

# KULLEGĠ SAN BENEDITTU

## Boys' Secondary, Kirkop

HALF-YEARLY EXAMINATION – 2012/13

Mark

LEVEL  
5-6-7-8

FORM 1

INTEGRATED SCIENCE

TIME: 1h 30min

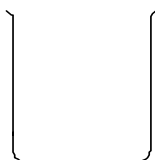
Name: \_\_\_\_\_

Class: \_\_\_\_\_

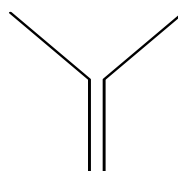
### ANSWER ALL QUESTIONS

1. The objects used in the lab for doing experiments are called apparatus.

a) Write the name of these objects in the space provided.



\_\_\_\_\_



\_\_\_\_\_

(2)

b) Draw the following apparatus and write what they are used for.

i) a test tube



This is used \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2)

ii) a spatula



This is used \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

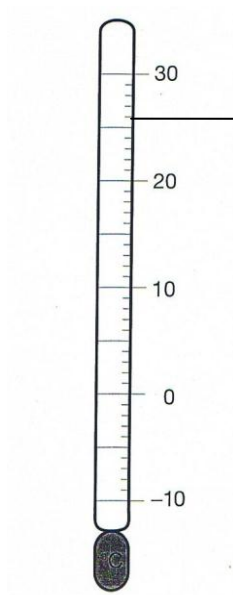
(2)

c) Complete this sentence.

An apparatus used to measure something, is called a measuring \_\_\_\_\_. (1)

Look at the diagram.

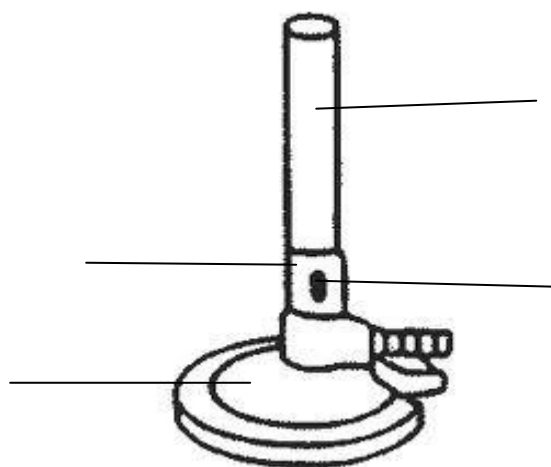
d)



- i) What is this object called? \_\_\_\_\_ (1)
- ii) What does it measure? \_\_\_\_\_ (1)
- iii) Write the reading at x. \_\_\_\_\_ (2)

2. John used the apparatus in the picture below to heat some water.

- i) What is this apparatus called? \_\_\_\_\_ (1)
- ii) Label the parts shown. (4)



- iii) Which flame is the safety flame? \_\_\_\_\_ (1)
- iv) Write one difference between a yellow and a blue flame. \_\_\_\_\_ (2)
- v) Underline the correct words in the brackets.

To get a blue flame you should ( open the air – hole / close the air – hole ) . (1)

3. Some chemicals in the lab or at home can be dangerous. Hazard labels are put on these chemicals to show what type of danger can be caused.

a) Draw the label found on a chemical that catches fire quickly.

(2)



b) On a glue stick, Ray noticed these hazard labels.



i) What does this tell you about the glue?

---



---

(2)

ii) Write one thing Ray should do to avoid these dangers.

---



---

(2)

4. This question is about FIRE.

Match the words in column A with those in column B to form correct sentences.



	Column A		Column B
1	Heat, fuel and oxygen		are types of fuel.
2	Wood, gas and petrol		help a fuel to burn.
3	Water, a fire blanket and a fire extinguisher		are all needed to start a fire.
4	Air and oxygen		can be used to put out a fire.

(4)

5. i) Fill in the blanks using the words in the box.

teacher	water	glass bin	dangerous	rules
---------	-------	-----------	-----------	-------

In the lab, there could be many \_\_\_\_\_ situations. Safety \_\_\_\_\_ are made to avoid this. For example, gas, electricity and \_\_\_\_\_ are to be used for experiments only. When an accident happens or something is broken, students should tell the \_\_\_\_\_ and put the broken glass in the \_\_\_\_\_ .

(5)

ii) Explain why eating or drinking in the lab is dangerous.

(2)

6 a)



Look at these two pictures.

i) Name two things that **both** these objects can do.

(2)

ii) Find one thing that only the bird can do. \_\_\_\_\_

(1)

b) Which of the things below are living and which are non-living?



butterfly

sun

fish

book

<u>living</u>	<u>non-living</u>

(4)

7. Jake and his cat both eat food. They need this to grow and to move.



What are the other vital functions that Jake and his cat are able to do?

---



---

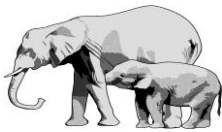
(4)

8. Fill the blank spaces in the sentences below.

Scientists have found out that different animals eat different types of food. Sheep eat plants and grass and so they are called \_\_\_\_\_. Predators, like lions and tigers, look for and catch other animals and so they are called \_\_\_\_\_. Then there are those animals, called \_\_\_\_\_ which feed on plants and animals.

(3)

9. Look at the animals below.



a. To which group do all these animals belong?

---

(1)

b. Give a reason for your answer to the question above.

---

(1)

c. In what way are snake eggs different from bird eggs?

---

(1)

d. Which of the above animals are warm blooded?

