

Science Department

Mock Exam

Term 3 - 2023/2024

Grade: 5G

Copy N (2)

Levels (Bloom's Taxonomy)	Difficulty level	Symbol	Percentage
Remember	Easy- Medium	E,M	20
Understand	Easy- Medium	E,M	20
Apply	Easy- Medium-Difficult	E, M, D	20
Analyze	Easy- Medium-Difficult	E, M, D	20
Evaluate	Difficult	D	10
Create	Difficult	D	10

Part 1

20 Questions- Multiple choice-

Q1. ----- is the evaporation of water from a plant's leaves

- a. **Transpiration**
- b. Storage
- c. Water absorption
- d. Nutrient evaporation

Q2. The main job of the -----is to take in nutrients and water from the soil.

- a. Leaf
- b. Stem
- c. **Root**
- d. Flower

Q3. An animal who hunts and kills its own food is called a(n) _____.

- a. **predator**
- b. scavenger
- c. producer
- d. omnivore

Q4. Which of the following is not an abiotic factor?

- a. rocks
- b. air
- c. **animals**
- d. water

Q5. How do decomposers help plants?

- a. They help with photosynthesis.
- b. **They enrich the soil.**
- c. They provide oxygen.
- d. They hold water

Q6. Energy and other materials from dead organisms are recycled back into the soil by -----

- a. producers
- b. herbivores
- c. omnivores
- d. decomposers

Q7. Which of Earth's systems interact with each other?

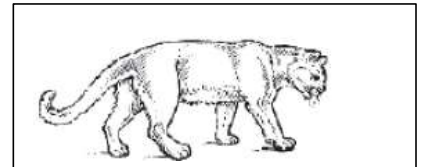
- a. geosphere and hydrosphere only
- b. hydrosphere and atmosphere only
- c. atmosphere and biosphere only
- d. All of Earth's systems interact with each other.

Q8. Which of the following materials used by plants to make food can be found in the air?

- a. pollen
- b. soil
- c. oxygen
- d. carbon dioxide

Q9. This animal is a predator.

If a predator is removed from an ecosystem, then -----.



- a. the population of predators will likely increase
- b. the population of prey will increase.
- c. the population of prey will decrease.
- d. the population of predators will not be affected.

Q10. Where does the water go when water evaporates from a puddle on the street?

- a. It goes into a nearby river or stream.
- b. It sinks into the street.
- c. It rises into the atmosphere.
- d. It goes into outer space.

Q11. Which of these activities is an example of you interacting with the geosphere?

- a. **rock climbing**
- b. swimming
- c. riding in an airplane
- d. sailing

Q12. People can help nature recycle plant material by composting. People use compost in their gardens. How does placing compost in your garden improve the natural environment?

- a. It makes the soil harder.
- b. It makes the soil unusable.
- c. It helps keep insects away.
- d. **It makes the soil rich in nutrients**

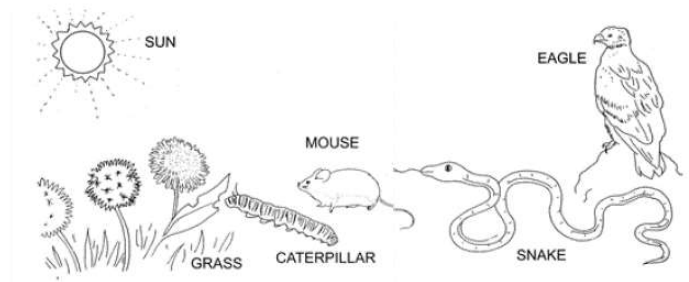
Q13. All living things use energy and release gas as a waste product. What cycle explains the circulation of these gases?

- a. Water cycle
- b. **Oxygen-Carbon cycle**
- c. Nitrogen cycle
- d. Hydrogen cycle

Q14. Which part of the water cycle includes water vapor gas changing to a liquid?

- a. **condensation**
- b. evaporation
- c. precipitation
- d. transpiration

Q15. The picture shows living things in an ecosystem. Which organism is a producer?



a.	Mouse
b.	Eagle
c.	Grass
d.	caterpillar

Q16. How do animals get nitrogen that is stored in the soil?

a.	Animals do not take in the nitrogen stored in the soil.
b.	Bacteria change the nitrogen into a gas that the animals breathe.
c.	Plants absorb the nitrogen from the soil and animals can eat the plants.
d.	The animals can eat the soil and absorb the nitrogen through their digestive system.

