

STAVEB SCIENCES

HOLIDAY PACKAGE

TERM 2 2023

*STAVEB SCIENCES ARE SET AT A STANDARD OF LOWER SECONDARY
CURRENT CURRICULUM IN MAJORLY THE SCIENCE SUBJECTS*

BIOLOGY

CHEMISTRY

PHYSICS

OTHER VOCATIONALS LIKE ICT, AGRICULTURE AND OTHERS

FOR MORE INFORMATION, CONTACT THE FOLLOWING TEACHERS

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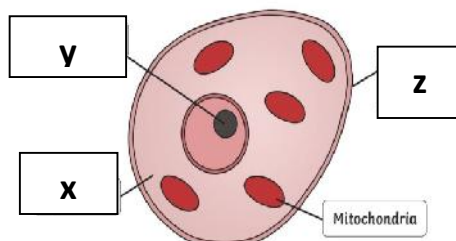
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SOLUTIONS FOR THE HOLIDAY PACKAGE TO BE AVAILED WITH ORDER

BIOLOGY SECTION

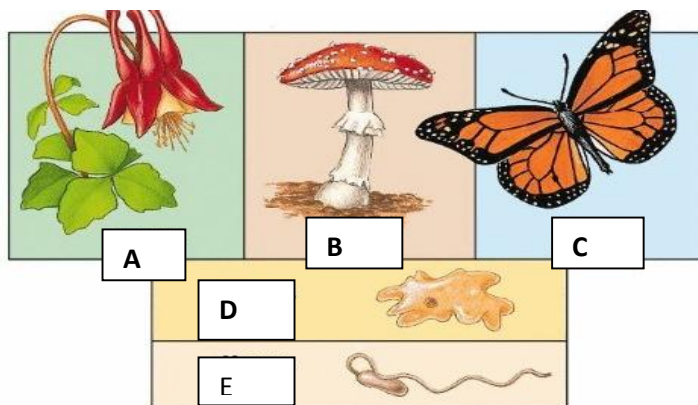
1. Moses was picked from school by his father when he was ill. On arrival at the hospital, a doctor picked a sample of his blood and smeared on a slide then viewed under microscope. The figure below is what the doctor observed. Name the parts on figure the doctor observed with their functions.



1. Joseph went home for holidays after first term and started narrating to his father his findings at secondary level. He told his father that one of the most important subjects he found interesting was biology. Explain the importance of studying the subject Joseph found more interesting.
2. Derrick a student of Mpoma high school finished s.6. He had passed biology very well but he had not yet chosen a career to undertake at university. Identify some of the careers that you think derrick would decide to undertake at the university. Explain to us the role of those careers you have mention in the table

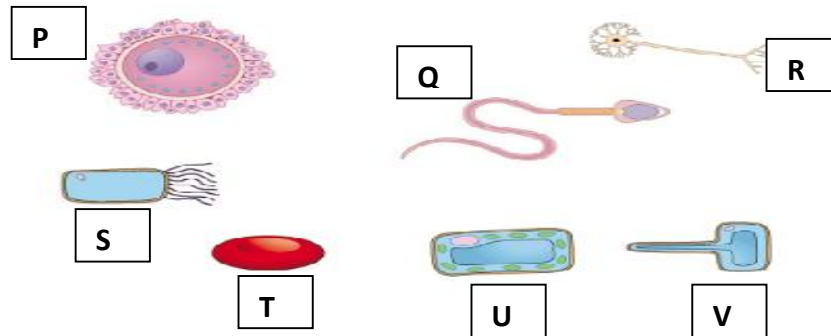
career	role
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3. The students on their way to school came in classroom with the organisms shown below shown as they were tasked by their teacher. Identify the kingdoms to which they belong to.



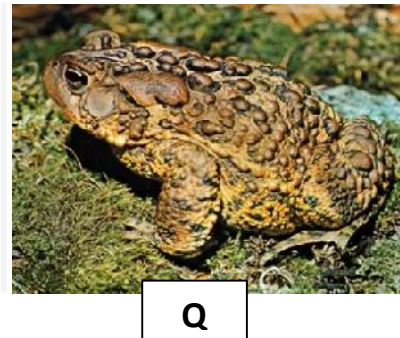
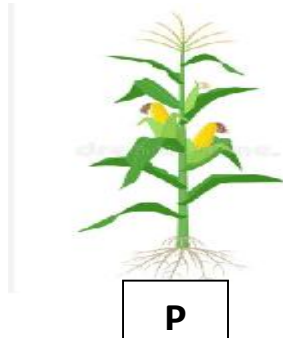
Organism	Kingdom
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4. Ann a cytologist from Makerere University examined different parts of a person and different plant parts then came up with some of the cells shown below. She then said that these cells are specialized. What did he mean by the underlined term? Name the cells he observed giving their functions.



Cell name	Function
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5. There was a discussion in senior one classroom at St. Ann Voc. S. School about two specimens Q and P that the teacher had provided during class lesson. Students in group A discussed similarities between them while group B discussed the differences between them. Write down the views from the two groups.



