



Let the mind manage the body
Que l'esprit gère le corps



Index Number:

MAURITIUS EXAMINATIONS SYNDICATE

Primary School Achievement Certificate Assessment

August 2017

Time 1 hour 45 minutes

SCIENCE
(Subject code No. P141)

INSTRUCTIONS TO CANDIDATES

1. Check that this assessment booklet contains 10 questions printed on 14 pages numbered 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15.
2. Write your Index Number on the assessment booklet in the space provided above.
3. You should not use red, green or black ink in answering questions.
4. Write all your answers clearly in the assessment booklet.
5. Attempt all questions.

Question	Marking		Revision		Control	
	Marks	Sig	Marks	Sig	Marks	Sig
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
Total						
Sig (HoG)						

Question 1 (5 marks)**Circle the correct answer.**

1. Animals that give birth to their young ones are known as
A mammals
B fish
C reptiles
D birds
2. Which one of the following food items is an example of **food for growth**?
A Bread
B Carrot
C Mango
D Fish
3. A is used to open or close an electric circuit.
A bulb
B switch
C wire
D battery
4. An example of a **balanced meal** is
A rice, soya bean and fish
B bread, chicken and chips
C rice, chicken and carrots
D cabbage, pumpkin and egg

5. Which **one** of the following is a **safety** precaution when using electricity?
- A** Drying one's hair using an electric hair dryer in a wet bathroom.
 - B** Connecting many power plugs to one socket.
 - C** Turning off the electricity supply when working with electrical wires.
 - D** Switching off all lights when leaving a room.

Question 2 (15 marks)

- (a) Air is a mixture of gases. **Diagram 1** shows a pie chart representing the amount of different gases found in air.

Label the pie chart using the words from the given list.

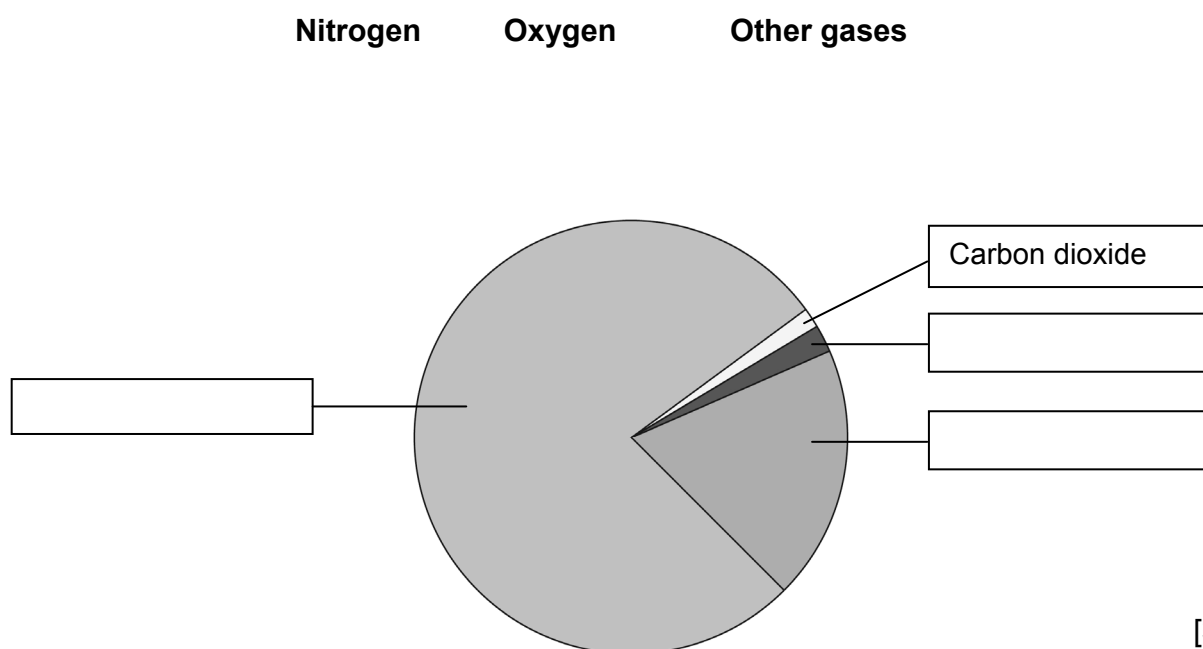


Diagram 1

(b) Animals can be classified according to their characteristics.