---

(2)

10. Match the group with the correct feature.

Sub-group	Feature
mammal	feathers
bird	scales
reptile	fur/hair
amphibian	dry scales
fish	smooth skin

(5)

11. The picture below shows the remains of an animal found in a rock.



a) Give the name for the remains of living things found in rocks.

\_\_\_\_\_

(1)

b) To which group would this animal belong?

\_\_\_\_\_

(1)

12. Plants need water to grow.



a. Name TWO other things plants need to be able to grow properly.

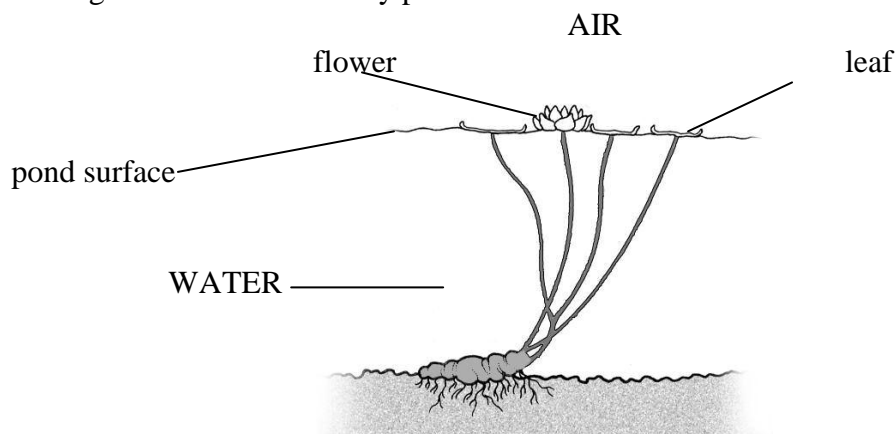
\_\_\_\_\_

(2)

b. Name TWO parts of the plant that water must pass through to get from the soil to the leaves. \_\_\_\_\_

(2)

13. This diagram shows a water lily plant.



a. Water lilies do not grow well in moving water. Suggest a reason for this.

\_\_\_\_\_

(2)

b. Write one way how water lily plants are adapted to live in water.

\_\_\_\_\_

(2)

14. Fill in the blank spaces below using some of the words in the box.

photosynthesis	customer	product	consumer	producer
----------------	----------	---------	----------	----------

A food chain always starts with a \_\_\_\_\_, which is an organism that makes food. This is usually a green plant, because plants can make their own food by \_\_\_\_\_.

A food chain continues with a \_\_\_\_\_, which is an animal that eats a plant or another animal. (3)

15. Here is an example of a food chain.



Grass



insect



frog



fox

(not to scale)

a. What does the arrow in a food chain mean?

\_\_\_\_\_ (1)

b. From the information given in the food chain above, what would happen if the frogs were poisoned and died?

\_\_\_\_\_ (1)

c. From the above food chain :

i) Which animal is an invertebrate? \_\_\_\_\_ (1)

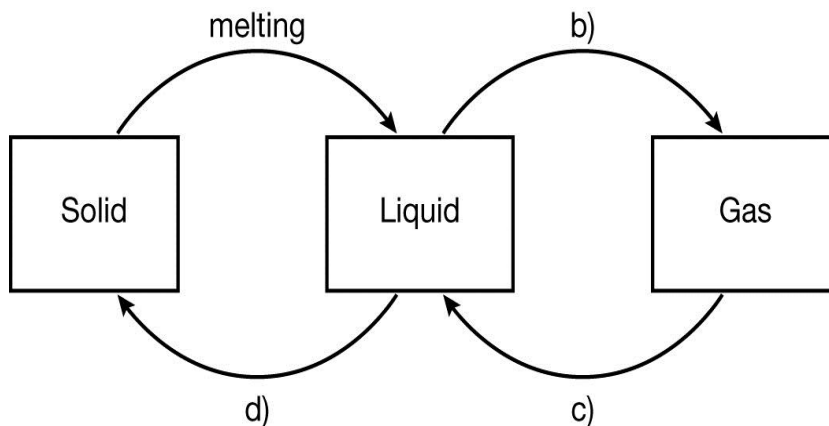
ii) Name an animal which is a predator. \_\_\_\_\_ (1)

iii) Name an animal which is a prey. \_\_\_\_\_ (1)

iv) Which animal is both a predator and a prey. \_\_\_\_\_ (2)

16. a) Water can be found either as a solid, a liquid or a gas. It can be changed from one state to another.

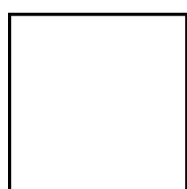
- i) What do we call water when it is a solid? \_\_\_\_\_ (1)
- ii) What do we call water when it is a gas? \_\_\_\_\_ (1)
- iii) What is needed to melt a solid? \_\_\_\_\_ (1)



b) The diagram above shows how one state of matter can be changed to another. One process has been done for you. Write the names of the processes that take place at:

- b) \_\_\_\_\_ c) \_\_\_\_\_
- d) \_\_\_\_\_ (6)

17a. Complete the diagrams below by drawing the arrangement of particles in a solid, a liquid and a gas.



solid



liquid



gas

(3)

b. Complete these sentences using some of the words in the box.

Store	flow	compressed	field	shape	sharp
big	change	charges	stand	space	closer

Solids have their own \_\_\_\_\_. Liquids and gases can \_\_\_\_\_ shape. A gas spreads out to fill any \_\_\_\_\_. Gases and liquids will \_\_\_\_\_ through pipes. Gas particles can be pushed \_\_\_\_\_ together because they have \_\_\_\_\_ spaces between them. Solids and liquids have smaller spaces and cannot be \_\_\_\_\_ any more. (7)