

Name:

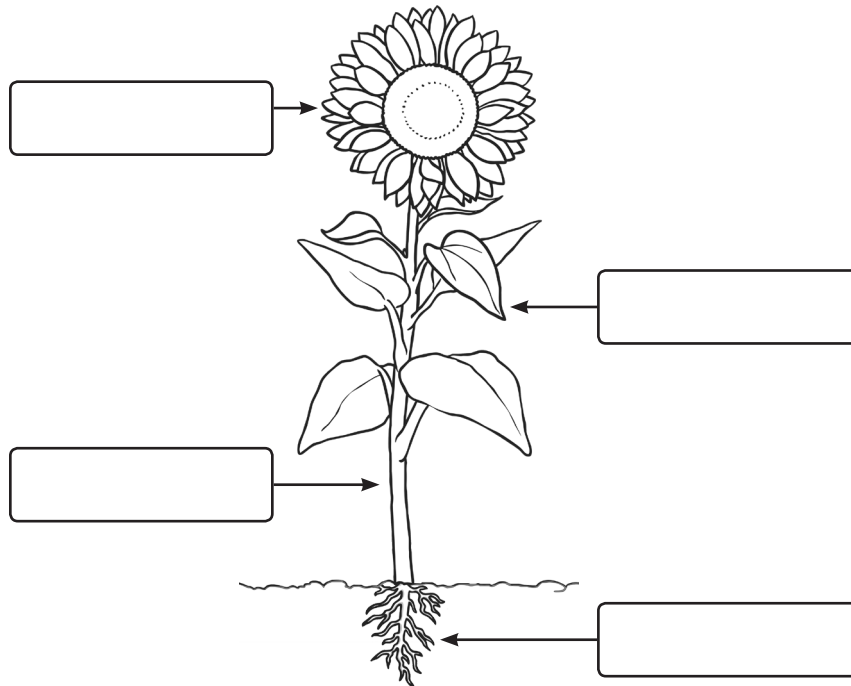
Date:

Science Assessment Year 3: Plants



Parts of a Plant

1. Label these parts of this plant:



3 marks

2. What jobs do these parts of a plant do?

a) The petals:

b) The stem:

c) The roots:

3 marks

3. Where are food and nutrients made in this plant?

Circle one word.

Roots

Stem

Petals

Leaves

1 mark

Total for this page

4. What is the process of making food in a green plant called?

1 mark

Living Things

5. Mrs Nerg helps us remember what all living things do, name 2 things all living things do.

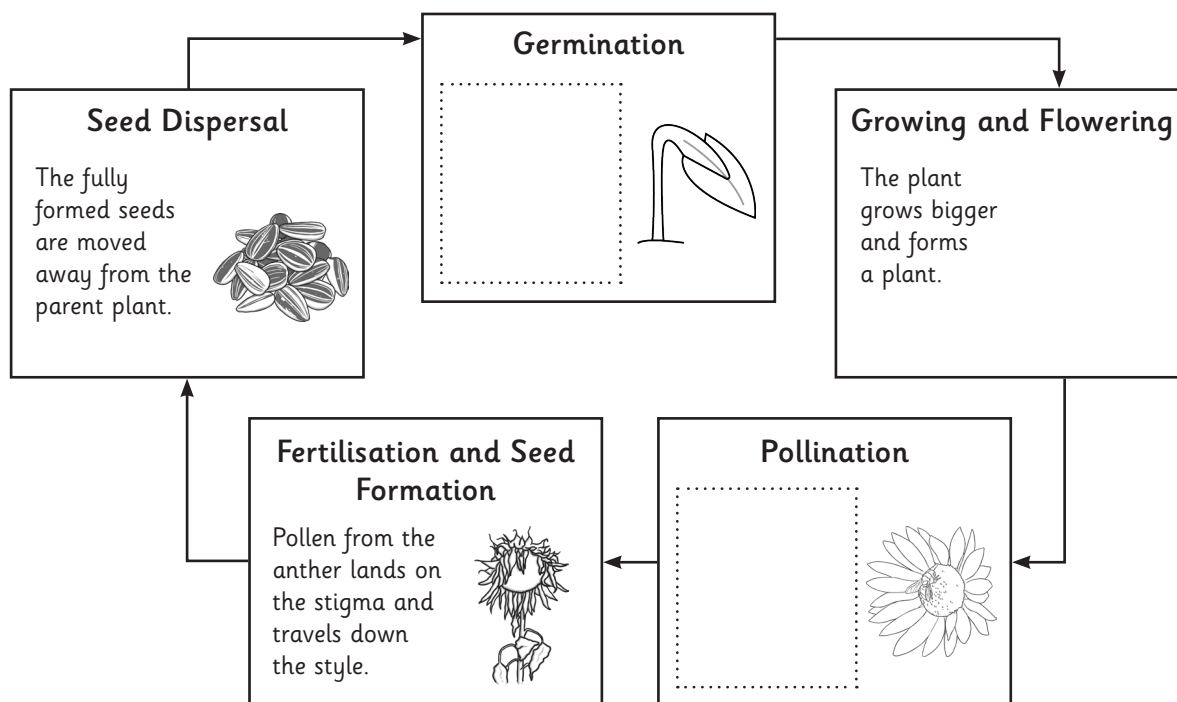
a)

b)

2 marks

The Lifecycle of a Plant

6. Fill in the missing parts of this lifecycle.



2 marks

7. Name two ways that seeds can be dispersed:

a)

b)

2 marks

Total for this page

8. Name 2 things that a plant needs to grow:

a)

b)

2 marks

Planning an Investigation

We need to investigate whether a plant will grow quicker in a warm place than a cold place.

