## تم تحميل هذا الملف من موقع المناهج الإماراتية





## حل ملخص دروس الكتاب سؤال وجواب منهج انسباير

موقع المناهج ← المناهج الإماراتية ← الصف الخامس ← علوم ← الفصل الثالث ← الملف

تاريخ إضافة الملف على موقع المناهج: 09:50:59 2024-06-09

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## التواصل الاجتماعي بحسب الصف الخامس









اضغط هنا للحصول على جميع روابط "الصف الخامس"

## روابط مواد الصف الخامس على تلغرام

<u>الرياضيات</u>

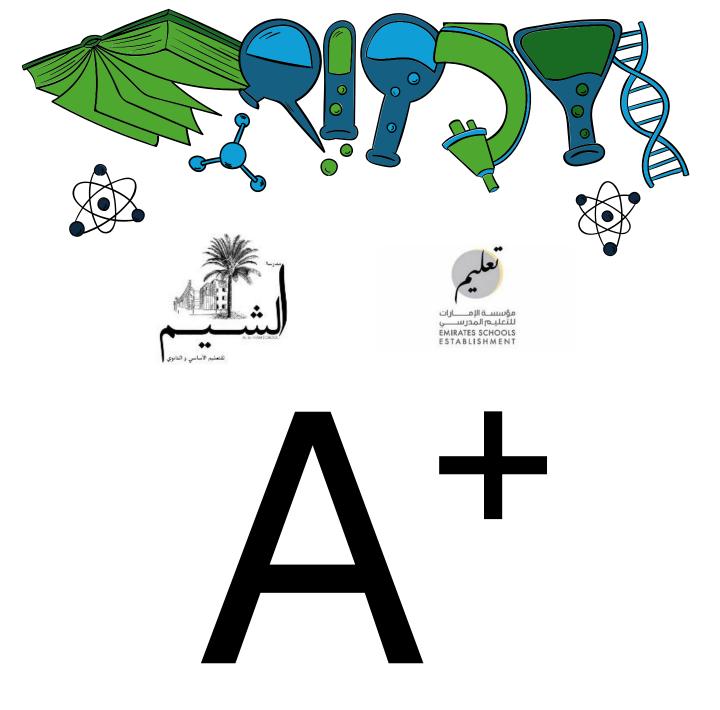
اللغة الانجليزية

اللغة العربية

التربية الاسلامية

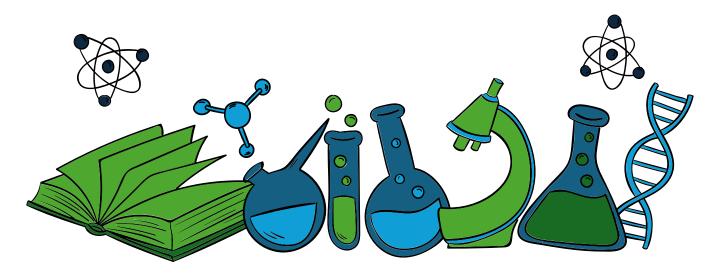
المزيد من الملفات بحسب الصف الخامس والمادة علوم في الفصل الثالث		
مراجعة نهائية وفق الهيكل الوزاري منهج انسباير المسار المتقدم	1	
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المادة علوم في الفصل الثالث	المزيد من الملفات بحسب الصف الخامس و
المسار العام	



Science
Grade 5G
Term 3 2023-2024

Done by: Eiman Alshamsi &Reem Alrashdi



<mark>ابنتي الغالية</mark>

قطعنا شوطا كبيرا هذه السنة

تغيرنا جميعنا

تعلمنا شيئا جديدا

اكتسبنا مهارة جديدة

نحن نتطور وما زلنا نتطو<mark>ر</mark>

وها هنا نحن على <mark>أشراف النهايات</mark>

نهاية عام 2023<u>–2024 الدراسية</u>

نتطلع إلى نهاية سعيدة لتفوق مستحق ونجا<mark>ح مستح</mark>ق

فليكن شعارك:

- 1. أنا أقرأ
- 2. أنا أفهم
- 3. أنا أحدد المطلوب
- 4. أنا أعرف مفتاح الحل
- 5. أنا أختار ال<mark>اخ</mark>تيار الصحيح وأكتب الإجابة الصحيحة

