

STUDENT  
NAME

CENTRE  
NUMBER

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CANDIDATE  
NUMBER

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**SCIENCE**

**October 2023**

Total time: 35 minutes

Candidates answer on the Question Paper.  
No Additional Materials are required.

**READ THESE INSTRUCTIONS FIRST**

Write your centre number, candidate number and name in the spaces at the top of this page.

Write in dark blue or black pen.

Do not use staples, paper clips, glue or correction fluid.

DO **NOT** WRITE IN ANY BARCODES.

Answer **all** questions.

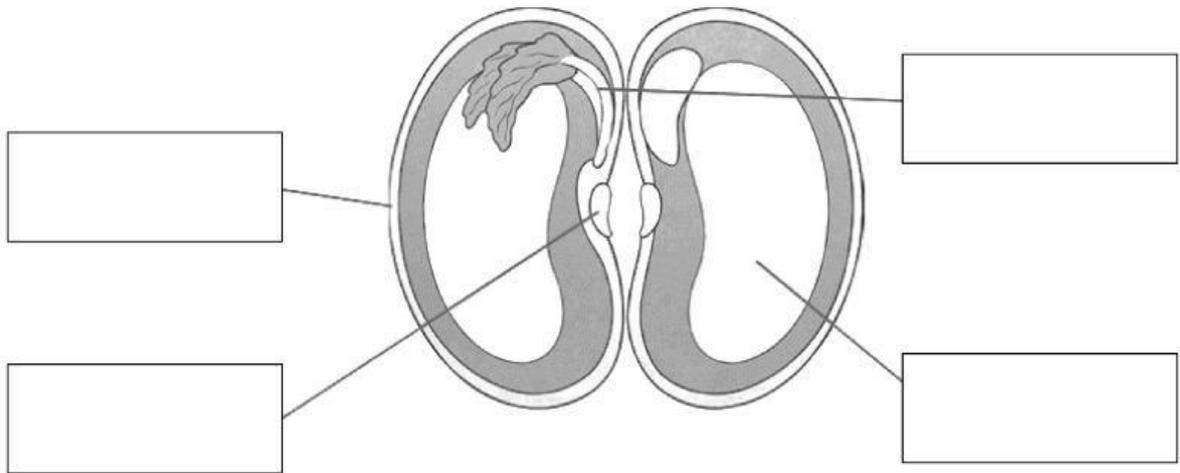
You should pay attention to punctuation, spelling and handwriting.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [ ] at the end of each question or part question.

For Teacher's Use	
Page	Mark
1	
2	
3	
4	
5	
6	
Total	

1 Label the parts of a seed.



[Total marks: 4 points]

2 Angela and Peter investigate the effect of air on the germination of seeds.



They discuss how to do their investigation. They have five ideas.

- A Give all the seeds the same amount of water.
- B Use different types of plastic.
- C Don't water a group of the seeds.
- D Put one group in a place with light, put the other on a dark place.
- E Put the two groups of seeds in the same place.

(a) Which two ideas will make the investigation a fair test?

..... [1] and ..... [1]

(b) Among the three factors that seeds need to germinate, which two factors should be kept the same?

..... [1] and ..... [1]

[Total marks: 4 points]

3 Angel puts her pot, with 10 seeds in it, in the dark. Pepe puts his pot, with 10 seeds in it, in the light. They count the number of seedlings that have grown. Here are their results:

After 2 days, no seeds in the dark and no seeds in the light
After 4 days, 1 seed in the dark, no seeds in the light
After 6 days, 3 seeds in the dark, 2 seeds in the light
After 8 days, 8 seeds in the dark, 6 seeds in the light
After 10 days, 10 seeds in the dark, 10 seeds in the light

(a) Complete the table to show how many seedlings germinated.

time in days	number of seedlings in the dark	number of seedlings in the light
2		
4		
6		
8		
10		

[2]

(b) What could they conclude based on the results of their investigation?

.....  
.....[1]

[Total marks: 3 points]

4 One of the life processes of plants is reproduction.

(a) Which part of the plant is needed for reproduction?

Tick (✓) the correct box.

- flower
- leaf
- stem
- root

[1]

(b) Write a short description of this process.

.....

..... [1]

[Total marks: 2 points]

5 Look at the pictures below, then answer the questions that follow.

(a) The picture shows a coconut seed.



Coconut seeds need to travel as far from the tree as possible.

Write down a reason why.

.....

..... [1]

(c) The picture shows dandelion seeds.



In what way do the seeds get dispersed?

.....  
.....[1]

[Total marks: 2 points]

6 The pictures show different seeds.

Draw a line from each seed to the way it is dispersed.

seed	way of dispersal	seed
	animals	
	explosion	
	wind	

[Total marks: 6 points]

7 Seeds need resources to begin growing.

Likewise, plants need things to grow into mature plants.

(a) Draw a circle around the things that ALL plants need to grow.



Sunlight



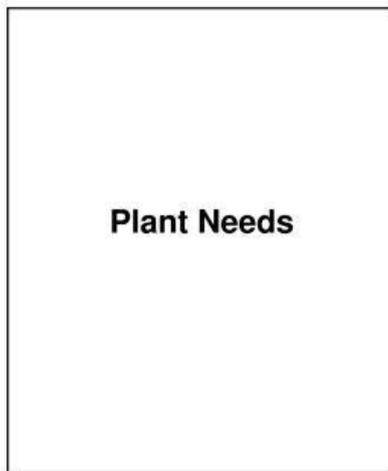
Air



Moonlight



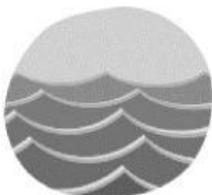
Hammer



Plant Needs



Fire



Water



Dog



Soil

[3]

**(b) What do seeds need to germinate? Write your answer.**

[3]