

AWIT GROUP | TWO-WAY TOS | Assessment in Learning I

Subject: Grade 7 Science

Topic: Living Things and Their Environment

Total Number of Items: 50

Content Area	Cognitive Levels						Total Items	Percentage
	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating		
A. Levels of Biological Organization (8 items)	2	3	2	1	0	0	8	16%
B. Parts and Functions of the Microscope (7 items)	3	2	2	0	0	0	7	14%
C. Plant and Animal Cells (10 items)	3	3	2	2	0	0	10	20%
D. Asexual and Sexual Reproduction (8 items)	2	3	2	1	0	0	8	16%
E. Ecological Relationships (10 items)	2	3	2	2	1	0	10	20%
F. Photosynthesis and Cellular Respiration (7 items)	2	2	1	2	0	0	7	14%
Total Items	14	16	11	8	1	0	50	100%
Percentage	28%	32%	22%	16%	2%	0%	100%	

Assessment Questions Based on the TOS

A. Levels of Biological Organization

- Remembering: Which of the following is the highest level of biological organization?
 - a) Cell
 - b) Organ
 - c) Population
 - d) Ecosystem
- Understanding: Explain the relationship between a tissue and an organ.
- Applying: A group of interacting populations of different species in a particular area is called a community. Give an example of a community that you can find in your school garden.
- Analyzing: Compare and contrast an organ and an organ system.

B. Parts and Functions of the Microscope

- Remembering: What part of the microscope is used to adjust the amount of light passing through the specimen?
 - a) Eyepiece
 - b) Diaphragm
 - c) Objective lens
 - d) Stage
- Understanding: Describe the function of the coarse adjustment knob.
- Applying: A student wants to view a specimen under high power. What steps should they follow after focusing on the specimen under low power?

C. Plant and Animal Cells

- Remembering: What is the powerhouse of the cell?
 - a) Nucleus
 - b) Ribosome
 - c) Mitochondrion
 - d) Chloroplast
- Understanding: Explain why the cell membrane is described as selectively permeable.
- Applying: You are given two unlabeled slides, one containing plant cells and the other animal cells. How would you differentiate them based on their observable structures under a microscope?
- Analyzing: Differentiate between a prokaryotic and a eukaryotic cell.

D. Asexual and Sexual Reproduction

- Remembering: Which of the following is a form of asexual reproduction?
 - a) Fertilization
 - b) Meiosis
 - c) Budding
 - d) Pollination
- Understanding: Explain the main difference between sexual and asexual reproduction in terms of genetic variation.
- Applying: A farmer wants to propagate a plant that produces sweet fruits. Which method of reproduction, sexual or asexual, would be more suitable to ensure that the offspring will have the same desirable trait? Explain your answer.
- Analyzing: Compare the advantages and disadvantages of sexual and asexual reproduction.

E. Ecological Relationships

- Remembering: What type of ecological relationship exists when one organism benefits while the other is harmed?
 - a) Mutualism
 - b) Commensalism
 - c) Parasitism
 - d) Competition
- Understanding: Explain how commensalism differs from mutualism.
- Applying: Describe a scenario in a forest ecosystem that illustrates competition.
- Analyzing: Analyze the potential long-term effects on an ecosystem if a keystone predator is removed.
- Evaluating: A farmer is experiencing a pest infestation in their crops. Evaluate the effectiveness of introducing a natural predator of the pest compared to using chemical pesticides, considering the impact on the overall ecological balance.

F. Photosynthesis and Cellular Respiration

- Remembering: What are the raw materials needed for photosynthesis?
 - a) Oxygen and water
 - b) Carbon dioxide and water
 - c) Glucose and oxygen
 - d) Carbon dioxide and glucose
- Understanding: Explain the role of chlorophyll in photosynthesis.
- Applying: How does the process of cellular respiration in animals depend on photosynthesis in plants?
- Analyzing: Compare the inputs and outputs of photosynthesis and cellular respiration.

GROUP MEMBERS:

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References/Sources:

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2. exquisiteeducation.com
3. ku.edu
4. blogspot.com
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