

SINGAPORE CHINESE GIRLS' SCHOOL (PRIMARY)

SECOND SEMESTRAL ASSESSMENT 2017

NAME: _____ ()

DATE: 26 OCTOBER 2017

CLASS: PRIMARY 3 SY / C

Parent's Signature:

SCIENCE

BOOKLET A

20 questions

40 marks

Total time for Booklets A & B: 1 h 25 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

Part I (40 marks)

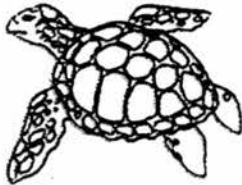
For each question from 1 to 30, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. Study the objects below.



Which of the following can be placed in the same group as those above?

1)



3)



2)



4)



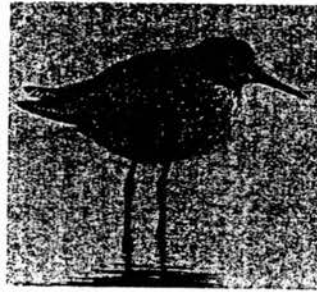
2. A scientist discovers a new animal and describes it as:

- It has the colour of a lion.
- It has a horn on its head.
- Its young hatch from eggs.
- It has an outer covering of feathers.

Which of the following groups does this animal most likely belong to?

- | | |
|---------------|-------------|
| 1) Amphibians | 3) Mammals |
| 2) Birds | 4) Reptiles |

3. Before winter sets in, birds like the common redshank shown below fly to a warmer place.



Which of the following characteristics of living things are shown in this behaviour?

- A: They can move by themselves.
B: They need water to survive.
C: They need sunlight to make food.
D: They respond to changes.
- 1) A and B only 3) B and C only
2) A and D only 4) C and D only

4. The following table shows the characteristics of K, L, M and N.

Characteristics	K	L	M	N
Makes its own food		✓		
Need air, food and water		✓	✓	✓
Moves from place to place	✓		✓	✓
Covered with hair	✓		✓	

Which of the following is correct?

- 1) L is a rose plant.
2) N belongs to the bird group.
3) L, M and N are living things.
4) M crawls to get to places.
5. Which of the following statements about bacteria is true?
- 1) Bacteria reproduce by spores.
2) Bacteria can produce their own food.
3) Bacteria only grow on our food and spoil it.
4) Bacteria can be seen clearly only through microscopes.

6. Study the table below.

Lives on land			
Produces its own food		Cannot produce its own food	
Produces flowers	Does not produce flowers	Eats plants	Eats meat
	B		D

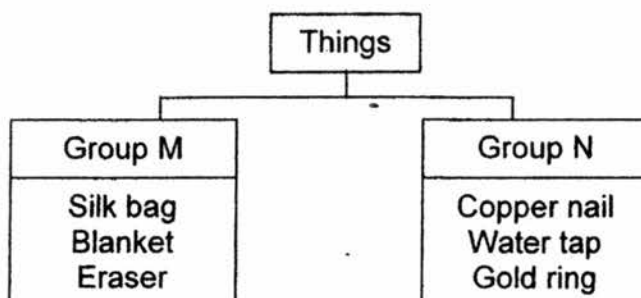
Which of the following could B and D be?

	B	D
1)	Bird's nest fern	Goat
2)	Mushroom	Goat
3)	Mushroom	Lion
4)	Bird's nest fern	Lion

7. Which of the following objects should be made of a material that is waterproof but **not** flexible?

- | | |
|-------------|---------------|
| 1) bowl | 3) pants |
| 2) raincoat | 4) bath towel |