Q17.
Mr. Ahmad's science class learned that green plants use sunlight, water, and carbon dioxide. to make their own food and release oxygen in the process. How can the class explain how animals complete the oxygen-carbon cycle.

a.	Animals take in the oxygen, but do not release gas as they use energy.
b.	Animals take in carbon dioxide and use it to make food.
c.	Animals take in oxygen and release nitrogen as waste.
d.	Animals take in oxygen and as they use energy, carbon dioxide is released as waste.

Q18. Plants cannot grow close to each other; because their ____ need to spread out and absorb nutrients from the soil.

a.	stems
b.	roots
c.	petals
d.	xylems

Q19. How do decomposers help plants?

a.	They help with photosynthesis.
b.	They enrich the soil.
c.	They provide oxygen.
d.	They hold water.

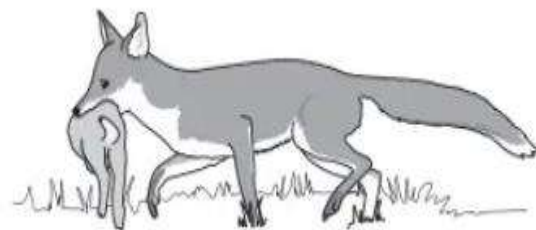
Q20. Which of the following is not part of Earth's geosphere?

- a. mountains
- b. soil
- c. rivers
- d. volcanoes

Part 2

10 Questions- Written questions

Q1. A fox and a rabbit are an example for predator – prey interaction.



a. Define the predator in this case.

.....Organisms that hunt for their food.....

b. How the population of foxes change if the population of rabbits decreased.

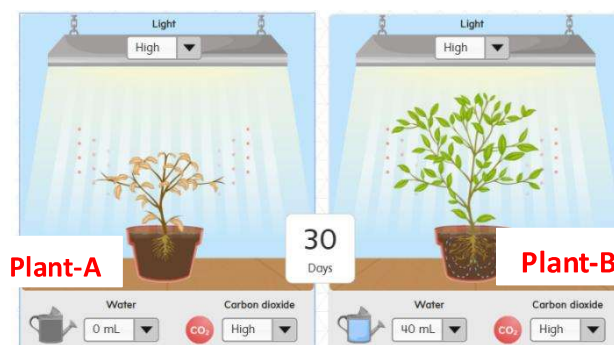
.....The population of foxes will decrease because the foxes depend on the rabbits as a food source.....

c. What happens if the plant population in the forest decreased?

.....The population of rabbits will decrease.....

Q2.

Mr. Ahmed was conducting an experiment to study the effect of various factors on plant survival. He used two similar plants to conduct the experiment. He took one plant, set the light and air to high, and water to 40 mL. On the other plant, set the light and air to high but set the water to 0 mL and then 20 mL.



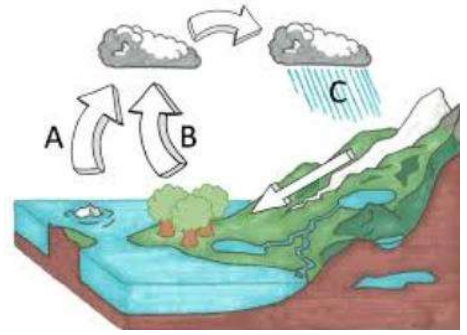
a. Which plant shows most growth?.....Plant B.....

b. What is/ are the factor(s) that affect plant growth?.....Light, carbon dioxide and water.....

c. What happens when you set all plants to the same setting but vary the amount of light?

.....It will affect the growth of the plants.....

Q3. The picture shown below is a diagram of water cycle.



