

KULLEGG SAN BENEDITTU Secondary School, Kirkop

Levels
5 – 6 – 7 – 8

HALF-YEARLY EXAMINATION – 2015/2016

FORM 1

INTEGRATED SCIENCE

TIME: 1h 30min

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Global Mark
Max. Mark	6	11	12	6	5	2	4	2	6	7	4	11	4	4	4	3	3	6	100
Mark																			

Instructions to students:

Answer **ALL** questions.

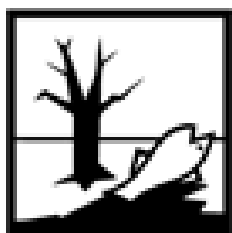
Read each question carefully.

DO NOT WRITE ABOVE THIS LINE

Name: _____

Class: _____

1. A chemical bottle had the following labels:



Label A



Label B

a) What are the dangers which this chemical presents?

Label A: _____ Label B: _____

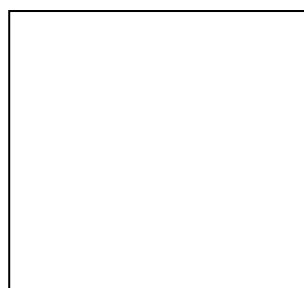
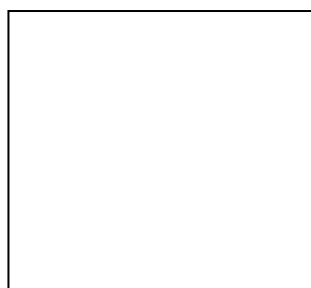
(2 marks)

b) i) Complete the following sentence:

A substance which **catches fire** easily is said to be _____,
whereas a substance which **causes itching** is _____ to the skin.

(2 marks)

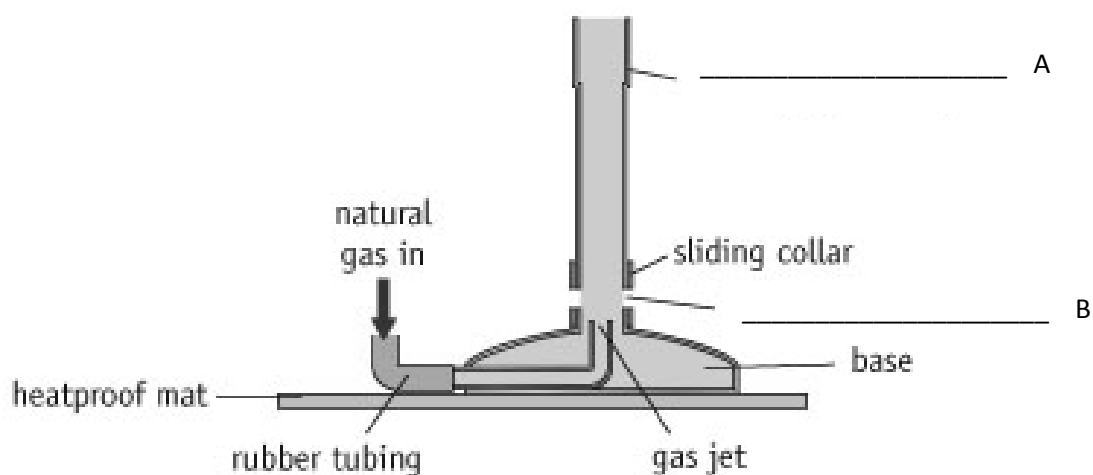
ii) In the boxes below draw and label the correct hazard signs for the substance mentioned above.



(2 marks)

(6 marks)

2. a) Complete the labelled diagram of the Bunsen burner below by filling in the labels A and B.



(2 marks)

b) Complete the table below:

Air hole	Flame colour
Closed	
Open	

(2 marks)

c) Write one property for **each** type of flame mentioned above.

(2 marks)

d) Arrange in order the steps involved to light a Bunsen burner safely.

After that, turn on the gas tap.	
Close the air hole.	
Open the air hole to obtain a blue flame.	
Next, light a match.	
Hold the match above the chimney.	

