>(f) pokok/trees (mendapat mineral dan cahaya matahari/get minerals and sunlight)</p>  <p><i>Trees in a forest</i></p>
<p>(g) tumbuhan/plant (mendapat mineral dan cahaya matahari/ gets minerals and sunlight)</p>  <p><i>Flowering plants and weeds</i></p>	<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>	<p>(i) burung hantu owl (tikus rat)</p>  <p><i>Owl and rat</i></p>
<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>	<p>(k) paku-pakis tanduk rusa staghorn fern (mendapat cahaya matahari/ gets sunlight)</p>  <p><i>Tree and staghorn fern</i></p>	<p>(l) pokok tree (afid/aphid (mendapat nutrien/ gets nutrients))</p>  <p><i>Tree and aphid</i></p>

Study the diagrams given.

1 Method: \_\_\_\_\_ TP12 Explanation of the method: A \_\_\_\_\_ is used for controlling the population of a pest without using a pesticide. TP23 Justify the use of biological control in agricultural sector. TP5/KBAT

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

4 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 \_\_\_\_\_.

## 2.9 AKTIVITI PERBINCANGAN

Faktor yang mempengaruhi saiz populasi  
Factors that affect the size of a population1 State the factors that affect the size of a population in an ecosystem. Choose the correct answers. TP2

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