

تم تحميل هذا الملف من موقع المناهج الإماراتية



حل تجميعة صفحات الكتاب وفق الهيكل الوزاري منهج انسابير

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تاريخ إضافة الملف على موقع المناهج: 2024-06-06 16:11:29

إعداد: Granil Gilson

التواصل الاجتماعي بحسب الصف الخامس



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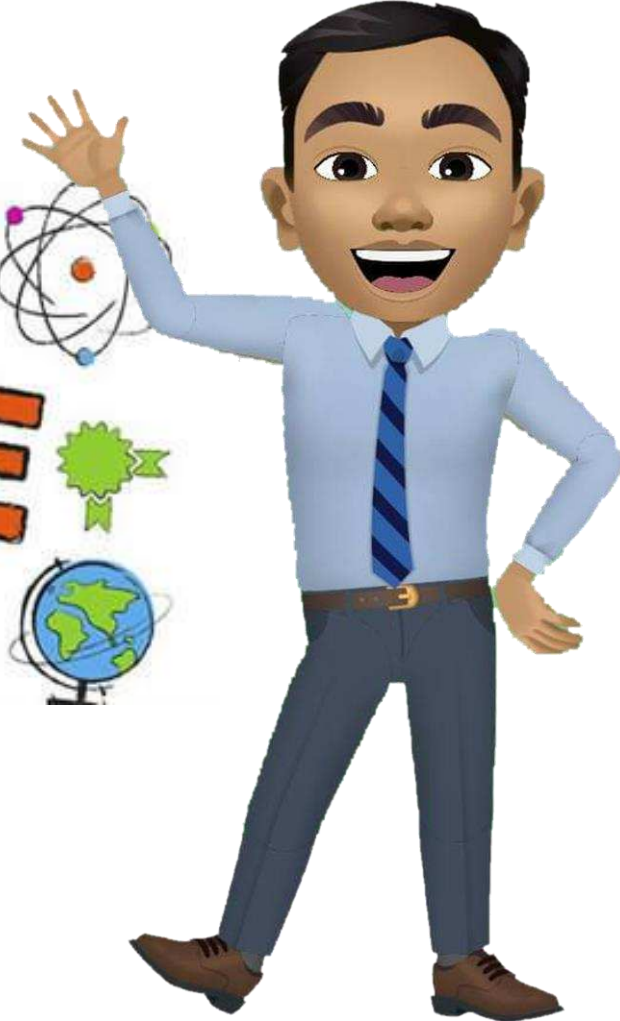
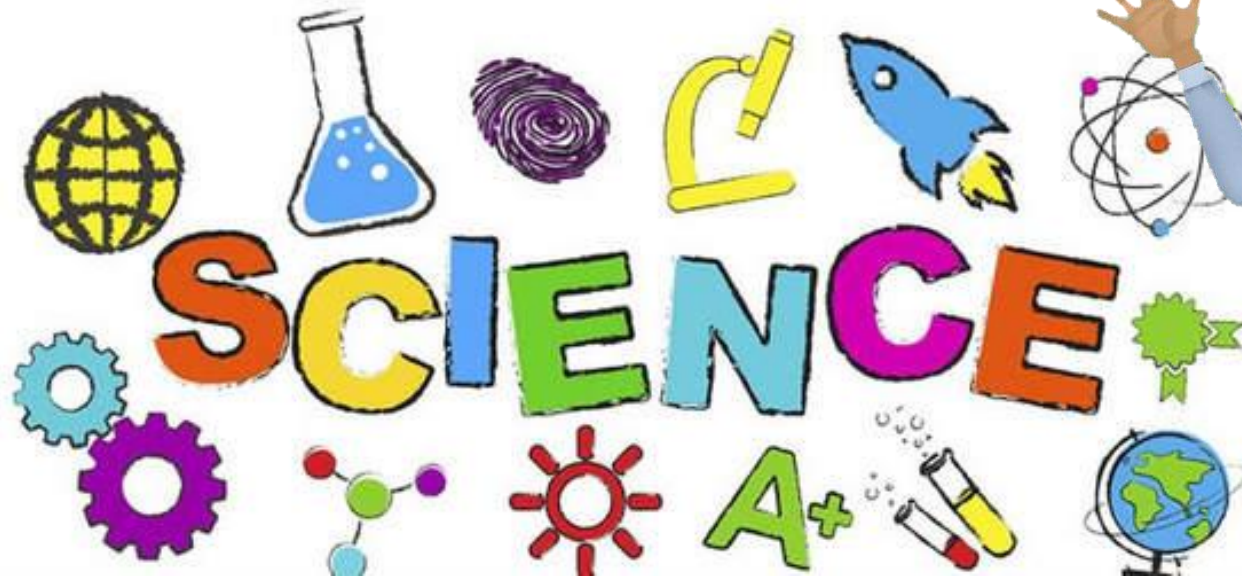
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Academic Year	2023/2024
العام الدراسي	
Term	3
الفصل	
Subject	Science/Inspire
المادة	علوم/انسبير
Grade	5
الصف	
Stream	General
المسار	العام
Number of MCQ	15
عدد الأسئلة الموضوعية	
Marks of MCQ	60
درجة الأسئلة الموضوعية	
Number of FRQ	5
عدد الأسئلة المقالية	
Marks per FRQ	40
الدرجات للأسئلة المقالية	
Type of All Questions	MCQ/ الأسئلة الموضوعية FRQ/ الأسئلة المقالية
نوع كافة الأسئلة	
Maximum Overall Grade	100
الدرجة القصوى الممكنة	
Exam Duration - مدة الامتحان	120 minutes