(5 marks)

(11 marks)

3. a) Write the name of a scientist you have read about and mention the scientific area that he or she is or was interested in.

(2 marks)

b) Identify the measuring instruments used to find

- The time taken to write your name and address _____
- The length of a copy book _____
- The temperature of hot water _____

(3 marks)

c) i) Two science students wanted to find the mass of 50ml of water. Which measuring instruments did they use?



_____ (2 marks)

ii) Then these students wanted to add some salt crystals to the water and dissolve them. What pieces of apparatus did they use?

_____ (2 marks)

d) Fill in the blank spaces below with the correct **science apparatus** to complete the text:

i) A _____ is used to pick very small amounts of water.

ii) A _____ is used to transfer liquids without spilling.

iii) _____ are used to pick up hot objects.

(3 marks)

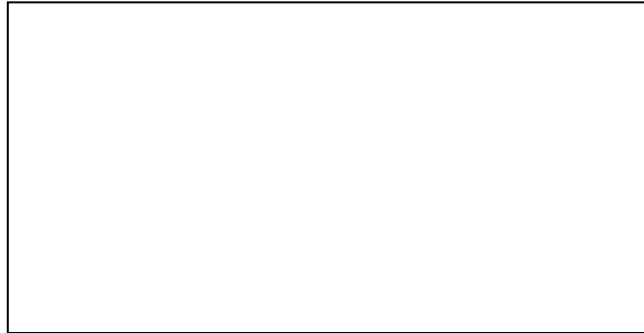
(12 marks)

4. The table shows some common dangers (hazards) in the laboratory. Complete the table showing how these different hazards can cause problems in the laboratory and how they can be avoided. (6 marks)

Hazard	Problem that the hazard can cause	Solutions
Not listening to the teacher carefully	You could carry out the experiment incorrectly, which could be dangerous	Pay special attention and follow instructions.
Running to collect equipment		
Eating your sandwiches in the laboratory		
Long hair not being tied back		

5. The fire triangle shows the three things that must be present for a fire to burn. If one of these things is removed, the fire goes out.

a) Draw and label the fire triangle in the box below.



(3 marks)

b) Use the fire triangle to explain the following

i) Turning the gas supply off to extinguish a cooker burner.

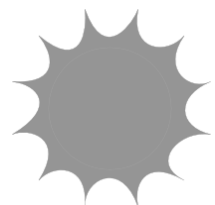
_____ (1 mark)

ii) Using water hoses to put out a fire

_____ (1 mark)

(5 marks)

6. In a class activity, students were discussing living and non-living things. One student Rachela argued that the sun was a living thing while Andrea claimed that the sun was a non-living thing.



a) Who is right? Rachela or Andrea? _____ (1 mark)

b) Give a reason for your answer.

Reason: _____ (1 mark)

(2 marks)

7. Match the following vital function with its correct meaning:

- | | |
|---------------|------------------|
| a) Excrete | Become a parent |
| b) Reproduce | Produce energy |
| c) Respire | Smelling food |
| d) Use senses | Get rid of waste |

(4 marks)

8. Look at the pictures of these living things.



The pictures show a dog, a conifer tree, a lizard, a beetle and an orangutan.

a) Which of the above living things is the **odd one out**?

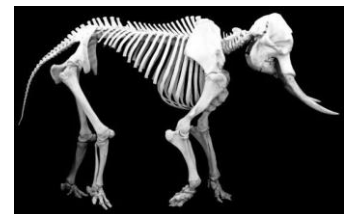
_____ (1 mark)

b) Give a reason for your answer.

_____ (1 mark)

(2 marks)

9. The following skeleton of a dead elephant was found. The elephant possesses a backbone.



a) Fill in the blanks to complete the sentence:

Animals that have a backbone are termed _____ while animals that do not have a backbone are termed _____.

(2 marks)

b) Sort the following animals into 2 groups:



jellyfish



mouse



snake



chameleon

Animals with a backbone	Animals without a backbone

(4 marks)

(6 marks)

10. The following pictures show different animals.

- a) The image shows a pig giving milk to its young. To which vertebrate group does the pig belong?