- (a) Group A
(b) Group B

6. Biology is associated with so many branches. These branches are referred to as the life process that enables these specimens sustain life. The pictures below were taken at St. Ann farm when organisms were found carrying out various life processes. Identify them giving how important they are to the organisms at the farm.

organisms	Life process	importance
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7. Students of St. Ann vocational sec school were asked by their teacher to find out the helpfulness of micro-organisms like bacteria, fungal organisms and so on. In their discoveries, they found out that some micro-organisms are important in food industries in making food like chapatti
- Identify some of the foods which are made by the help of micro-organisms except the one mentioned above
 - Describe briefly the procedure you can use to prepare chapatti for a day's meal
 - During a school holiday, Moses met Emmanuelle in a nearby home garden as they were gathering the mushrooms that had massively grown in their locality on a certain humid day.
8. They discussed the kingdom to which the mushroom belongs since they were classmates but of different schools. Emmanuelle said it is a plant while Moses said it is a fungal organism.



- Whom do you support.
- Give the characteristics that enable you to place a mushroom in its kingdom
- In which way are fungal organisms important in communities

CHEMISTRY SECTION

1. Moses left a panga outside the house after pruning the banana plantation on a day before Sunday. He found a reddish brown coating on it in the morning.
(a) Which type of change did it undergo through?
(b) Apart from the above type of change, state any other type of change you know
(c) Write down the differences between the type of change in 1(a) and 1(b)

Change in 1(a)	Change in 1(b)
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2. Senior ones of Namayemba high school were asked by their teacher to move out of their classroom to find out some of the materials that are used in day to day life. They first researched about the meaning of materials and then observed the school environment.
(a) Define the underlined word in question 2
(b) List down some of the materials that they took note of when outside the school environment. Include their uses in their daily life
3. A school head teacher went to the shop that sells the laboratory apparatus to stock the school laboratory with apparatus that are used in measuring volume of the solution
Write down some of the items that were shopped for lab stock by the head teacher .Include their uses.

Apparatus	Use
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4. In school laboratories, Bunsen burners are the better sources of heat. however, they produce flames which are different under different conditions. Use letters of suitable choice to label them.



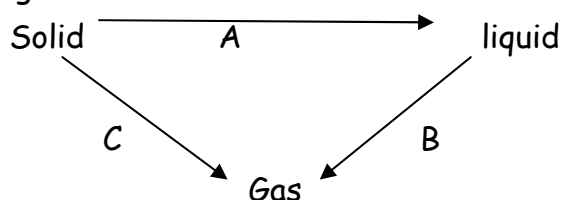
Which type of flame is suitable for the following activities? Give reason

Activity	Type of flame	Reason
Heating in the laboratory		
Lighting a poultry house.		

5. In order to find out the changes that occur on substance when under different temperatures, a student of senior one heated liquid water which was cool until no more changes could occur.

(a) Describe the changes that occurred during the experiment.

(b) Study the diagram below then use it to answer the questions below it



(i) Name the processes A-B

A ,B and C

(ii) Name any one substance which can undergo through process C

6. The picture below is one of the equipments available in the laboratory



(a) Name the device above

(b) State the importance of the above apparatus in the laboratory

(c) Mention any two important places where the above apparatus can be found

7. A peasant in your town council wants to build the house shown in the figure below having seen it in Bugiri municipal council some years ago. He realizes that you do chemistry and you understand the concept of materials.



Write down some of the materials and their properties that relate them to their uses which he should buy before calling an architectural engineer to come on ground and start constructing the building.

PHYSICS SECTION

1. Two students were found by their teacher arguing whether there are differences between mass and weight. The teacher helped them to come out of the argument. State the differences that you think the teacher told them.

mass	weight
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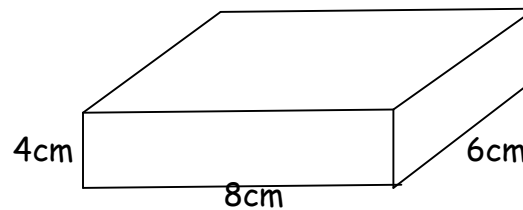
2. Bakali was cooking in the school kitchen at Namayemba high school. The students in the nearby class started complaining of the serious smoke that had accumulated in their class.
 - (a) By what process was the smoke particle moving to class.
 - (b) Explain the process identified
 - (c) State 3 factors which affect the process identified.
3. Joseph measured for a customer 5kgs of sugar. If you were asked to determine the weight of this sugar. Show the working to obtain a correct answer. (acceleration due to gravity is 10gms^{-1})
4. The mass of a stone is 4g and its volume on using a displacement method is 10cm^3 . Calculate its density.
5. S.I units are so essential in physics and other subjects where measurements are involved. Fill in the table as required

quantity	s.I unit
mass
.....	kg/m^3
weight
power
.....	Kelvin

6. Laboratories are so important in many sectors in Uganda they are found in vital places where manufacture of products take place.
 - (a) Mention any three places where they are found.
 - (b) Identify giving importance any 5 tools found in those places
 - (c) State any 7 rules and guidelines that one should follow while in these rooms.
7. A S.1 student was tasked by his physics teacher to research different processes in which different states of matter. He then confronted you to

help him get some knowledge on this. Explain in your understanding the different processes you tell this learner.

8. In a certain school, students were discussing different methodologies on how to determine the volume of an irregular object. Aminah who was the chairperson of the group gave an answer as displacement method. If you support Aminah, describe how you would experimentally perform this to obtain the volume.
9. The blocks builders were using to build a new block in Bugiri town was found to be of the dimensions as below. On measuring the mass of each was 3kgs.



10. Physics has proved to such important subject in day to day life. This is because of the many products made using the knowledge of its field. Explain how it is important with support of the products produced.

Happy Holiday Dear Students