إما أن تستمر إلى النهاية أو لا تحاول على الإطلاق

## Plant survival pages 10-11

Question	Answer key	Note
What is <mark>Energy?</mark>	ability of <mark>work</mark>	Photosynthesis
Which type of energy does	Plant need	Oxygen O2 light energy
plant need to make it is  own food or sugar?	sunlight energy to  do sugar	Sugar
Which type of energy does	Plant use <mark>sunlight energy</mark> to	$6CO_2 + 6H_2O = C_6H_{12}O_6 + 6O_2$
plant need to survive and grow?	make sugar then use sugar energy to survive and growth	
Plant structure: plant part	Root ,stem,leave,stomata ,xylem,phloem	Flower Leaves
What is the <b>role</b> of <mark>root</mark> ?	Take in_ <mark>water_</mark> from <mark>soil</mark> Take <mark>in <u>nutrient</u> from <mark>soil</mark></mark>	Stem
What is the <b>role</b> of stem?	Transport water	
What is the <b>role</b> of leave?	Make <mark>sugar</mark>	
What is the <b>role</b> of <mark>xylem</mark> ?	Is <b>Tissue</b> that  Transport water  Found in stem	photosynthesis products
What is the <b>role</b> of phloem?	Is <b>Tissue</b> that  Transport sugar  Found in leaves  water and miner. (+ xylem	
What is the <b>role</b> of	Is <b>tinny opening allowing <u>air to</u></b>	Stomata
stomata?	enter found in leaves Air:  Carbon dioxide in	Copand Storada Copand Storada Storada Og. H.O
What is the Transpiration?	2. Oxygen out  Evaporation of water from plant's leave Water vapor Happen by Stomata	Transpiration  (a) Unused water evaporates from the leaf surface  (b) The stem draws the water up  (c) The stem draws the water from water from

Question	Key words	Note
How does leave make sugar?	Water and carbon dioxide  combine with presence of sunlight to produce sugar and oxygen  Water + carbon dioxide + sunlight = sugar + oxygen	So, sugar is making in morning
What does plant need to live and grow?  Why plant need enough space?	<ol> <li>Water</li> <li>Air</li> <li>Sunlight</li> <li>Space</li> <li>Nutrient</li> <li>Spread out their roots to get enough water</li> </ol>	
What <b>affect</b> plant <b>growth</b> ?	and nutrients from soil  1. Amount of sunlight 2. Amount of water 3. Amount of air	
Why is soil important for plant growth?  Why are water and air important for plant growth?	Give nutrient to plant  To make energy or sugar or food	

	Root	stem	Leave
matter	Absorb: 1. Water 2. nutrients	Transport water	Take in sunlight energy Take in carbon dioxide Take out oxygen Take out water vapor Make sugar

	Xylem	Phloem	Stomata
Matter	<mark>water</mark>	<mark>sugar</mark>	Air Carbon dioxide Oxygen Water vapor

Question 1	
which plant parts have a role to obtain energy, water, and air?	
Roots take in water from the soil. the xylem in the stem transport water to the parts of the plant. Leaves take in sunlight and carbon dioxide and release oxygem and sugar,	Plants give off
In which <u>tissue</u> of plant does <u>water transportation</u> occur?	Leaves take it carbon dioxid from the air.
In which <u>tissue</u> of plant does sugar transportation occur?  Phloem	Roots take in water and nutrients from the soil.
which plant structure provide movement of matters such as oxyg	en, carbon dioxide and water
	cin carbon aloxide and water
vapor?  Stomata in the leaves	
Which is the name of process of releasing water vapor from plan  It is called Transpiration	t's leaves?
Some plant like cacti can survive in hot area and adapt to little	
rain. why would be an advantage that cacti has a waxy stem?	
It will prevent the loss of water	

In the rain forest some plant climb high into the tree canopy

They climb to access sunlight they need to survive.

.why this would be an advantage?

**4.** MATH Connection Parker investigated how the amount of sunlight affects plant growth. Using his data below, calculate the average growth of each plant. Assume that each plant was provided 20 mL of water per day.

	Amount of Sunlight Per Day	Height in Week 1	Height in Week 2	Height in Week 3	
Plant A	4 hours	1 cm	3 cm	6 cm	3,3
Plant B	8 hours	1.5 cm	4 cm	8 cm	4,5
Plant C	16 hours	1 cm	2 cm	3 cm	2

Which is the highest plant? Plant B
Why is the plant C shorter than plant A?  Because it get more sunlight than it needs. So it didn't grow well
In general, what could you conclude from the result?  If plants get more or less sunlight than needed they will not grow healthy
What other factors can affect plant growth? water, air, nutrients, space, predators
Why sunlight is important for plant survival?  Sunlight give them energy to make their own food

Some farmers growing plants without soil, how will plant survive without soil?