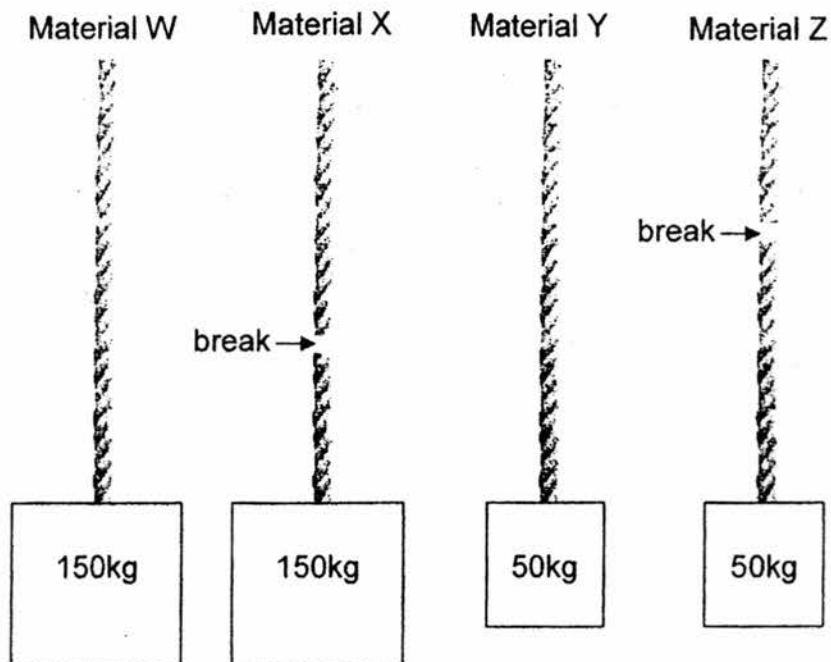
8. Study the classification chart below carefully.



Which of the following are suitable headings for Groups M and N?

	M	N
1)	Alive	Never alive
2)	Made from plants	Made from animals
3)	Non-metals	Metals
4)	Not waterproof	Waterproof

9. Alison used 4 different materials, W, X, Y and Z to make ropes. She then tied some weights at one end of each rope. She found that Materials X and Z snapped as shown below.



Alison then made the following statements based on the results of her experiment. Which of the following statements is correct?

- 1) Material W is stronger than Material X.
- 2) Material X is stronger than Material ~~X~~
- 3) Material Y is stronger than Material X.
- 4) Material Z is stronger than Material Y.

10. The _____ system takes in air into our body..

- 1) skeletal
- 2) respiratory
- 3) digestive
- 4) circulatory

11. Which of the following statement is **correctly** matched?

	System	Functions
1)	Circulatory	Transport oxygen throughout our body
2)	Digestive	Gives our body its shape
3)	Muscular	Breaks down food into simpler substances
4)	Skeletal	Transport food throughout our body

12. Which of the following correctly shows the flow of food in the human digestive system?

- 1) Mouth → stomach → small intestine → gullet → anus → large intestine
- 2) Mouth → anus → large intestine → stomach → small intestine → anus
- 3) Mouth → gullet → small intestine → stomach → large intestine → anus
- 4) Mouth → gullet → stomach → small intestine → large intestine → anus

13. Which 2 parts of the digestive system do **not** contain digestive juice?

- 1) mouth and stomach
- 2) gullet and small intestine
- 3) gullet and large intestine
- 4) stomach and small intestine

14. When our stools become too hard, it is most likely because _____.

- 1) too little digestive juices are added to the food in the mouth
- 2) too much water is absorbed by the large intestine
- 3) too much water is absorbed by the small intestine
- 4) too much water is drunk

15. Look at the plant below.

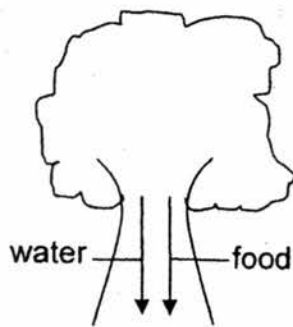


Which of the following is the plant above **not** able to do?