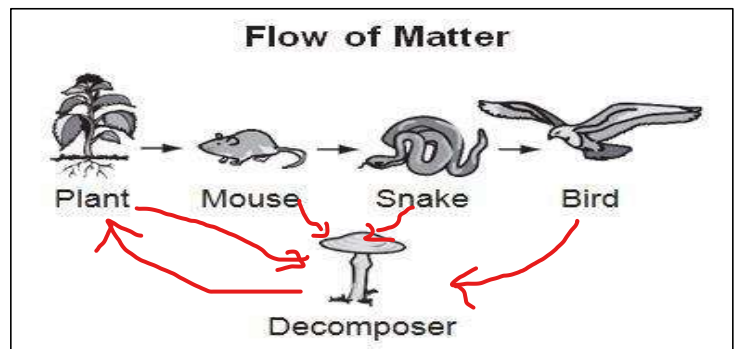
a. Identify the processes in stage C: **Precipitation**

b. Write the name of any two types of precipitation: **Rain, sleet, snow and hail**

c. Number the following stages in water cycle according to their correct order

- Water droplets combine in the clouds to form larger droplets. **3**
- Water vapor cools and **condenses** on dust particles forming clouds. **2**
- Large water droplets **fall to the ground** from the clouds. **4**
- Energy from the sun causes the water in the lake to evaporate. **1**

Q4. The diagram is an incomplete model of the flow of matter in an ecosystem.



a. Identify the producer in this ecosystem:

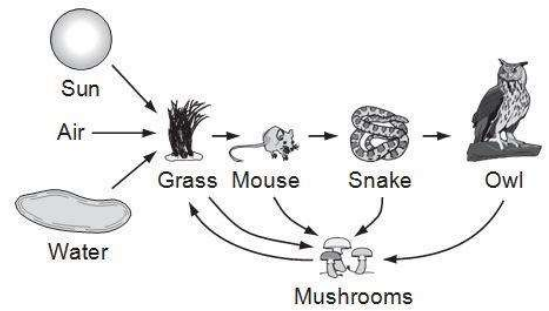
Plant

b. Describe where arrows need to be added to complete the model: **draw the arrow(s) in the diagram.**

c. Explain your answer in part b:

Decomposers break down dead organism which return nutrients to the soil.

Q5 Mrs. Ali's class created this diagram as a model of an ecosystem.



a. Name the decomposer in this ecosystem: ...Mushrooms.....

b. Name any two abiotic factors in this ecosystem: Sun, water, air.....

c. Predict how the ecosystem would be affected if the decomposers shown in the model die:

.....The dead animals and plants will not break down and lead waste......

Q6. The given picture shows the structure of a plant.



a. Which part of the plant body helps in producing food: Leaves.....

b. What is the name of the gas used for photosynthesis?.....Carbon dioxide.....

c. How do the plants remove excess water from their body? What is the name of the process?

.....From the leaves by process call transpiration......

Q7. Decomposers help the ecosystem in many ways.



a. Write an example of decomposers:.....Bacteria, earthworm, fungi.....

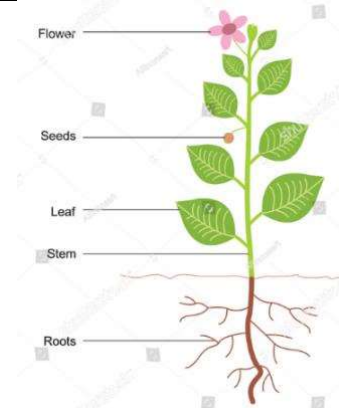
b. How do the decomposer help the ecosystem (Two points needed):

1. Breakdown dead plants and animals.....
2. Make nutrients that help plants to grow......

c. Ahmed says the fungi and mouse are decomposers. Do you agree with him? Explain

.....no, fungi are decomposers, but mouse is consumer.....

Q8. Plants produce their food in their leaves.



- a. What is the name of the process by which plants make their own food: Photosynthesis.....
- b. What is the source of energy that plants use to make their own food? Sunlight.....
- c. How does the plant take ground water from soil? By the roots.....

Q9. There are many systems in an ecosystem.



- a. Which system in ecosystem consists of rocks and mountains?.....Geosphere.....
- b. Complete the diagram by using the word bank.
- c. How does the hydrosphere interact with the geosphere?
By weathering and erosion.....

Q10. Oxygen-carbon cycle is very important to keep the balance in ecosystem.

- a. Which gas is taken in by animals from the atmosphere?.....Oxygen.....
- b. How does the plants and animals help each other in Oxygen -Carbon cycle?
Plants use carbon dioxide in photosynthesis and give off oxygen that animals used for breathing and give off carbon dioxide.....



- c. Give an example for an activity that release carbon dioxide to atmosphere: ...By burning of fossil fuels.....

***** End of the Exam*****