They will survive because they don't need the soil to grow.
They need the nutrients that are in the soil, So by adding the nutrients to water it will grow healthy....

Some plants spread it is root in air, how could this plant get water and nutrients?

Plants that are spreading their roots in air ,grow in very wet area and their leaves absorb water and nutrients



## Interactions of living things pages 26-31

Question	Answer key	Note
What is <mark>ecosystem</mark> ?	made up living things and nonliving things in an environment	Biotic Factors
What is <mark>biotic factors</mark> ?	living things or organisms  Animal+plant+human	
What is <mark>abiotic</mark> factor?	non-living things water +air+sun+soil	Abiotic Factors
What is habitat?	the place in an ecosystem where an organisms live	ocean forest
What is <mark>niche</mark> ?	special role of organisms in the	Biotic Factors
What is <mark>producer</mark> ?	make it is own food  Plant	Producers Consumers Decomposers
What is c <mark>onsumer</mark> ?	need food from other living things  Animals + human	
What is <mark>predato</mark> r?	organisms that <mark>hunt</mark> for <mark>food</mark>	The second secon
What is <mark>prey</mark> ?	the organisms that <mark>eaten</mark> or hunted by predator	Hadding Combines Oneshops
What is herbivore consumer?	eats plant	Animals that eat plants.  Carnivore Carnivore Omnivore  Animals that eat meat.  Animals that eat both plants and
What is <mark>carnivore consumer?</mark>	eats others animal (meat)	meat.
What is <mark>omnivore?</mark>	Eats both plant and animal	

Why is predator important in ecosystem?	to control number of prey so plants or producers and other nonliving resources like water	C. T.
	and air are save or not run out	
Why is important to control number of prey population?	to save resources of earth like water and plants Because prey eats plants	
What would happen to the	rabbits is a <mark>prey</mark> that will be	زیادة= <mark>In</mark> crease
<b>population</b> of <mark>rabbits</mark> if	<mark>hunted</mark> by fox <mark>predato</mark> r, so	نقصان = <mark>De</mark> crease
number <mark>of foxes increased</mark> ?	number of rabbits in the	
	ecosystem will <mark>decrease</mark>	
What is the niche of	Break down plant matter	
earthworm in the forest?		
How <mark>does living things</mark>	living things interact with each	
<mark>interact with each other</mark> in	other by giving energy or	Owl (consumer)
ecosystem?	nutrients to each other	
	<u>Like</u>	
	rabbit eat plant to get energy	Caterpillar (consumer) Frog (consumer) Snake (consumer)
	from plant	+>+39+69
	Rabbit give energy to fox when	
	fox eat rabbit	
How does <mark>living things and</mark>	Living things can cycle the	Nonliving give
nonliving things interact	matter of nonliving things	resources to living
with each other in	Like water cycle through	thing survive
ecosystem?	transpiration happen by plant's	Like water
	<u>leaves</u>	<mark>Shelter</mark>
	Nitrogen cycle through bacteria	Air
	Oxygen cycle and carbon dioxide	
	cycle through plant and animal	

Question	Answer key	Note
What is invasive species?	an <mark>organisms</mark> that is <b>introduced</b> to a <b>new ecosystem</b> and <b>causes harm</b>	
What harms could cause by invasive species?	<ol> <li>health</li> <li>environment</li> <li>economy</li> </ol>	The cone toad (ضفدع)
How does organisms become invasive?	When No one can hunt it or eat it so number of invasive organism increasing with out control	was introduced to Australia to eat beetles
Why <mark>invasiv</mark> e has <mark>bad</mark> or negative impact in ecosystem?	Compete other organisms for food resources ,water and shelter or habitat	because (خنفساء)because beetles were eating sugar cane crops محاصيل قصب السكر Cane toad has toxic skin so no predator
What does interaction mean?	1) explain how living things need other living things to survive. Like rabbit eat plant 2) Explain how living things need nonliving to survive Like rabbit need water or home	will eat the cone toad