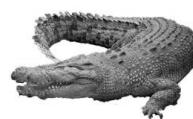
Fill in **Table 1** by classifying the following animals according to their body covering.



Parrot



Dog



Crocodile



Fish



Duck



Rabbit

Table 1

Body covered with hairs	Body covered with feathers	Body covered with scales

[6]

(c) Animals can also be classified according to their eating habits.

Study and complete **Table 2** by using the appropriate word from the list below:

Granivorous Meat Tiger Grass Pig Herbivorous Omnivorous

Table 2

Animal	Food mostly eaten	Type of animal
.....	Vegetables, fruits and bugs
.....	Carnivorous
Cow






[6]

Question 3 (8 marks)

Complete **Table 3** by writing the **main** energy transformation taking place in each picture.

The first one has been done for you.

Table 3

 Using an electric kettle to boil water	Electrical → Heat
 Using wood to cook →
 A loudspeaker playing music →
 A running horse →
 Using a solar powered calculator →

[8]

Question 4 (10 marks)

Diagram 2 shows the teeth found in the lower jaw of a human being.

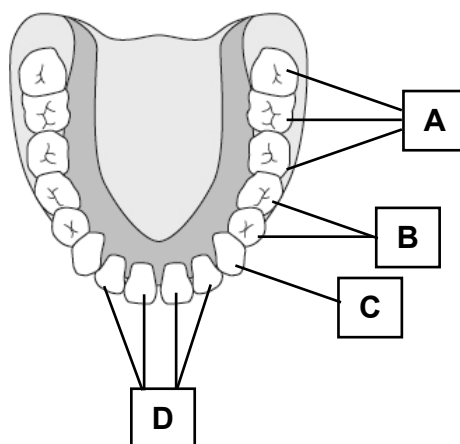


Diagram 2

(a) Write down the names of teeth **A**, **B**, **C** and **D**.

A

B

C

D

[4]

(b) (i) Does **Diagram 2** show a set of milk teeth or permanent teeth? Tick (✓) the correct box.

☐

milk teeth

☐

permanent teeth

[1]

(ii) Explain your answer to part (b)(i).

.....

..... [1]

(c) Which one of the teeth shown in **Diagram 2** is **mostly** used

(i) to bite food?:

(ii) to crush food?:

[2]

(d) Give **two** ways to keep our teeth healthy.




1.

2.

[2]

Question 5 (13 marks)

- (a) Plants live in habitats which are best suited to them. Match each plant shown in **Column A** to the place where it **usually** grows in **Column B**.

Column A	Column B
 Seaweed	On dry land
 Water lilies	In damp forests
 Fern	In oceans
	In ponds

[3]

- (b) It is important to protect our forests.

- (i) Give one reason why.

..... [1]

- (ii) Give **two** ways how we can protect our forests.

1. [1]

2. [1]

- (c) **Diagram 3** shows a cactus plant.

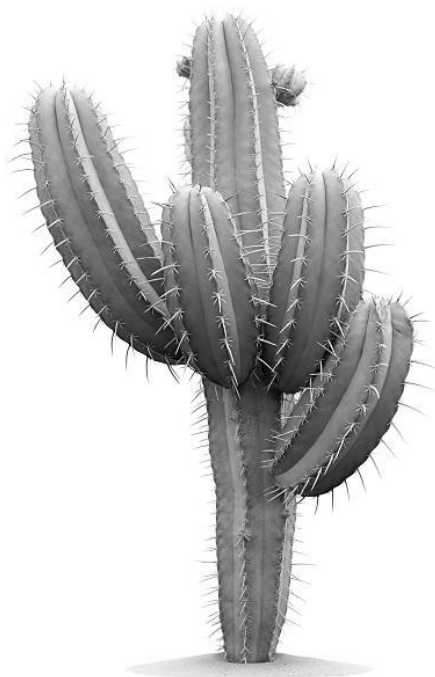


Diagram 3

- (i) Observe **Diagram 3** and write down **two** characteristics of this plant.