# End of Term 3 Exam 2023-2024

## Grade 5 Science

### Al Aasimah School C2 Boys



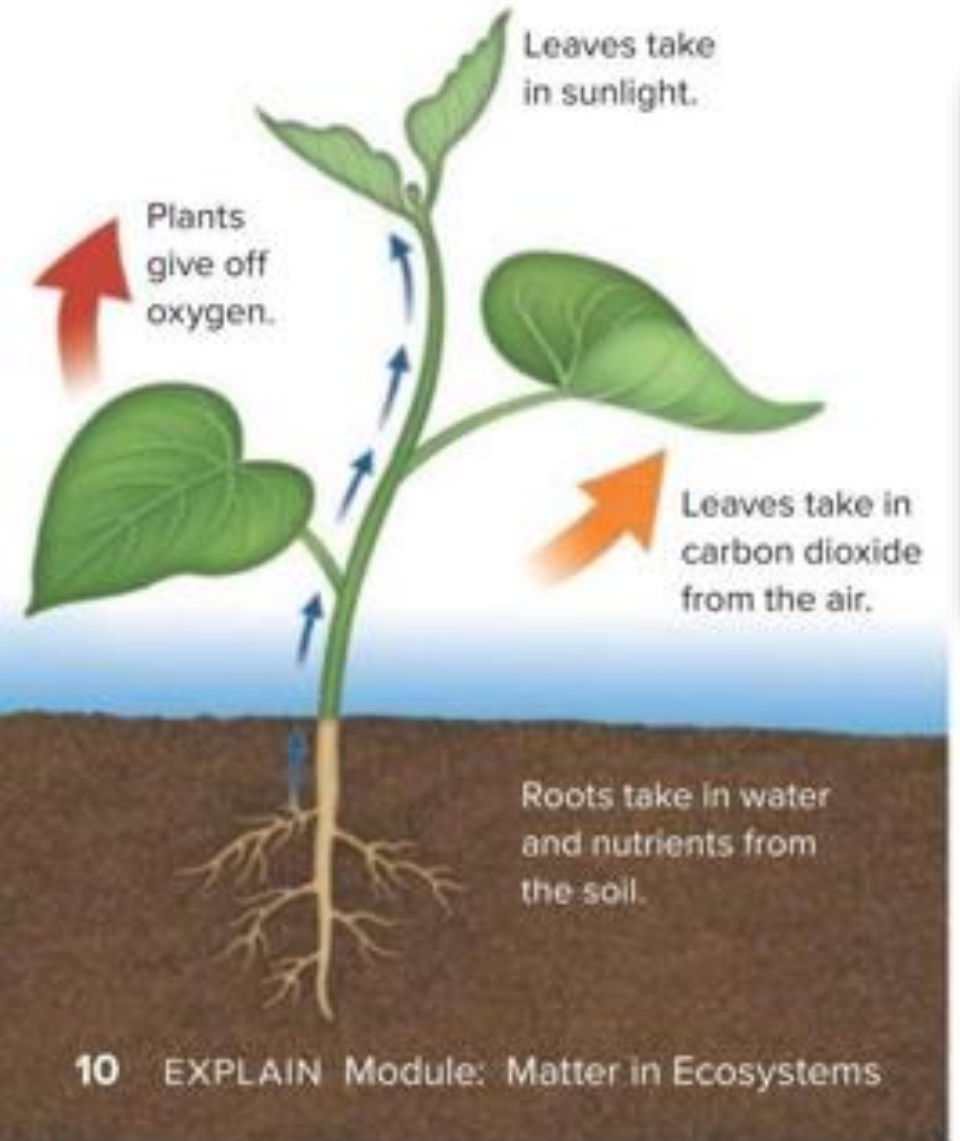
**Mr. Gilson Granil**  
Teacher

1

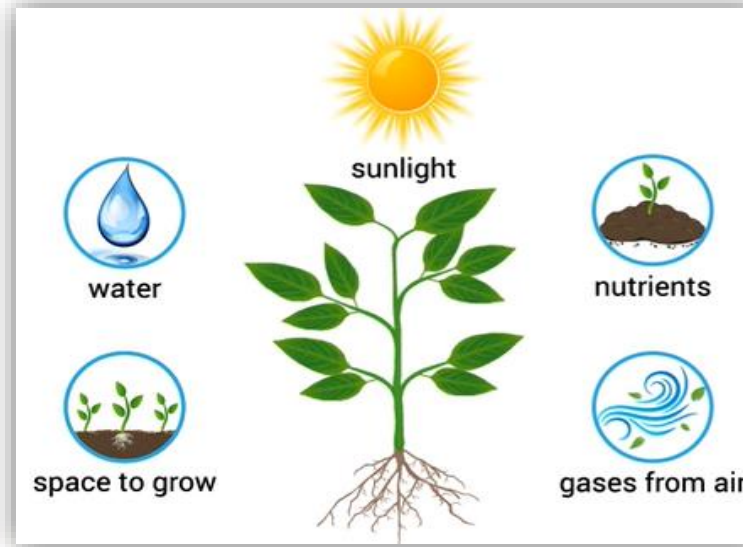
5-LS1-1 Students will support an argument that most of the mass of a plant is obtained from water and air and not from soil.

Figure page 10

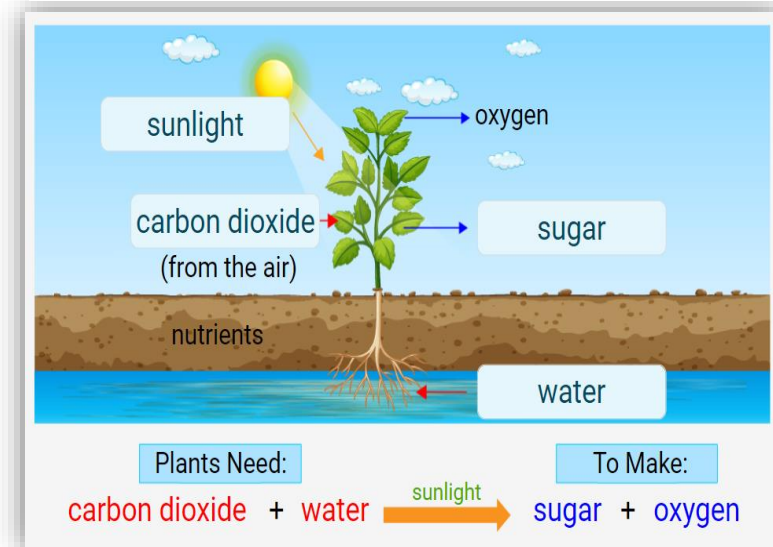
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## What Plant Needs



## How Plants make Food



## Special Plant Structures

1. **Stomata** – tiny openings underside of leaves
2. **Xylem** – found inside the stem; moves water upward
3. **Phloem** – moves sugars to all plant parts