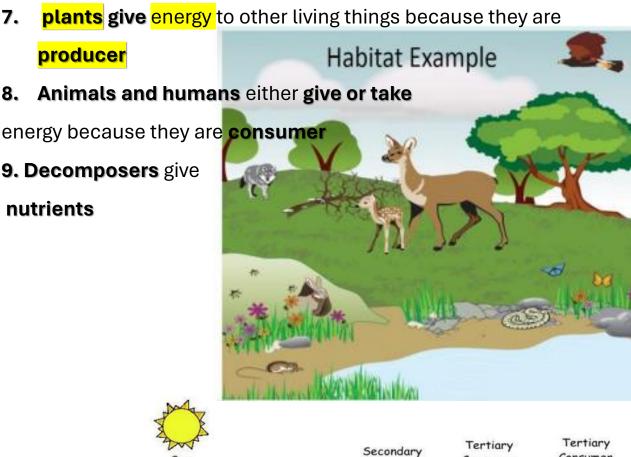
## Role of decomposers pages 42-43

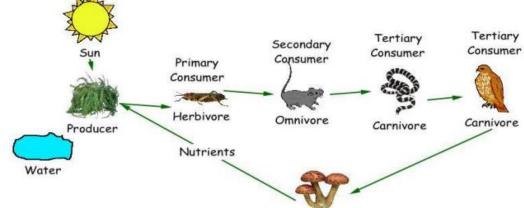
Question	Answer key	Note
What is decomposition?	is <mark>breaking down</mark> or decaying of <b>plant and animal material.</b>	Older plants die  De
What is decomposers?		Aving plants take up frients from humus in the soil  Soil organisms feed on dead plants rotting them down to humus. The humus contains nutrients.
What are e <mark>xamples</mark> of decomposers?	<ol> <li>earthworm</li> <li>Insects</li> <li>Bacteria</li> <li>Fungi</li> </ol> Worm	Mushroom Insects Bacteria
What is bacteria?	Bacteria are a type of organism made up of a single cell	
What is <mark>fungi?</mark>	is a type of decomposer coms in many forms	
What are <mark>examples of fungi</mark> ?	<ol> <li>Yeast</li> <li>Mushroom</li> <li>Mold</li> <li>Mildew</li> </ol>	
What are the differences between fungi and plant?	<ol> <li>plant makes it is own food</li> <li>Fungi breck down plant and animal matter to make food</li> </ol>	
What is the role of decomposers in ecosystem?	Break down plant and animal matter to return <mark>nutrients</mark> to the <mark>soil</mark>	Nodules can appear or mosts where bacteria change nitrogen.
What is the role of bacteria that live in root?	change form of nitrogen to new form that can plant absorb by roots	
How adding molded fruit or waste food can benefits to soil health?	Mold is a fungi which is type of decomposers that help to give nutrients to soil	

What is compost heap?	Waste from food or animal's waste	سماد
Why compost heap is important to soil?	because compost heap have large number of decomposers like mold ,bacteria and fungi which help breaking down dead matter and giveback nutrient to soil	

#### **Summary**

- 1. ecosystem= biotic +abiotic factors
- 2. **Biotic** like plant +animal+human+decomposers
- 3. Abiotic like water+air+rocks +sun light
- All factors are interacting with each other to provide life 4.
- All factors are important because each factors have niche (job) 5.
- 6. Plants do it is own food or energy,
- 7.





Producers	Make their own food
Consumers	Needs food from other sources
Herbivores	Eat plants
Carnivores	Eat other animals
Omnivores	Eat both plants and animals
Predators	An animal that hunts other animals for food
Prev	Animals that are eaten by other animals

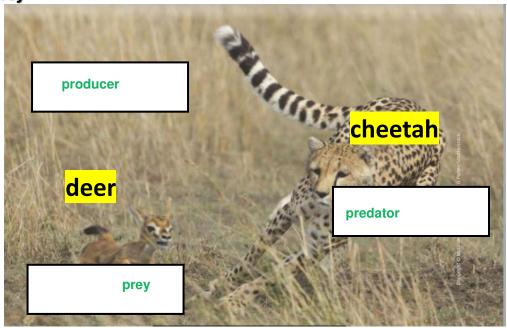
Decomposer

1. Use word bank to label each elements of the picture below

producer

predator

prey



What is the habitat of deer and cheetah? it is the grassland
Which is an example of carnivore's consumer??
What is the niche of grasses? to produce oxygen and food
Which is an examples of abiotic factors?rock.soil.water.
Which are an examples of biotic factor? grass cheetah deer
Name a producer grass or plants
Name an herbivoredeer
What would happen to deer and cheetah population if an invasive species of plant was
introduced into the ecosystem that competed with deer food
the population of the deer will decrease
How many consumers in the picture?two
what would happen to the body of cheetah after
die? it will be decomposed and returned to the soil as nutrients