Characteristic 1: [1]

Characteristic 2: [1]

- (ii) How does each characteristic mentioned in part (c)(i) help this plant to survive in its natural habitat?

Characteristic 1:

..... [2]

Characteristic 2:

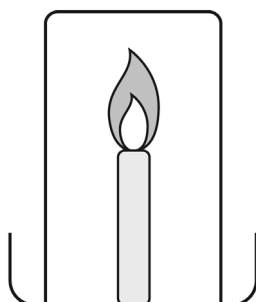
..... [2]

- (iii) Based on your observations, what is the **natural** habitat of this plant?

..... [1]

Question 6 (8 marks)

- (a) Alex places a jar over a lit candle as shown in **Diagram 4**.

**Diagram 4**

- (i) How does the amount of oxygen and the amount of carbon dioxide vary with time inside the jar? Tick (✓) the correct box.

Amount of oxygen:

increases

☐

decreases

☐

remains the same

☐

[1]

Amount of carbon dioxide:

increases

☐

decreases

☐

remains the same

☐

[1]

- (ii) What happens to the flame after some time?

..... [1]

- (iii) Explain your answer to part (a)(ii).

.....

..... [1]

- (b) Sam is drinking some juice using a straw as shown in **Diagram 5**.

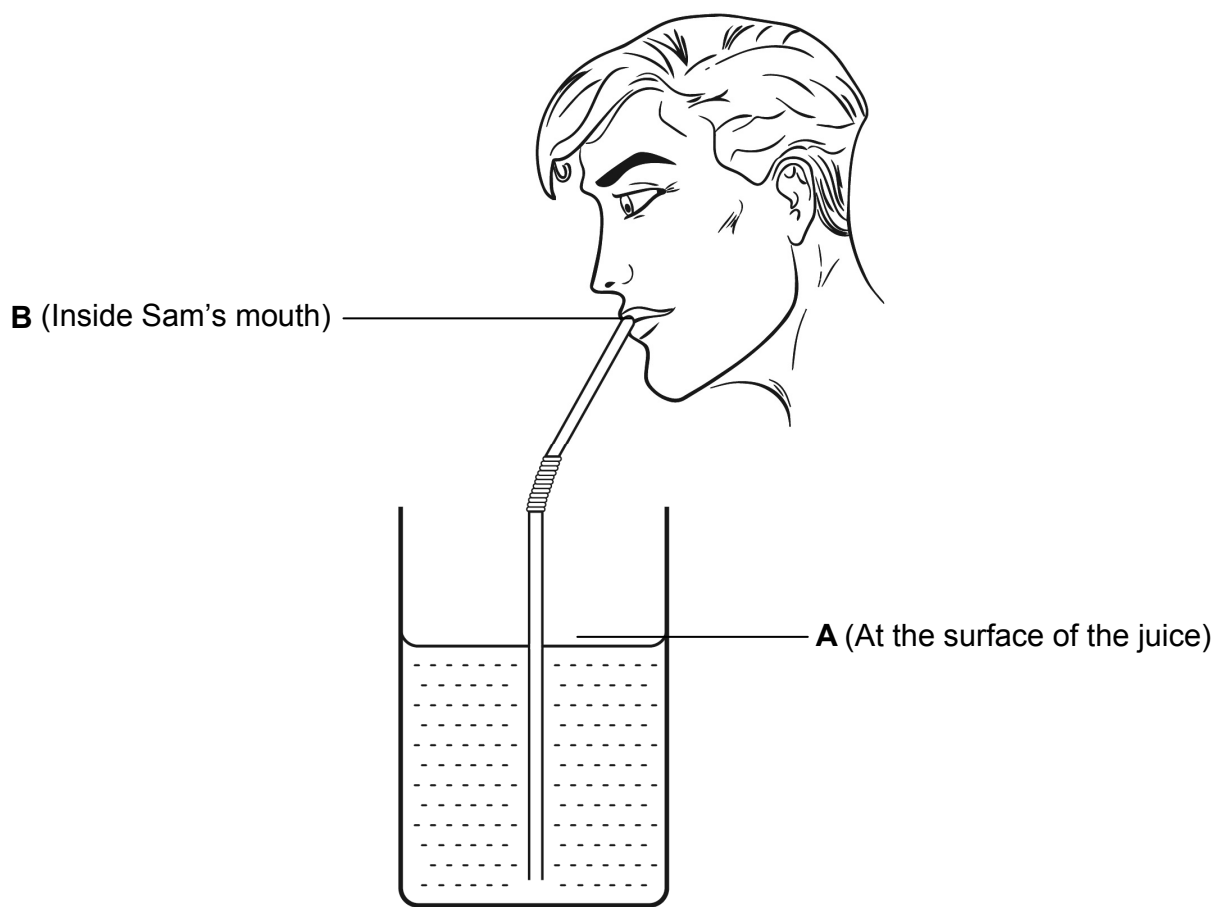


Diagram 5

- (i) Is the air pressure greater at **A** or at **B**?

.....

[1]

- (ii) Using an arrow, show on **Diagram 5** the direction in which the juice moves **inside** the straw.