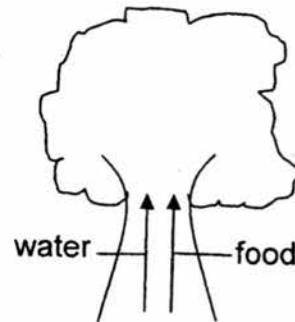
- 1) Make food
- 2) Stay firmly in the soil
- 3) Take in water and mineral salts
- 4) Transport water and mineral salts

16. Which of the following diagrams correctly shows the flow of food and water in trees?

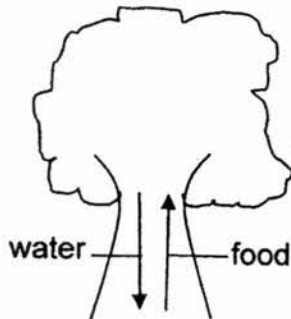
1)



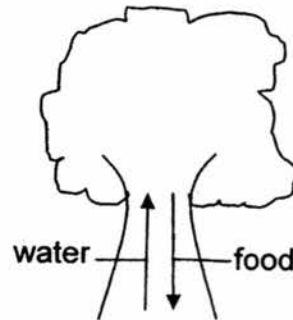
3)



2)



4)



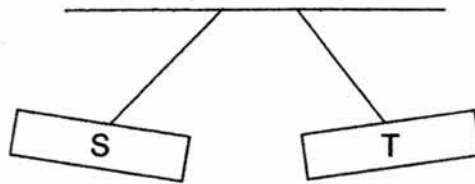
17. Matthew brings the following objects near a magnet.

A: Steel staples	C: Iron nail
B: Aluminium can	D: Silver ring

Which of the objects will be attracted to the magnet?

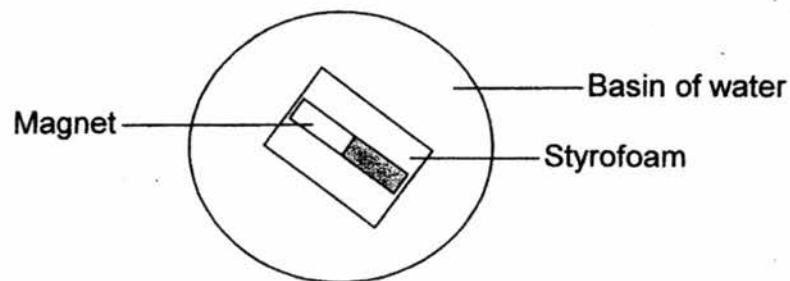
- | | |
|------------|------------|
| 1) A and B | 3) B and C |
| 2) A and C | 4) C and D |

18. 2 bars, S and T, are hung from a rod. The diagram below shows what happens when they are brought near each other.

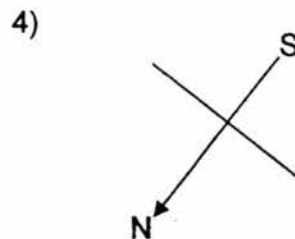
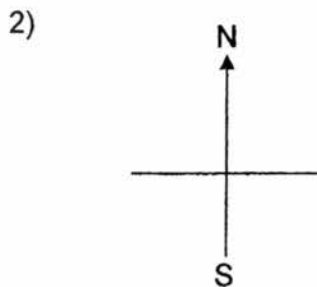
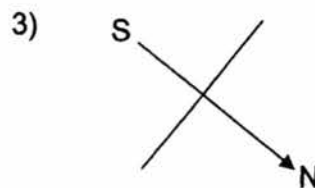
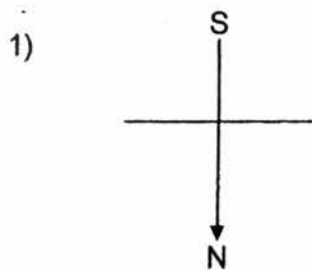


Which of the following statements is true?

- 1) S is a magnet while T is non-magnetic.
 - 2) T is a magnet while S is non-magnetic.
 - 3) S and T are both magnets.
 - 4) S and T are not magnets.
19. A magnet is taped onto a piece of Styrofoam and placed into a basin of water. It is then spun until it comes to rest in the direction shown below.



Which of the following correctly shows the directions of North, South, East and West?