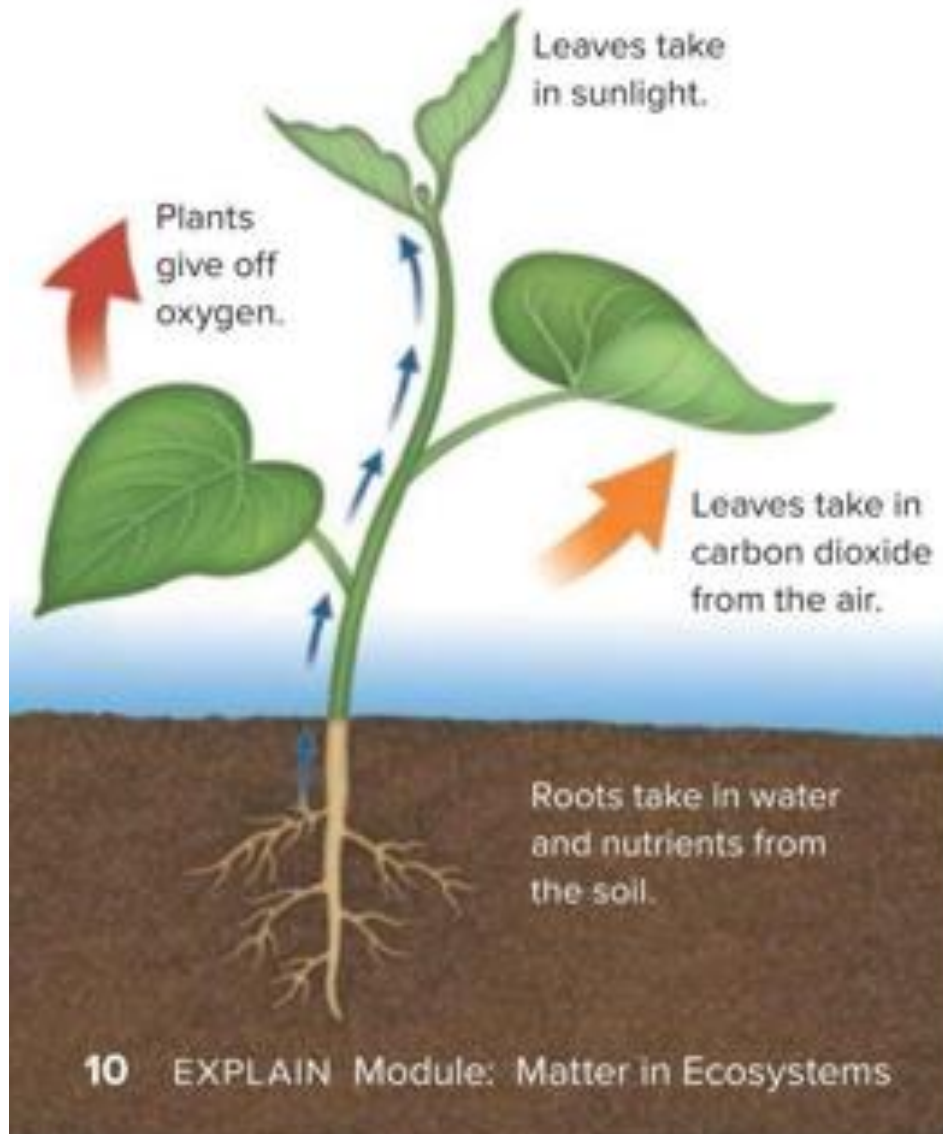
2

5-LS1-1 Students will support an argument that most of the mass of a plant is obtained from water and air and not from soil.

Figure page 10

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Explain how the diagram **provides evidence** of the major roles of the different plant parts and the **flow of energy, water, and air.**

### 1. Leaves

- take in carbon dioxide
- give off oxygen
- capture energy from the Sun.

### 2. Roots

- take in water and nutrients.

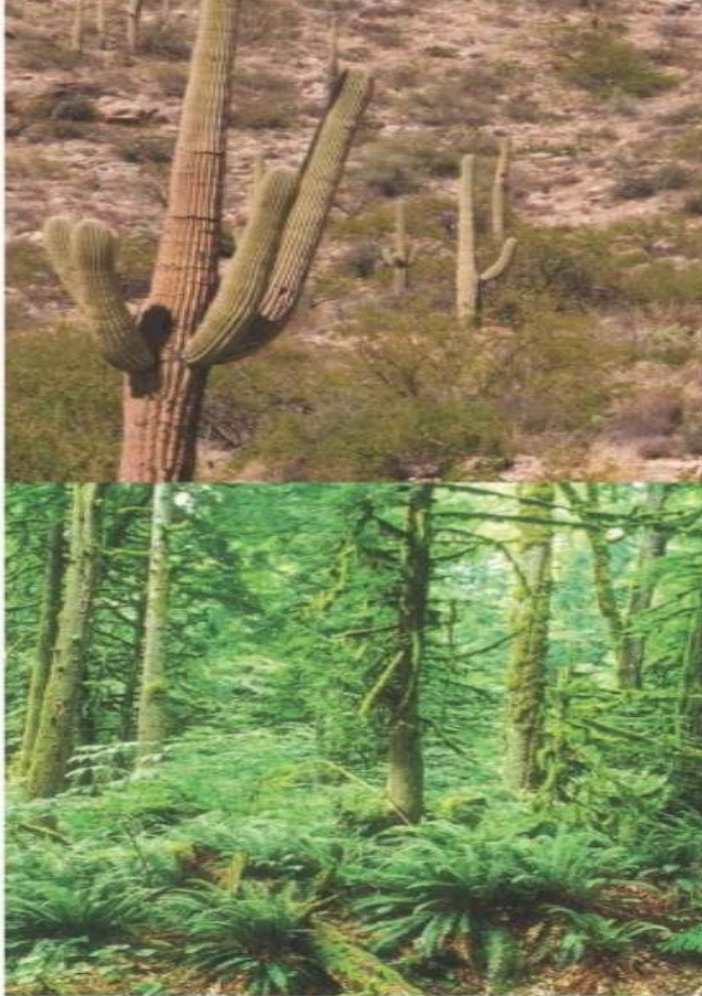
### 3. Stem

- moves water and nutrients from roots to leaves

3

5-LS1-1 Students will support an argument that most of the mass of a plant is obtained from water and air and not from soil.