### Earth's system page 66

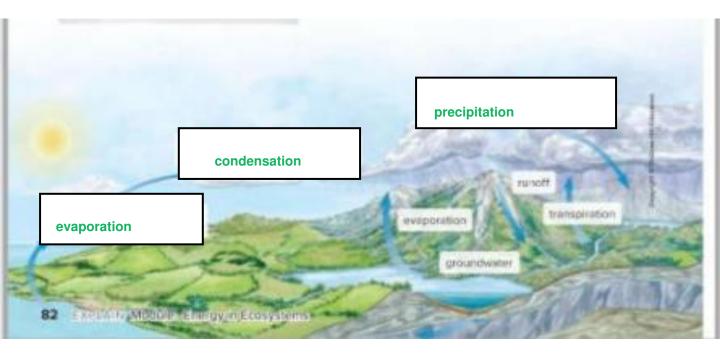
Question	Answer key	Note
What are Earth's system?	Systems are a collection of different components that all work together	Hydrosphere
Are all Earth's system work together?	yes all <mark>Earth's system work together Interact with each other</mark>	Themosphere  Atmosphere  Stratosphere  Stratosphere
What is <mark>atmosphere?</mark>	is layer of <mark>gases</mark> surrounding Earth	Nitrogen Composition of Air
What are examples of atmosphere?	Nitrogen  Carbon dioxide  Oxygen  Water vapor	Carbon Dioxide, Water Vapour and other Gases 11%
What is <mark>geosphere?</mark>	solids and molten rocks inside  Earth	
What are examples of geosphere?	Soil Rocks Land features like: mountain, hills ,volcanoes	
What is <mark>hydrosphere</mark>	Liquid and solid water found in Earth	
What are examples of hydrosphere?	Ocean River Glaciers Ice caps	Covers more than 70% Salt water (ocean ) Fresh water (ice)
What is <mark>biosphere?</mark>	all living things	
What are examples of biosphere?	Plants Animals Human Decomposers	



Which type of earth's system does river belong to?hydrosphere
. Maria (1997)
List examples of geosphere components from the picture above
. wools
1. <u>rock</u>
2
2
3. mountains
J
Which best describe the system <mark>of gases that surrounding earths</mark>
?atmosphere
List examples of biosphere components from the picture above
1. plants
2. deer

# Cycles of matter in Ecosystem pages 82-84

Question	Answer key	Note
What is the water cycle?	Continuous movement of water between earth's surface or air	Water changes among three states of matter Gas, liquid and solid
What is evaporation?	water change from <mark>liquid to gas</mark> in the form <mark>water vapor</mark>	Water goes to atmosphere Liquid to gas
what is transpiration?	water <mark>evaporates from plant's</mark> leaves	One way water vapor returns to atmosphere
Which energy cause water evaporates	Sun energy	
What is condensation?	Water vapor cools(gas) and changes to liquid Forms clouds	Gas to liquid
What is precipitation?	water falls from clouds	Water return to the Earth's surface
What are forms of precipitation?	<ol> <li>Rain</li> <li>Sleet</li> <li>Snow</li> <li>Hail</li> </ol>	Sleet :solid Snow: solid Hail: solid Rain: liquid
What is <mark>runoff?</mark>	Water <mark>flows on earth</mark> and gathers in lakes, streams, ocean and groundwater	
Which type <mark>of water could plant absorb from the soil?</mark>	Groundwater	



- 1. Complete the diagram above with missing vocabularies in the blank boxes
- 2. Which earth's system does water vapor rise into?..atmosphere.....
- 3. Which type of water does plant absorb from the soil?..groundwater......
- 4. Which the name of this cycle? water cycle
- 5. Which is the main source of energy needed for this cycle?..\$w.....
- 6. Which best describe the process of failing liquid water from clouds such as rain precipitation
- 7. Which best describe the process of forming clouds?..condensation
- 8. Which plant's structure release water vapor during transpiration?. leaves by stomata