20. Which of the following objects needs magnets to work?

1)



3)



2)



4)



End of Booklet A

SINGAPORE CHINESE GIRLS' SCHOOL (PRIMARY)

SECOND SEMESTRAL ASSESSMENT 2017

NAME: _____ ()

DATE: 26 OCTOBER 2017

SCIENCE

BOOKLET B

	Total Actual Marks	Total Possible Marks
Booklet A		40
Booklet B		30
Total		70

9 questions

30 marks

Total time for Booklets A & B: 1 h 25 min

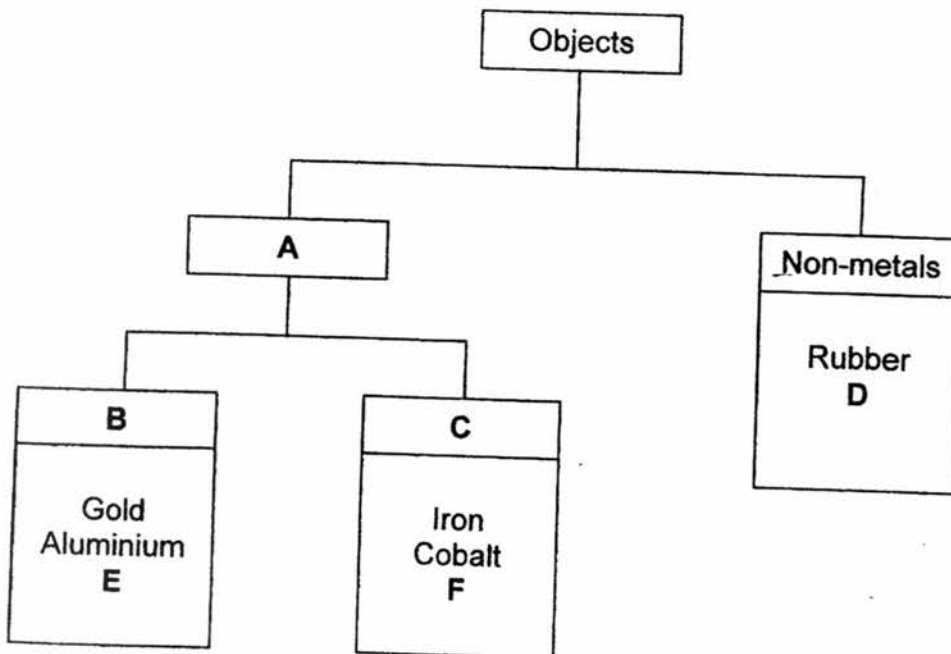
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Part II (30 marks)

Answer all the following questions.

21. Look at the classification chart below.



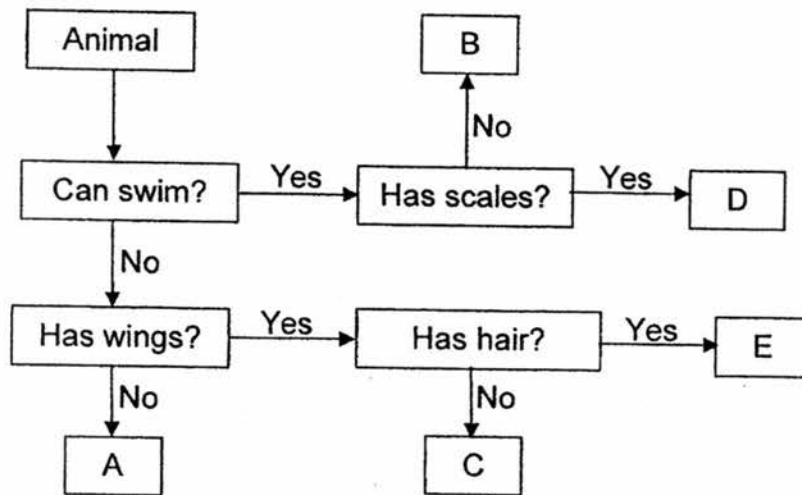
Match the words in the box to the appropriate letter.

[4]

Paper	Steel	Magnetic
Metals	Brass	Non-magnetic

A: _____
C: _____
D: _____
E: _____

22. Study the flowchart below carefully.



a) Describe Animal B.

