

AHMES SECONDARY SCHOOL

FORM TWO HOLIDAY PACKAGE DECEMBER 2021

- Describe how each of the following unicellular organisms moves:
 - Amoeba*
 - Paramecium*
 - Euglena*
- Name four types of joints found in the human skeleton and for each describe an example.
- Describe the components of human skeleton.
- Describe the function of the following in the mammalian skeleton:
 - cartilage
 - ligaments
 - synovial fluid
- Draw a labelled diagram to show where synovial fluid is found in a synovial joint.
- Draw a labelled diagram to show the arrangement of bones and muscles that form the hinge joint of the human elbow.
 - Describe how the muscles are used to bring about the movement of this joint.
- Explain what is meant by the term 'antagonistic muscle action'.
 - Describe two examples of antagonistic muscle action which do not involve the skeleton.
 - By giving examples in each, list types of skeleton and state the functions of skeleton.
- Name types of muscle tissue and describe how the structure of each is adapted to its function.
- Copy and complete the following table for **two** named tropisms.

Tropism	Stimulus	Description of response	
		Root	Shoot

- State the consequences for a plant if it lacks:
 - chloroplasts
 - magnesium
 - phosphorus
 - nitrogen
 - calcium
- Describe the adaptations shown by a leaf for photosynthesis.
- Name the components of blood.
 - Outline the functions of the four different types of blood cell.
 - Explain how oxygen and carbon dioxide are transported by blood.
- Explain factors that affect the rate of transpiration.

14. Describe the breathing mechanisms in human
 15. Name the various structures used for gaseous exchange in; amoeba, tilapia, frog, tortoise, scorpion, grasshopper, cow.
 16. Describe the features of respiratory surfaces which make them efficient in gaseous exchange.
 17. Write balanced symbol equations for:
 - a. aerobic respiration
 - b. anaerobic respiration in yeast and plant tissue
 - c. anaerobic respiration in muscle cells
 18. Outline the digestion of the following food substances as a meal passes along the alimentary canal of a human; **i.** carbohydrates **ii.** proteins **iii.** fats
 19. From the following list of organisms construct a possible food web; Lions, gazelles, shrubs, wildebeests, hyenas, grass, decomposer, zebra.
 20. a) Name three divisions in the kingdom Fungi by giving two examples in each
b) Outline seven advantages of members of the kingdom Fungi.
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Biology department 2021