[1]

- (iii) Why does the juice move in the direction indicated in part (b)(ii)?

.....

.....

[2]

Question 7 (9 marks)

Eki sets up a circuit as shown in **Diagram 6**.

Study the circuit carefully and answer the questions that follow.

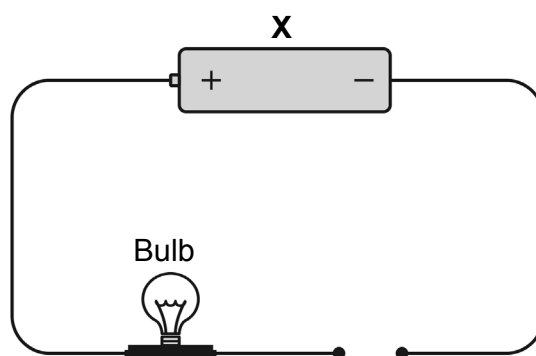


Diagram 6

(a)(i) Name component **X**.

X: [1]

(ii) State the function of component **X** in an electric circuit.

..... [1]

(b) The circuit shown in **Diagram 6** is an 'open' circuit. What is an 'open' circuit?

..... [2]

(c)(i) Suggest **one** thing that you can do to close the circuit in **Diagram 6**.

..... [1]

(ii) How would you know that the circuit is now closed?

..... [1]

(d) A material which **allows** electricity to pass through it is known as an electrical

..... [1]

(e) Choose **two** materials from the list below that **do not** allow electricity to pass through them. Circle your answers.

Iron

Plastic

Aluminium

Glass

Copper

[2]

Question 8 (13 marks)

Diagram 7 shows a tomato plant.

Study **Diagram 7** carefully and answer the questions that follow.