[1]

b) Name one similarity between Animals C and E

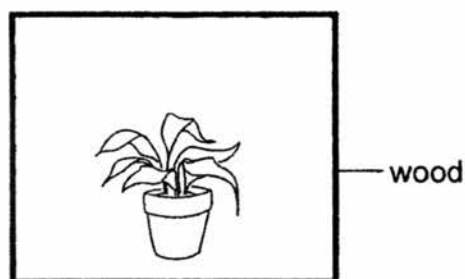
[1]

c) Based on the flowchart, which animals, A, B, C, D or E represent the animals in the table below?

[2]

Parrot	Goldfish	Frog	Bat

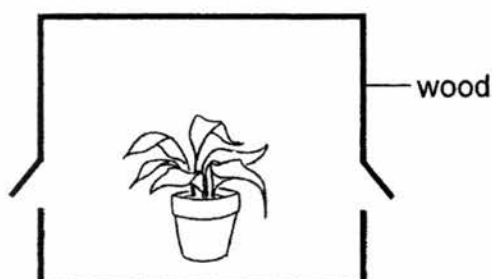
23. Pauline wants to find out if the amount of light affects the height of plants. She is given 4 set-ups as shown below.



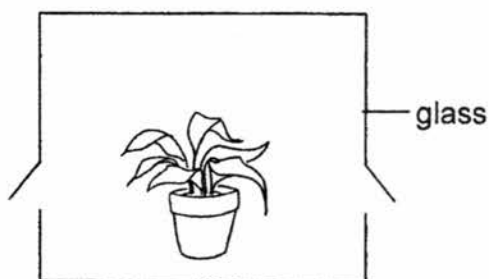
Set up A



Set up C



Set up B



Set up D

- a) Which 2 set ups should she use to carry out a fair test? [1]

- b) Some variables are listed below. Which variable/s should Pauline keep the same or change to ensure a fair test? Tick (✓) your answers. [2]

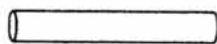
Variables	Change	Keep the same
Transparency of box		
Type of plant		
Size of plant		
Amount of water given		

- c) Living things need food to stay alive. However, plants do not need to hunt for food. Explain why. [1]

24. Indra carried out a flexibility test on 3 rods made of different materials. She bent each rod with the same amount of strength. The results are shown below.



X



Y



Z

- a) Arrange the materials starting from the least flexible to the most flexible. [1]

- b) Indra wants to use one of the 3 materials, X, Y or Z to make Part M of the knife below.



Which material, X, Y or Z, is the most suitable for making Part M? [1]

- c) What is another important property which Part M should have? [1]

25. Read the following statements about the human body systems. Tick 'True' for true statements and 'False' for false statements. [2]

	Statements	True	False
a)	The ribcage protects our heart and lungs.		
b)	Digestion of food is completed in the small intestine.		
c)	The blood vessels make up the skeletal system.		
d)	Saliva is a digestive juice that also softens food so it can be swallowed easily.		

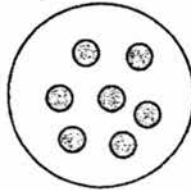
26. Carla had a plate of spaghetti as shown below for lunch.



a) What is the function of the teeth in the mouth?

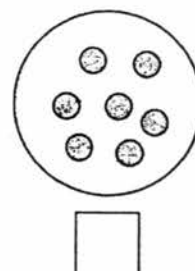
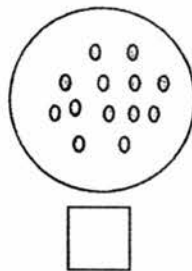
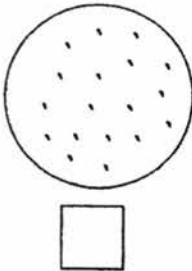
[1]

The picture below shows how the appearance of the food in Carla's mouth ~~after~~
~~a few minutes~~
before it entered the gullet



b) Tick the size of the food that would have just left the gullet.