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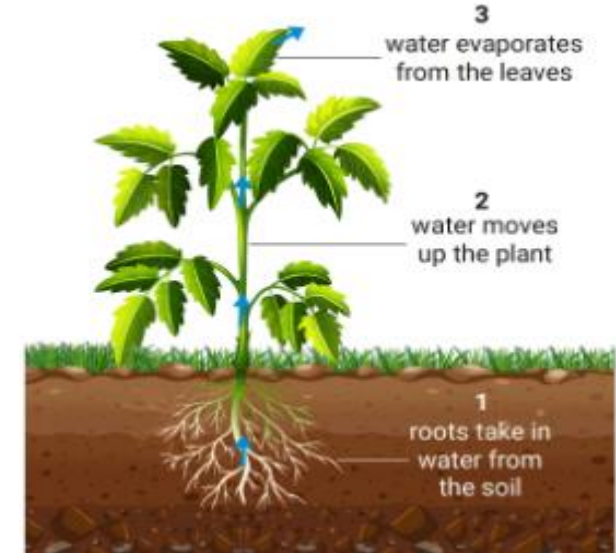


Some plants need more water than others. Cacti can survive in deserts with little rain, while the plants in a rain forest live in a very wet area.



### Three-Dimensional Thinking

- Which is found inside the stem of a plant?
  - epidermis
  - root hairs
  - xylem
  - leaves
- Explain the process of transpiration.



Transpiration is the loss of water through a plant's leaves. It drives the movement of materials throughout a plant. As water evaporates from the leaves, more water is carried from the bottom of the plant to the top. Water moves into the leaf, replacing the water that has evaporated.



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Figure page 15

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## Soil-less Gardens

Agricultural and food science technicians might study how to grow food crops without soil. Research ways of growing plants without soil by reading the Investigator article *Soil-less Gardens*, going online to teacher-approved websites, or by finding books on hydroponics at your local library.

**WRITING Connection** Write a persuasive argument for why plants should be grown with or without soil by



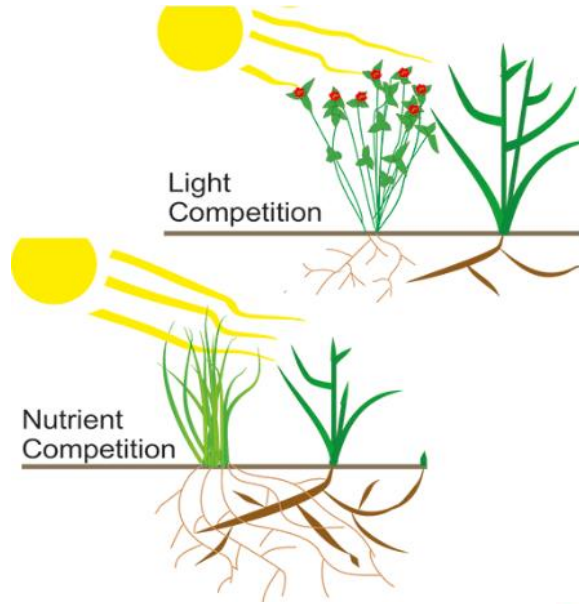
**Hydroponics is a method of growing plants without soil. Hydroponic plants are exposed to light and plant roots are exposed to water to allow for the process of photosynthesis.**

5

5-LS1-1 Students will support an argument that most of the mass of a plant is obtained from water and air and not from soil.

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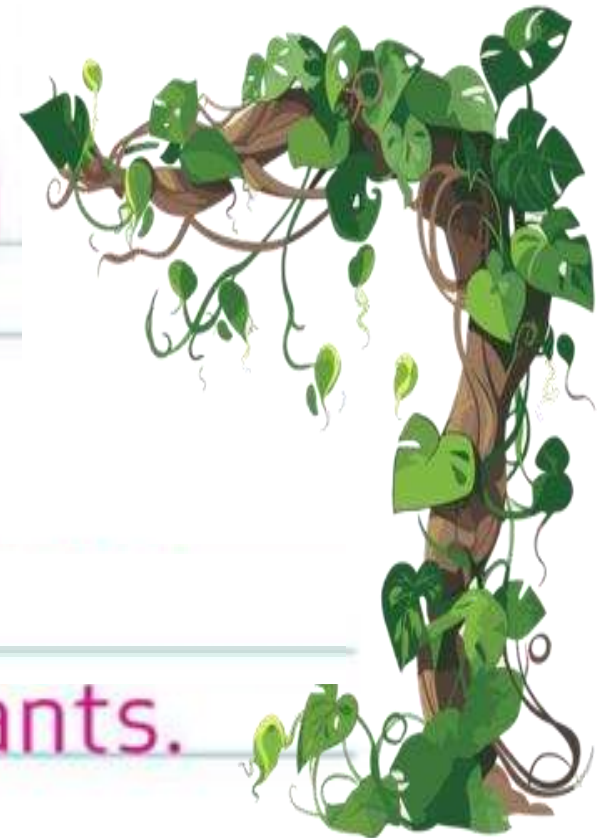


1. Why would it be a disadvantage if plants grow too close together?

Plants that grow too close together compete for the same resources or need more space to grow bigger.

2. Some woody vines can grow on rainforest trees and climb high into the tree canopy. Why would this be an advantage?

Vines can access sunlight more by climbing the stem of taller plants.



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5-LS2-1 Students will use models to show the relationships between living things in an ecosystem.

U2M1L2 page 28



*Cane toads from South America were introduced to Australia to eat the large amount of beetles in the sugar cane crops.*



An organism that is put into a new ecosystem and causes harm to that area is called an **invasive species**.