Question	Answer key	Note
What is the nitrogen cycle?	Continuous circulations of nitrogen from air to soil to organisms and back to air or soil	Air is made up 78% of nitrogen(gas) not all living things can take nitrogen gas
Which nitrogen form can be absorbed by roots in plant?	plant can not take nitrogen gas from air but take nitrogen liquid form from <mark>soil</mark>	
Why <mark>nitrogen</mark> is important for plant growth?	nitrogen is important for plant to make protein  Protein and nitrogen are parts of nutrients	
How does plant can take in nitrogen?	Bacteria build up nodules appear in roots where can change nitrogen gas into a form plants can use	Nodules can appear on roots where backers change nitrogen.
Which process could fix nitrogen gas to form can plant absorb?	<ol> <li>Bacteria that live in the roots</li> <li>Volcanic activity and lightning</li> </ol>	البكتيريا تغير من شكل النيتروجين لشكل يسمح الجذور امتصاصه النشاط البركاني والبرق يغير من شكل النيتروجين الموجود في الجو الى شكل يمكن للنبتة
How does nitrogen go to animals?	Animals that eats plant such as cows ,will get nitrogen from plant they ate	Herbivore consumer take nitrogen from plant
How does <mark>nitrogen return</mark> to soil again?	As animals eats plants after eating , <mark>animals release waste</mark> that have nitrogen	
How does nitrogen return to the air or atmosphere again?	Decomposers also break down dead matter of plant and animal and give back nitrogen to air	

#### **Summary**

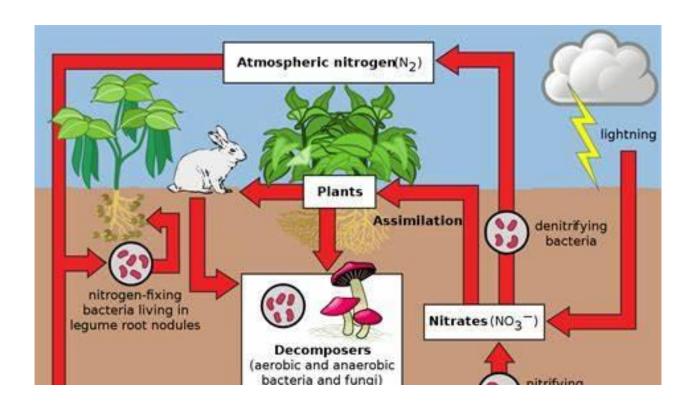
Nitrogen is existing in air need to be fix before other organisms take or can use

It can be fix into two ways:

- 1. Bacteria live in roots (nodules)
- 2. Volcanic and lightning

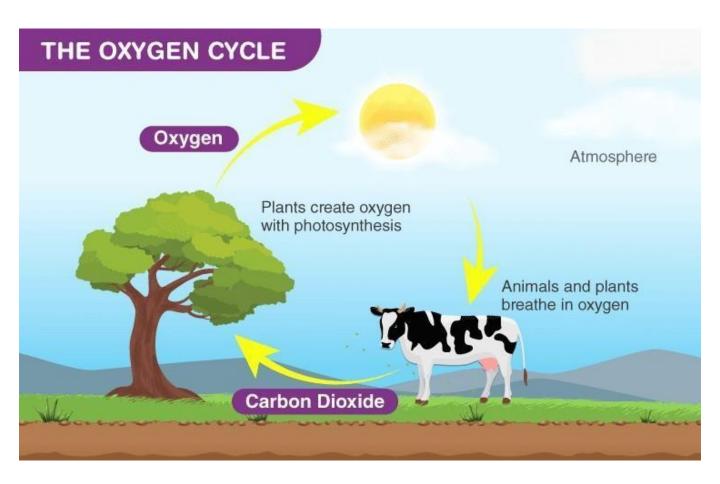
Nitrogen return to soil or geosphere because of animal waste

Nitrogen return to air or atmosphere because of decomposers





Ч	now can introgen be absorbed by plants
	BActeria in the roots change the nitrogen gas into a form plants can use
	What is the role of <mark>bacteria</mark> live in plant's roots?
••••	to break down the nodules and change the nitrogen gas into a form plants can use
	How can nitrogen return to the atmosphere?
••••	by decomposers and bacteria
	How can nitrogen return to soil?
••••	By bacteria and decomposers
	What is the role of decomposers in the nitrogen cycle?
	to change the nitriogen into a form that can be used by plants
	What is the role of herbivore consumer in the nitrogen cycle?
	when a herbivore consumers eat plants it store nitrogen when it dies nitrogen turn back to the soil



#### Plant:

- 1. Take in carbon dioxide to make sugar
- 2. Take out oxygen as waste

#### Animal:

- 1. Take in oxygen to survive
- 2. Take out carbon dioxide as waste