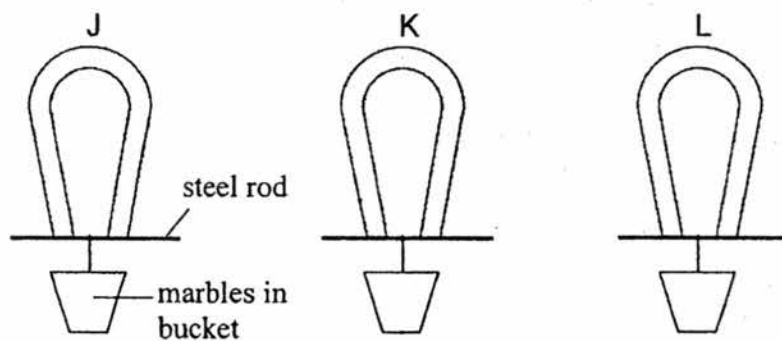
[1]



c) Explain your answer in part (b).

[1]

27. Maurice conducted an experiment with 3 magnets to find out the strength of each magnet.



The results of her experiment are shown in the table below.

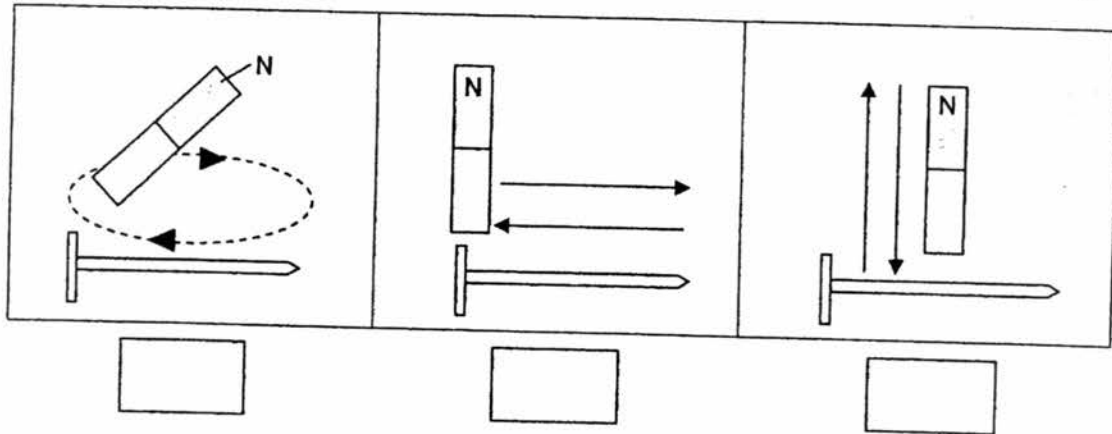
Magnet	Number of marbles in bucket when steel rod dropped
J	22
K	18
L	15

- a) Based on the results above, which is the strongest magnet? [1]

- b) Explain why the experiment would not work if a copper rod is used. [2]

28. Isaac wants to make an iron nail into a magnet by the 'stroke' method.

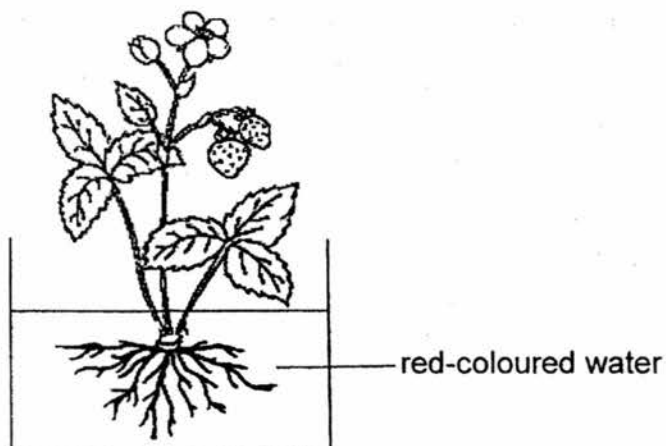
- a) Tick the diagram which shows the correct way of using the 'stroke' method to make an iron nail into a magnet. [1]



- b) What should Isaac do to find out if the iron nail has successfully become a magnet? [2]

- c) How can Isaac increase the strength of the magnetised iron nail? [1]