Characteristics of invasive species:

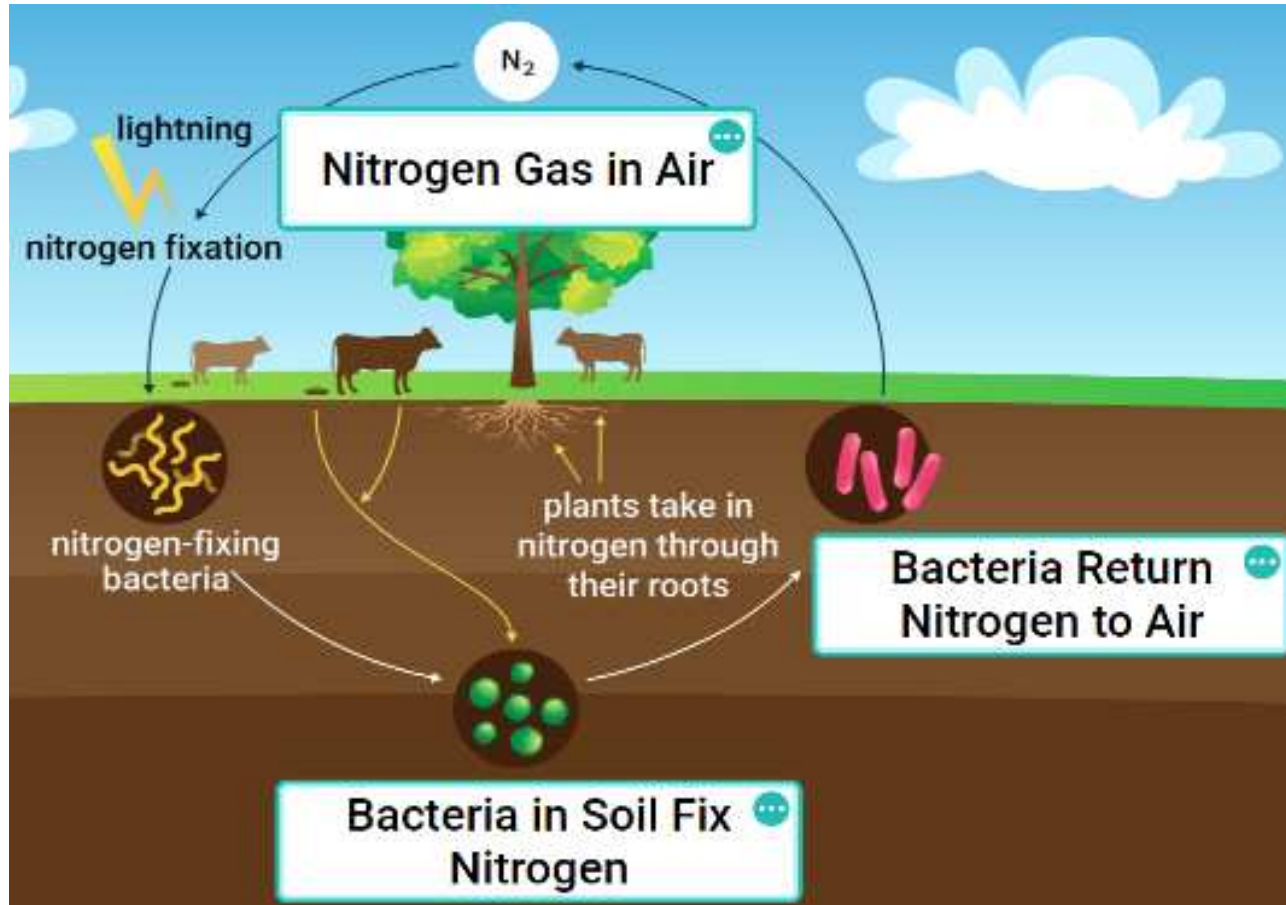
1. causes harm
2. causes diseases
3. spreads quickly
4. no known predator



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5-LS2-1 Students will develop and use models of how matter cycles through ecosystems. Students will also be able to explain how these cycles affect the ecosystem.

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**nitrogen cycle**

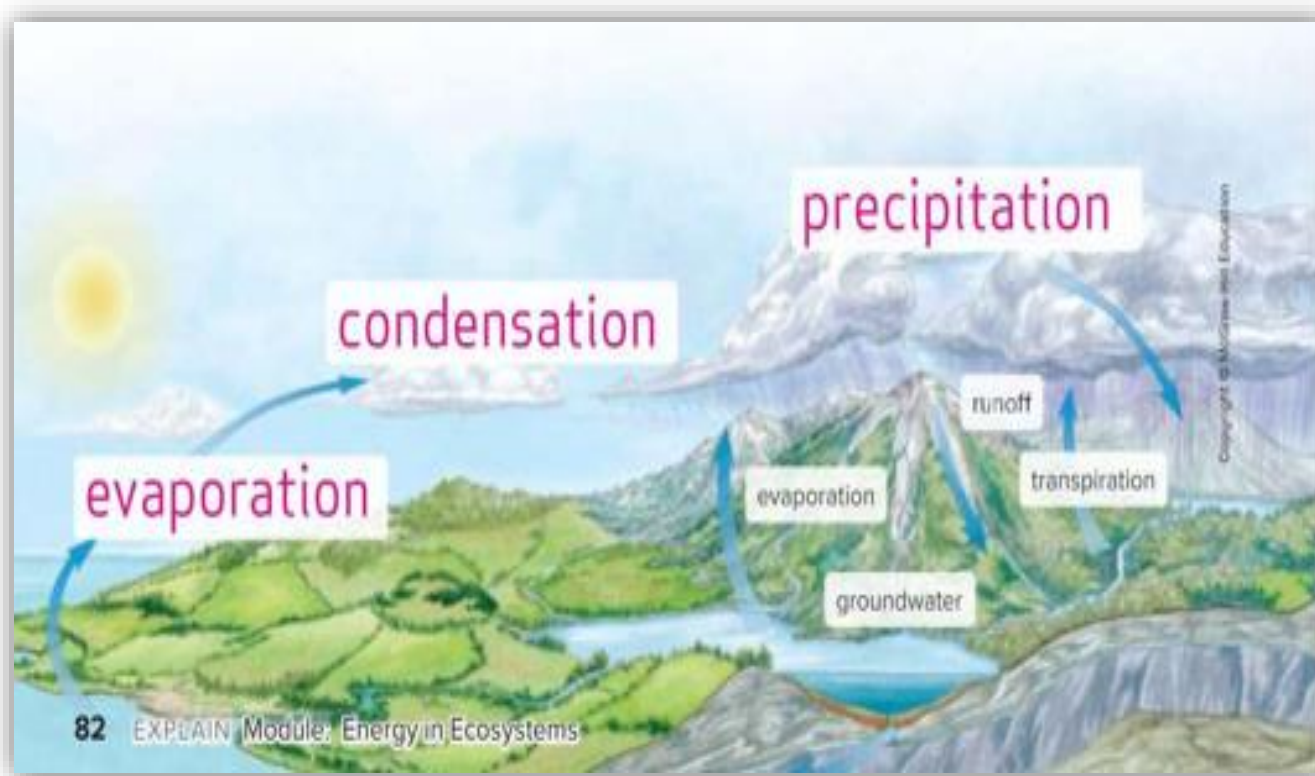
The **nitrogen cycle** is the continuous movement of nitrogen from air to soil to organisms over and back to air or soil.