9. What is the one variable we will change in this investigation?

.....

1 mark

10. Name two variables that need to stay the same:

a)

b)

2 marks

Here are the results of the investigation:

	Plant in the cold shed by the window	Plant in the warm classroom by the window	Plant in the Headteacher's office by the hot radiator
Week 1 Height	0cm	2cm	2cm
Week 2 Height	1cm	4cm	4cm
Week 3 Height	2cm	6cm	died

11. How tall do you think the plant in the cold shed will be in week 4?

cm

1 mark

12. How tall do you think the plant in the warm classroom will be in week 4?

cm

1 mark

Total for this page

13. Why do you think the plant near the hot radiator died?

.....

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1 mark

14. Write a conclusion from these results.

.....

.....

1 mark

15. Explain why people grow things in greenhouses.

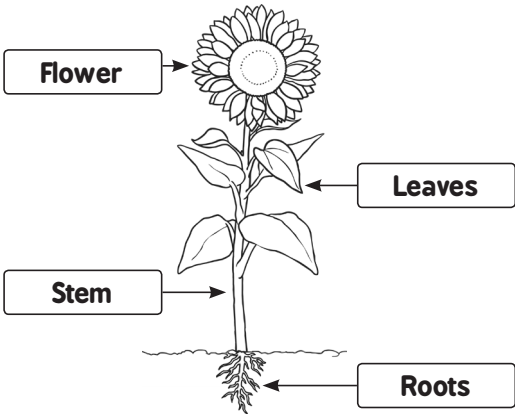
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2 marks

Total for
this page

question	answer	marks	notes
1. Label these parts of this plant.			
		3	Allow for small errors in spelling if it is obvious what the word is. 1 mark = 2 correct 2 marks = 3 correct 3 marks = 4 correct
2. What jobs do these parts of a plant do?			
a	The petals attract insects.	1	Accept either answer for b and c. Accept water or nutrients. Wording does not have to match exactly this example.
b	The stem holds up the plant / carries water to the flower.	1	
c	The roots anchors the plant / carries water or nutrients.	1	
3. Where are food and nutrients made in this plant?			
	Leaves	1	Do not give marks if more than one is circled.
4. What is the process of making food in a green plant called?			
	Photosynthesis	1	Allow for errors in spelling if it is obvious what the word is.
5. Mrs Nerg helps us remember what all living things do, name 2 things all living things do.			
	1 mark for each answer from any of the following: <ul style="list-style-type: none">• Movement• Reproduction• Sensitivity• Nutrition• Excretion• Respiration• Growth	2	Do not accept 'breathe' for respiration. Do not accept 'eat' for nutrition.

question	answer	marks	notes
6. Fill in the missing parts of this lifecycle.			
	1 mark for each space filled in correctly: Germination acceptable answers: <ul style="list-style-type: none"> The seed starts to grow Green shoots appear / show Pollination acceptable answers: <ul style="list-style-type: none"> Bees/insects take pollen from one plant to another Pollen fertilises the egg Pollen moved from one plant to another by birds, bats or wind. 	2	Do not accept: The plant grows (rather than 'starts' to grow) Accept bee or insect. Also accept other forms of pollination e.g. birds, bats, wind.
7. Name two ways that seeds can be dispersed:			
	1 mark each for any two from: <ul style="list-style-type: none"> Wind People / animals (burrs) Water (coconuts) Explosive / self-propelled Eaten by animals / in animal excretion 	2	Do not accept soil.
8. Name 2 things that a plant needs to grow:			
	1 mark each for any two from: <ul style="list-style-type: none"> Warmth Light Water Air Nutrients 	2	
9. What is the one variable we will change in this investigation?			
	1 mark for: The place where the plant is kept.	1	
10. Name two variables that need to stay the same:			
	1 mark each for any two from: <ul style="list-style-type: none"> amount of water given type of plant / seed amount of soil size of plant pot amount of light amount of air amount of nutrients / plant feed 	2	
11. How tall do you think the plant in the cold shed will be in week 4?			
	1 mark for any of: <ul style="list-style-type: none"> 3cm 3 Any answer 2.5cm > 5cm 	1	

question	answer	marks	notes
12. How tall do you think the plant in the warm classroom will be in week 4?			
	1 mark for any of: <ul style="list-style-type: none"> • 8cm • 8 • Any answer 8.5cm>11.5cm 	1	
13. Why do you think the plant near the hot radiator died?			
	1 mark for: <ul style="list-style-type: none"> • Too hot 	1	Do not give marks for other responses that would indicate an unfair test e.g. 'not watered', 'someone broke it', etc.
14. Write a conclusion from these results.			
	1 marks for answers that mention both the temperature and the height /speed of growth for example: <ul style="list-style-type: none"> • The coldest place makes the plants grow slower • A warm place makes plants grow higher /quicker. 	1	No marks for answers that only mention either the temperature or the height.
15. Explain why people grow things in greenhouses.			
	2 marks for answers that link the findings of this investigation to a warm greenhouse: <ul style="list-style-type: none"> • Plants grow better in a warm place and a greenhouse is warm 1 marks for answers that only mention one element: <ul style="list-style-type: none"> • Greenhouses are warm • Plants like it warm 	2	
		total 25	