



Practice Worksheet on Biology and Physics

Generated for Pearl - Based on resource uploaded by user.

[Generate one yourself at LitGrades](#)

Subject: Science

Date: 1/12/2025

Long Answer Questions

1. Describe the process of photosynthesis in detail. Explain the role of each reactant and the products formed.
2. Compare and contrast aerobic and anaerobic respiration. Include the energy yield and end products in both processes.
3. Draw a labeled diagram of a leaf and describe the function of each labeled part in relation to photosynthesis and transpiration.
4. Explain the structure and function of stomata in plants. What are the processes where stomata play a crucial role?
5. How can you calculate distance, speed, and average speed in different scenarios? Provide examples.

Multiple Choice Questions

1. What are the subatomic particles that constitute an atom?

- a) Proton and Neutron
- b) Proton, Neutron, and Electron
- c) Only Electrons
- d) Only Protons

2. What are elements?

- a) A mixture of elements and compounds
- b) Substances consisting of only one type of atom
- c) A mixture of different compounds
- d) A combination of two or more elements chemically bonded

3. Which of the following is a scalar quantity?

- a) Displacement
- b) Velocity
- c) Distance
- d) Acceleration

4. Which process converts light energy into chemical energy?

- a) Photosynthesis
- b) Respiration
- c) Transpiration
- d) Decomposition

5. What is the correct formula for calculating speed?

- a) $S = T/D$
- b) $S = D/T$
- c) $S = D * T$
- d) $S = T - D$

Answer Key

Long Answer Questions - Expected Responses

1. Describe the process of photosynthesis in detail. Explain the role of each reactant and the products formed.

Expected Answer: Explain the process of photosynthesis, including the role of chlorophyll, sunlight, carbon dioxide, and water, and the production of glucose and oxygen.

2. Compare and contrast aerobic and anaerobic respiration. Include the energy yield and end products in both processes.

Expected Answer: Differentiate between aerobic and anaerobic respiration, highlighting the energy yield and the end products in each process.

3. Draw a labeled diagram of a leaf and describe the function of each labeled part in relation to photosynthesis and transpiration.

Expected Answer: Illustrate the structure of a leaf with labeled diagrams and explain the function of different parts of the leaf in relation to photosynthesis and transpiration.

4. Explain the structure and function of stomata in plants. What are the processes where stomata play a crucial role?

Expected Answer: Describe the structure and function of stomata in plants. Explain the role of stomata in gas exchange and transpiration.

5. How can you calculate distance, speed, and average speed in different scenarios? Provide examples.

Expected Answer: Explain the calculation of distance, speed, and average speed using relevant formulas and provide examples to illustrate the application of these concepts in real-life scenarios.

Multiple Choice Questions – Correct Answers

1. What are the subatomic particles that constitute an atom?

Correct Answer: Proton, Neutron, and Electron

2. What are elements?

Correct Answer: Substances consisting of only one type of atom

3. Which of the following is a scalar quantity?

Correct Answer: Distance

4. Which process converts light energy into chemical energy?

Correct Answer: Photosynthesis

5. What is the correct formula for calculating speed?

Correct Answer: $S = D/T$