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5-LS2-1 Students will develop and use models of how matter cycles through ecosystems. Students will also be able to explain how these cycles affect the ecosystem.

Figure page 82

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The **water cycle** is the continuous movement of water between Earth's surface and air.

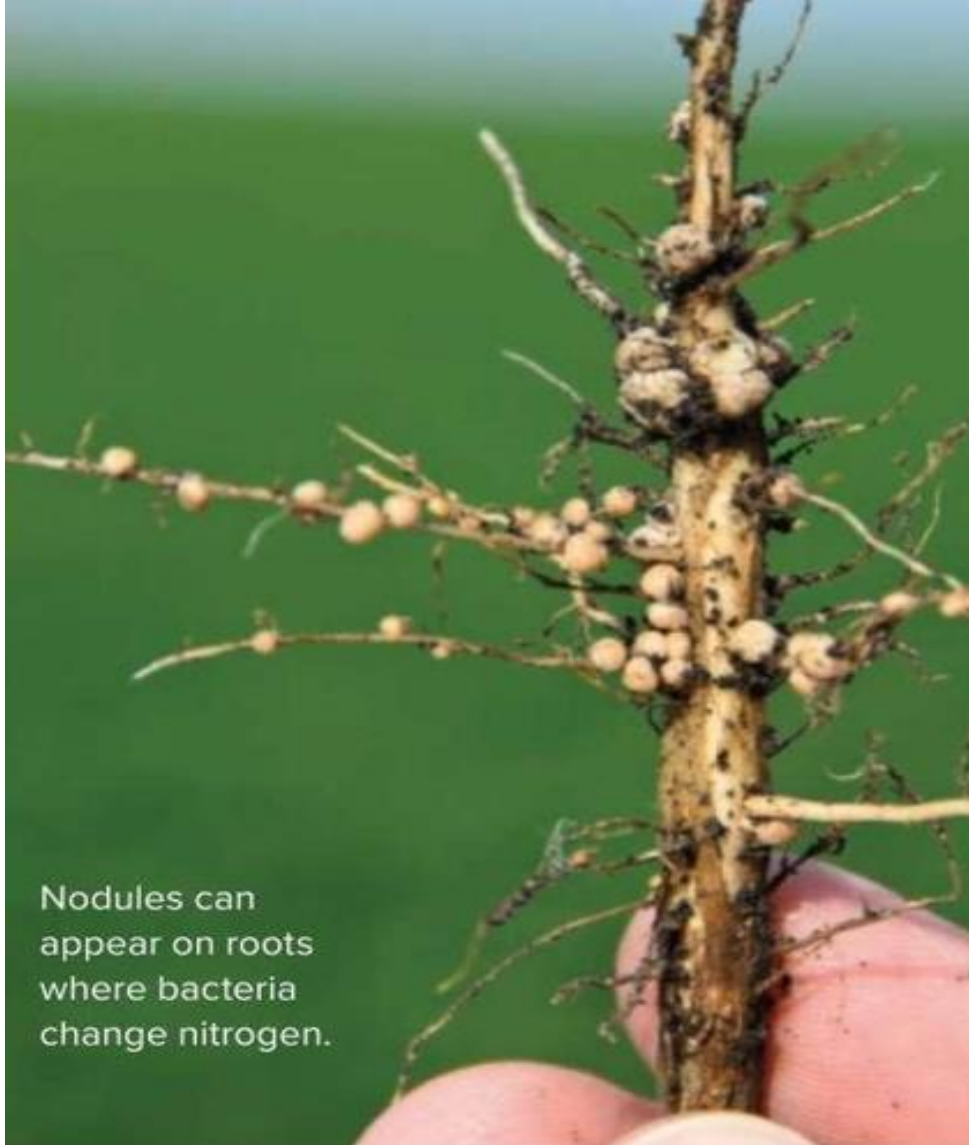
**water cycle**

9

5-LS2-1 Students will develop and use models of how matter cycles through ecosystems. Students will also be able to explain how these cycles affect the ecosystem.

Figure page 83

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### Three-Dimensional Thinking

2. Construct an explanation about the role that bacteria play in the nitrogen cycle.

Some bacteria live in the roots of plants. They pull nitrogen from the air and trap it in the soil. Plants use this nitrogen to grow. Animals that eat plants benefit from the nitrogen in plants that is used to make proteins.



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5-LS2-1 Students will use models to show the relationships between living things in an ecosystem.

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- All of the living and nonliving things in an environment make up an **ECOSYSTEM**.
- Ecosystem are **different sizes**. Some are large, and some are small.
- Living things depend on other living things and the nonliving things in their environment.



- The living things are called **BIOTIC factors**.
- The nonliving things are called **ABIOTIC factors**.