_____ (1 mark)

- b) i) To which vertebrate group does the bat belong?



_____ (1 mark)

ii. Give a reason for your answer.

_____ (1 mark)

- c) The newt has soft, moist skin and lays eggs with soft shells. To which vertebrate group do newts belong?



_____ (1 mark)

- d) The turtle has dry, scaly skin and lays eggs. To which vertebrate group do turtles belong?



_____ (1 mark)

- e) Mention 2 vertebrate groups that are cold-blooded.

i) _____ ii) _____ (2 marks)

(7 marks)

11. a) The dodo is an animal that does no longer exist. This means that the dodo is _____. The animal has been hunted extensively and its eggs were eaten by other animals.

(1 mark)



- b) Mention another animal that does no longer exist.

_____ (1 mark)

- c) Mention 2 characteristics that classify the dodo with the bird group.

i. _____

ii. _____

(2 marks)

(4 marks)

12. In a fieldwork activity, students observed a snail being eaten by a song thrush.



a) Underline the correct answer:

- i) The song thrush is an example of a (herbivore, carnivore).
- ii) It is also considered as a (producer, consumer). (2 marks)

b) The snail eats lettuce in the field.



i) Write down the above food chain.

_____ → _____ → _____ (3 marks)

ii) What do the arrows represent?

_____ (1 mark)

iii) Mention the process by which lettuce makes its own food.

_____ (1 mark)

iv) Apart from air, mention 2 things that need to be present for the lettuce to make its own food.

_____ (2 marks)

v) What would happen to the number of snails if a large number of song thrushes were killed by hunters?

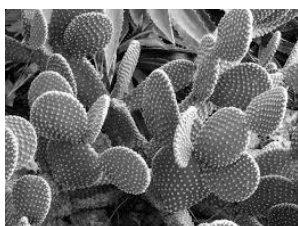
_____ (1 mark)

vi) What effect would this have on the lettuce found in the fields?

_____ (1 mark)

(11 marks)

13. Look at the following plants.



a) These are cactus plants. In which type of habitat are they most likely to be found? _____ (1 mark)

b) Which part of the plant produces food? _____ (1 mark)

c) In order for the plant to obtain water, the water has to be absorbed by the _____, then travels up the _____ in order to reach the leaves.

(2 marks)

(4 marks)

14. a) The polar bear is an animal that is adapted to living in cold harsh conditions.



Mention 2 characteristics that help it to **survive** in the cold Arctic.

i. _____

ii. _____

(2 marks)

b) The hare can be a prey. Mention 2 adaptations that enable it to escape its predators.



i. _____

ii. _____

(2 marks)

(4 marks)

15. This question is about the 3 states of matter – solids, liquids and gases.

Andy got out some ice cubes from the freezer and put them into a glass as shown in the diagram.



a) The ice cube is a solid. This means that the particles in the ice cube are _____ together. (1 mark)

b) Draw the particle arrangement of ice in the box provided.

(1 mark)



c) After some time the ice turned into water. This process is called _____.

(1 mark)

d) Draw the arrangement of particles in water.

(1 mark)



(4 marks)

16. The picture below shows water droplets forming on a mirror in the bathroom while someone is having a warm bath.



a) This change is called _____. (1 mark)

b) Why do water droplets form on the mirror? (2 marks)

(3 marks)

17. Abigail is hanging clothes on the line to dry.



a) Mention 2 things that help the clothes to dry faster.

i) _____

ii) _____

(2 marks)

b) In this case, water in the clothes has changed to water vapour in the air. What is this process called?

(1 mark)

(3 marks)

18. In a lab setting there are 3 containers: container A contains an **aluminium** block, container B contains **oil** and container C is filled with **helium** gas.

a) Which of the **above** materials:

i) Take the shape of the container? _____ and _____

ii) Can be used in car brakes? _____

iii) Can be used to produce windows and doors? _____

iv) Can be compressed to a smaller volume? _____

(5 marks)

b) Why can the material you mentioned in a (iv) be compressed?

(1 mark)

(6 marks)

END OF EXAM