29. Elaine placed a plant into a container filled with red-coloured water as shown below.

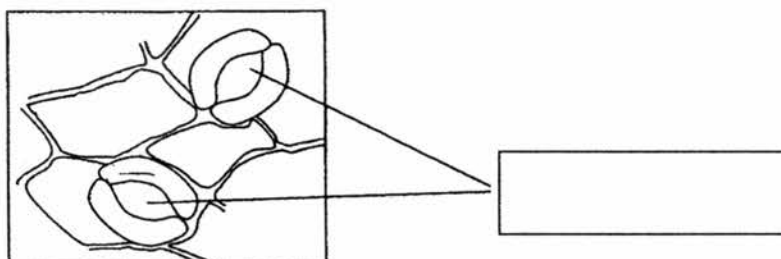


- a) After 5 days, Elaine observed that the flower and leaves turned red. Explain clearly why the flower and leaves turned red.

[2]

- b) Elaine then cut one of the leaves from the plant and observed it using a microscope. The picture below is a view of the underside of the leaf. Label the identified parts.

[1]



End of Booklet B

SCGS P3 SA2 2017

Part 1 (50m)

1.	3	6.	4	11.	1	16.	4
2.	2	7.	1	12.	4	17.	2
3.	2	8.	3	13.	3	18.	3
4.	3	9.	1	14.	2	19.	3
5.	4	10.	2	15.	1	20.	3

Part 2 (30m)

Qn	Suggested Answer															
21	A: Metals, C: Magnetic D: Paper E: Brass															
22a	Animal B <u>can swim</u> (0.5m) and <u>has no scales</u> (0.5m).															
22b	Both cannot swim/ have wings. (1m)															
22c	<table border="1"> <tr> <td>Parrot</td><td>Goldfish</td><td>Frog</td><td>Bat</td></tr> <tr> <td>C</td><td>D</td><td>B</td><td>E</td></tr> </table>	Parrot	Goldfish	Frog	Bat	C	D	B	E							
Parrot	Goldfish	Frog	Bat													
C	D	B	E													
23a	Set ups B and D															
23b	<table border="1"> <tr> <th>Variables</th><th>Change</th><th>Keep the same</th></tr> <tr> <td>Transparency of box</td><td>✓</td><td></td></tr> <tr> <td>Type of plant</td><td></td><td>✓</td></tr> <tr> <td>Size of plant</td><td></td><td>✓</td></tr> <tr> <td>Amount of water given</td><td></td><td>✓</td></tr> </table>	Variables	Change	Keep the same	Transparency of box	✓		Type of plant		✓	Size of plant		✓	Amount of water given		✓
Variables	Change	Keep the same														
Transparency of box	✓															
Type of plant		✓														
Size of plant		✓														
Amount of water given		✓														
23c	Plants can make their own food / photosynthesise / carry out photosynthesis.															
24a	Y, Z, X															
24b	Y															
24c	It must be waterproof / strong.															

25	T, T, F, T
26a	The teeth breaks up / grind / cut / chop / make / the food into <u>smaller pieces</u> . Note: <u>Breaks down food into simpler substances</u> – wrong as it means digestion.
26b	
26c	Gullet <u>does not / cannot digest food</u> .
27a	Magnet J is the strongest magnet.
27b	Copper is a <u>non-magnetic material</u> and <u>cannot be attracted to the magnet</u> .
28a	Box on the left (1 st Box)
28b	isaac should <u>bring the iron nail close</u> to <u>iron/ steel/ magnetic</u> objects and see if it is able to <u>attract</u> them. OR Use another <u>magnet</u> to check if the iron rod <u>repels</u> it. (mention of 'attract' as the result is wrong as the iron rod need not become a magnet to be attracted by a magnet)
28c	Stroke the iron nail <u>more times</u> / Use a stronger magnet
29a	The <u>roots took in / absorb</u> the (red-coloured) water and the <u>stem / Water-carrying tubes / xylem tubes / transported/carry up</u> the red water <u>to the flowers and leaves</u> .
29b	Stomata/ Stoma (1m)