### Abiotic Factors



### Biotic Factors



11	5-LS2-1 Students will use a model to identify matter on Earth as part of Earth's systems.		U2M2L1 page 82
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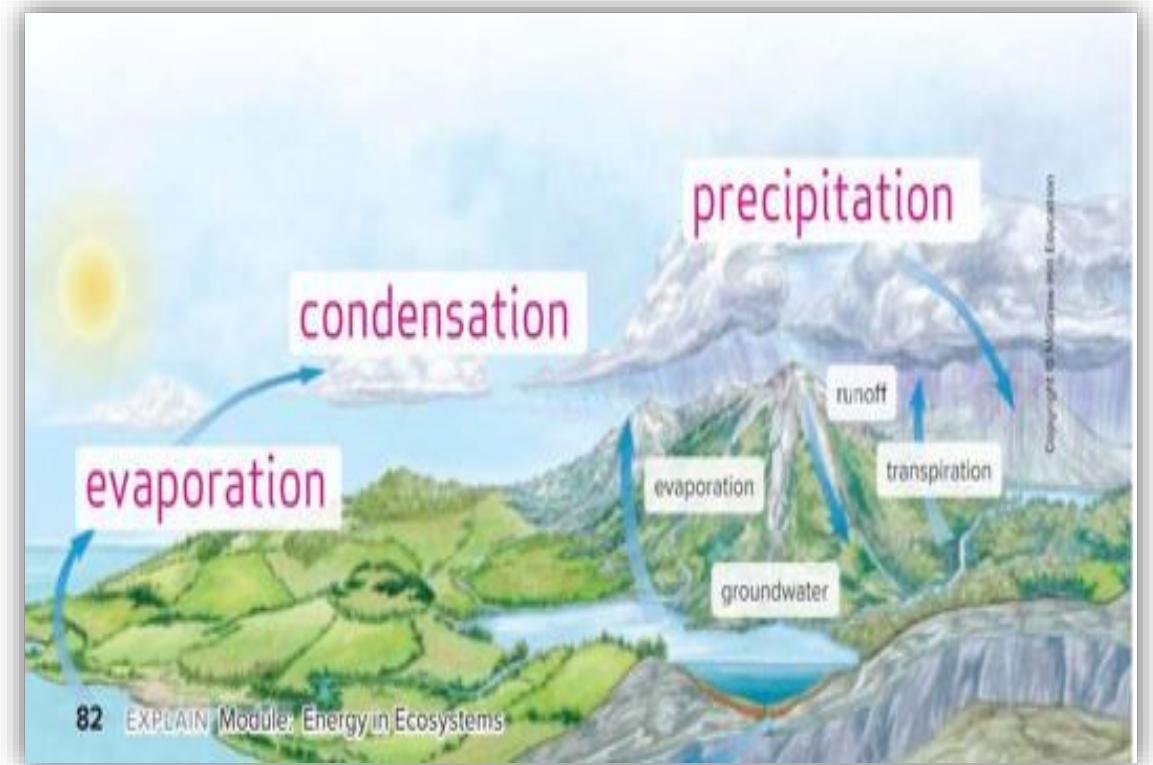
## Three-Dimensional Thinking

1. The water cycle includes water evaporating into water vapor which can form clouds.
  - A. True
  - B. False
3. **ENVIRONMENTAL Connection** How does conserving the amount of water we use affect the water cycle? Circle all that apply.
  - A. limits the amount of water we remove from natural waterways
  - B. allows natural water levels to remain at healthy levels
  - C. adds pollution to nearby waterways

The **Sun** is energy source for water cycle.

### Processes in the Water Cycle:

1. **Evaporation** – liquid to vapor
2. **Transpiration** – evaporation of water from plant's leaves
3. **Condensation** – vapor to liquid
4. **Precipitation** – water falls from clouds as rain, snow, sleet or hail
5. **Runoff** - water flows over Earth's surface and collects on bodies of water



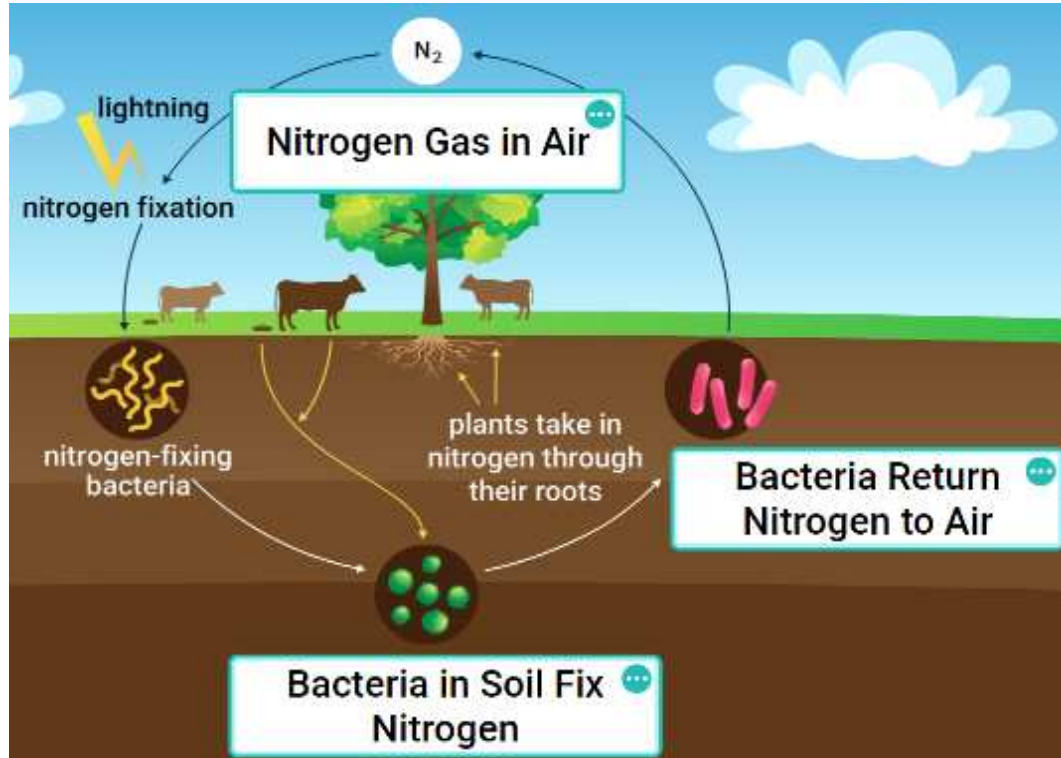
**water cycle**



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5-LS2-1 Students will develop and use models of how matter cycles through ecosystems. Students will also be able to explain how these cycles affect the ecosystem.

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## nitrogen cycle

1. Nitrogen makes up **78%** of air. It is needed by organisms to live and make proteins.
2. Nitrogen **can't be used directly** but must be fixed first to usable compounds by bacteria in the soil or by lightning.
3. Decomposers and bacteria help return the nitrogen back into the air by decaying plants and animals

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5-LS1-1 Students will support an argument that most of the mass of a plant is obtained from water and air and not from soil.

Figure page 9

U2M1L1 page 9

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	Average
Plant A	4 hours	1 cm	3 cm	6 cm	3.3 cm
Plant B	8 hours	1.5 cm	4 cm	8 cm	4.5 cm
Plant C	16 hours	1 cm	2 cm	3 cm	2.0 cm

### Communicate Information

5. Which conditions favored the most growth?

The plant that was exposed to 8 hours of light showed the most growth.

6. Which plant had the least growth? What can you infer from those results?

Plant C showed the least growth. When exposed to more sunlight, plants might need more water to grow.