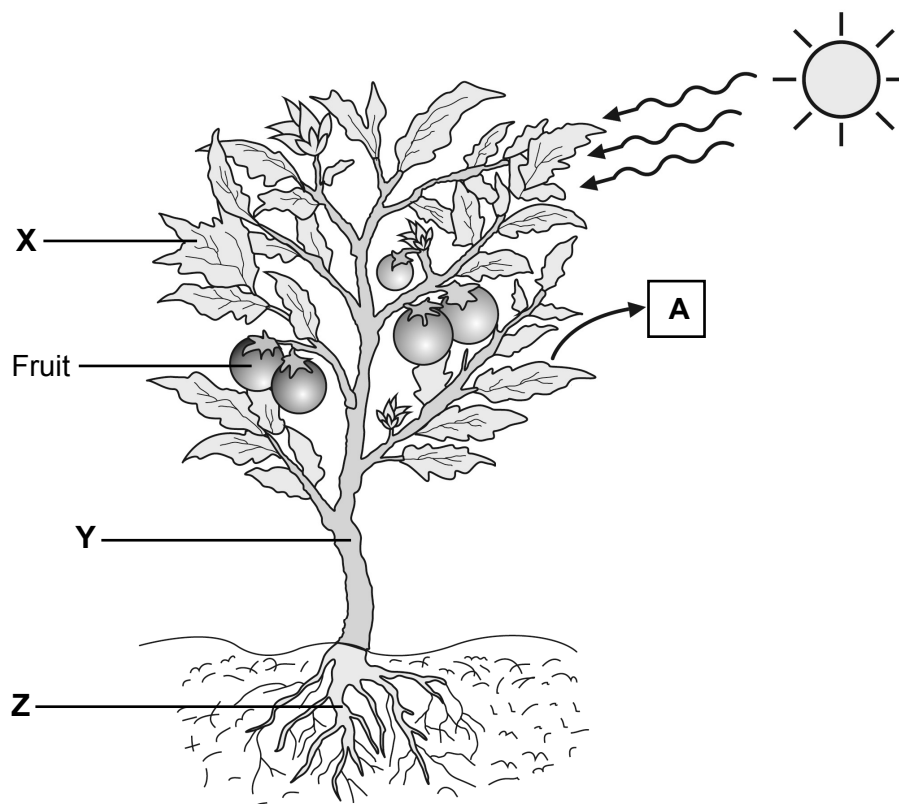


Diagram 7

(a) Name parts **X**, **Y** and **Z** of the tomato plant.

X

Y

Z

[3]

- (b) Name the process by which plants manufacture their food.

..... [1]

- (c)(i) In which part of the tomato plant is food manufactured?

..... [1]

- (ii) What does this part of the tomato plant contain that allows the plant to manufacture its food?

..... [1]

- (d) Give **two** conditions that are necessary for the tomato plant to manufacture its food.

1. [1]

2. [1]

- (e) Gas **A** is released in the atmosphere during the process of food manufacturing. Name gas **A**.

..... [1]

- (f) Explain why we should avoid keeping plants in a **closed** bedroom at night, when we are sleeping there.

.....

..... [2]

- (g) Give **two** ways in which plants are useful to people.

1. [1]

2. [1]

Question 9 (11 marks)

Study **Diagram 8** carefully and answer the questions that follow.

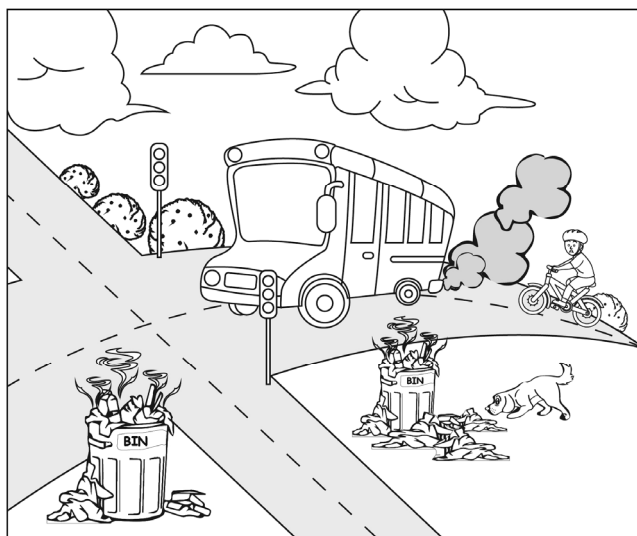


Diagram 8

- (a) Identify **two** sources of air pollution shown in **Diagram 8**.

Source 1: [1]

Source 2: [1]

- (b) Give **one** way in which air pollution can be reduced from each source identified in part (a).

Source 1:

..... [2]

Source 2:

..... [2]

- (c) How does air pollution affect

(i) people?

..... [2]

(ii) plants?

..... [2]

- (d) Give another source of air pollution **not** shown in **Diagram 8**.

..... [1]

Question 10 (8 marks)

Five friends are discussing what they would do to put out a fire in a pan containing oil.

Each friend makes a suggestion on how to put out the fire, as shown below.

For each suggestion, indicate whether the fire will be put out or not and explain why.

An example is given.



Example:



I would turn off the gas.

Fire is put out

☐

Fire is not put out

☒

Reason: *The source of the fuel will keep burning.*

(a)



I would blow air over the fire.

Fire is put out

☐

Fire is not put out

☐

Reason:

.....

(b)



I would cover the pan with a metal lid.

Fire is put out

☐

Fire is not put out

☐

Reason:

.....

(c)



I would throw water on the pan.

Fire is put out

☐

Fire is not put out

☐

Reason:

.....

(d)



I would throw sand in the pan.

Fire is put out

☐

Fire is not put out

☐

Reason:

.....

[8]

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