## Energy Roles

- Organisms that make their food are called **producers**.
- Organisms that get food by eating are called **consumers**.



### 3 Types of consumers

1. **Herbivore** – eats plants only
2. **Carnivore** – eats animals only
3. **Omnivore** – eats both plants and animals.



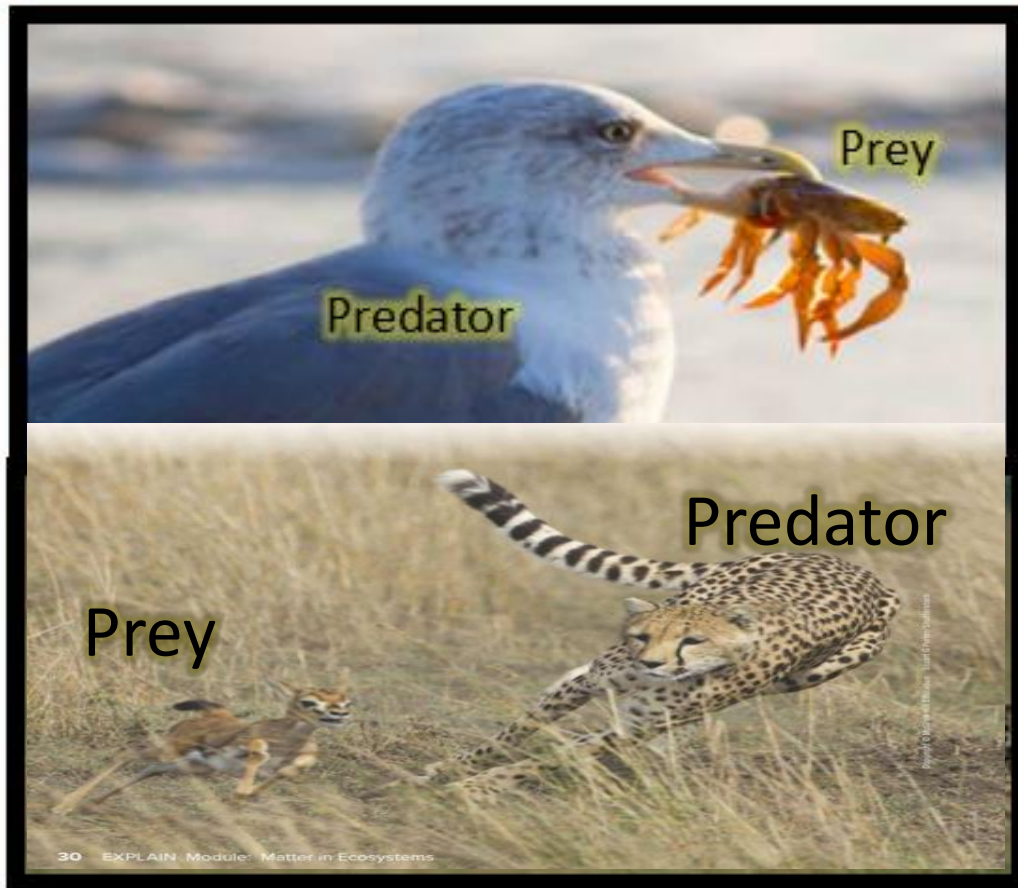
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5-LS2-1 Students will use models to show the relationships between living things in an ecosystem.

Figure page 30

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## Prey or Predator



The organisms that hunt for their food are **predators**.

The organisms that are hunted and killed are **prey**.

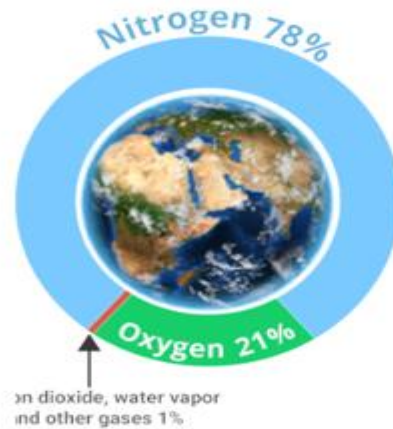
**Population** is a group of the same organisms living in the same area.

19 5-ESS2-1 Students will use a model to identify matter on Earth as part of Earth's systems.

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The **atmosphere** is made up of **layers of gases** that surround Earth.

These gases protect life on Earth and provide oxygen and carbon dioxide needed by living things.



The **geosphere** is made up of **all rocks on Earth**. It includes rocks found on and below Earth's surface.

Examples: mountains, volcanoes, soil, and rocks

The **hydrosphere** has **all of Earth's water** in solid and liquid form.

Salt and fresh water cover more than 70% of Earth.



The **biosphere** includes **all living things** on Earth.

All parts of Earth where life is found - the air, water, and land make up the biosphere.

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5-ESS2-1 Students will use a model to identify matter on Earth as part of Earth's systems.

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### Three-Dimensional Thinking

1. Which of the following is *not* part of Earth's geosphere?
  - A. mountains
  - B. soil
  - C. rivers
  - D. volcanoes
2. The biosphere contains all of the nonliving things on Earth.
  - A. True
  - B. False
3. The \_\_\_\_\_ includes all the gases around the Earth.
  - A. hydrosphere
  - B. atmosphere
  - C. geosphere
  - D. biosphere



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5-LS2-1 Students will use models to show the relationships between living things in an ecosystem.

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## Habitat or Niche?

The place where an organism lives is called its **habitat**.

The specific role an organism has is its **niche**.



### Three—Dimensional Thinking

1. An organism's role in an ecosystem is its \_\_\_\_\_.
  - A. habitat
  - B. niche
  - C. producer
  - D. prey
2. Think about a marine ecosystem such as an ocean. There are many interactions between living things within this ecosystem. Marine biologists study the population of the plants and animals in this ecosystem when they notice a change. Suppose a predator population suddenly decreased even though the prey population stayed the same. Besides disease, what could explain this change? Circle all that apply.
  - A. The predator had its own predator whose population increased.
  - B. The population of producers in the ecosystem died out.
  - C. The population of prey stayed the same.
  - D. A competing predator entered the ecosystem and is getting to the prey first, leaving the original predator without resources.

بَارِكْ اللهُ فِيكَ

Barakallahou Fik

May Allah Bless You.

**Mr. Gilson Granil**  
Teacher

**Mr. Mohamed Refat**  
Teacher