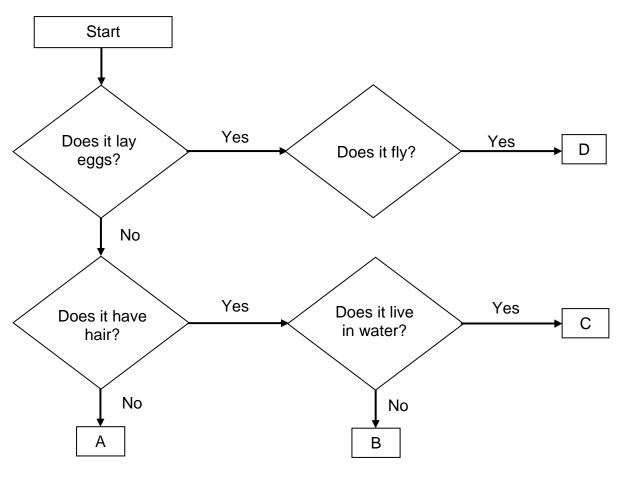
1a Study the flowchart below.



- (a) State the characteristics of animal C. [1]
- (b) State one similarity between animal A and animal C. [1]
- (c) State one difference between animal A and animal D. [1]

Topic: Diversity (Living Things – Animals)

Process Skills: Observing, Comparing, Analysing

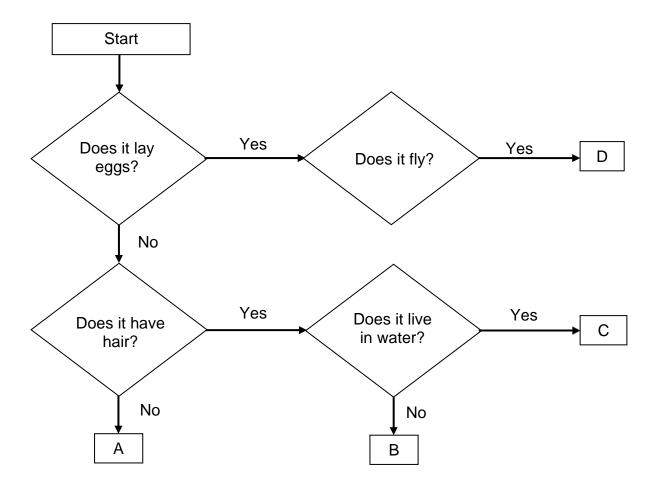
Suggested Response:

1a) Animal C does not lay eggs, have hair and lives in water.

1b) Both A and C do not lay eggs.

1c) D lay eggs but A does not lay eggs.

1b Study the flowchart below.



Ali wanted to use the above flow chart to classify a few animals. Which of the following classification is correct?

	В	С	D
(1)	dolphin	elephant	fly
(2)	tiger	dolphin	pigeon
(3)	whale	giraffe	penguin
(4)	monkey	whale	bat

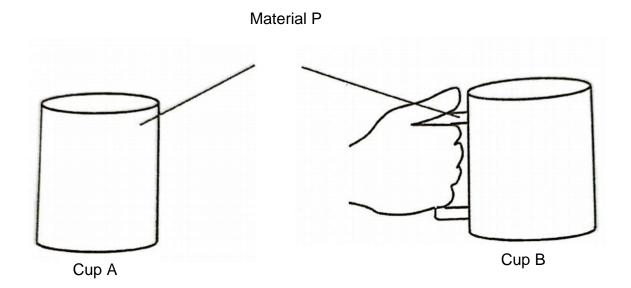
)

Topic: Diversity (Living Things – Animals)

Process Skills: Observing, Comparing, Analysing, Inferring

Suggested Response: (2)

2 Eric has two cups, A and B, made of material P. He poured an equal amount of hot water into each cup. Cup A was too hot to hold but he can hold cup B easily as shown



Which of the following best explains why Eric can hold cup B easily but not cup A?

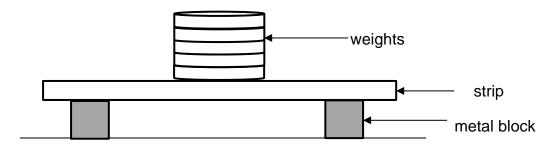
- (1) Cup A is a good conductor of heat.
- (2) Cup A is a good conductor of heat.
- (3) Distance from heat source is further in cup B.
- (4) Cup A is a good conductor of heat but the handle of cup B is not.

()

Topic: Interactions (Heat and Temperature) Process Skills: Observing, Comparing, Analysing,

Suggested Response: (3)

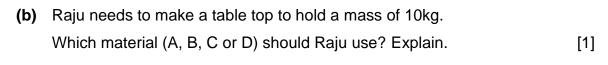
3 Raju conducted an experiment using four strips made of materials A, B, C and D respectively. The strips are of similar thickness and length. He put weights on each strip until it broke.



Raju then recorded the mass each strip could hold before it broke. He recorded the results in the table as shown below.

Material	Mass (kg) on the strip before it broke
А	6
В	4
С	12
D	8

(a)	What property of the material was Raju testing?	[1]



Topic: Diversity (Materials)

Process Skills: Observing, Comparing, Analysing, Inferring, Evaluating

Suggested Response:

3a) Strength

2b) Claim: Material C

Evidence: From the table, only material C is able to hold more than 10kg of mass

before it breaks.

Reason: So, Material C is the strongest material to be used to make a table top.

4 Three pieces of bread, A, B, C and D are sealed in a bag and left for 7 days under the conditions shown below.

Set-up	Type of bread	Temperature	Moisture given
Α	White bread	27°C	Yes
В	White bread	27°C	No
С	Toasted bread	27°C	Yes
D	Toasted bread	40°C	No

` ,	to investigate if water is needed for moulds to grow? [1]
(b)	For a fair test, which set-ups should be used if the aim of the experiment is to investigate if the type of bread affects the growth of moulds? [1]

(a) For a fair test, which set-ups should be used if the aim of the experiment is

(c) For the set-ups chosen in (b), name 1 other condition that should be kept constant for it to be a fair test. [1]

Topic: Diversity (Fungi and Bacteria)

Process Skills: Observing, Comparing, Analysing, Inferring, Evaluating

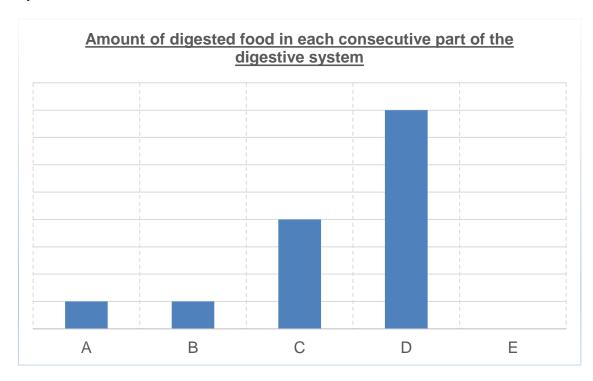
Suggested Response:

4a) A and B

4b) A and C

4c) Size of the bread/ brand of the bread/ location at which the experiment is conducted

5 The graph shows the amount of digested food is each part of the digestive system.



(a) Which part of the digestive system (A, B, C, D or E) is the gullet? Explain why.

(b) Which part of the digestive system is part E and explain why. [1]

Topic: Systems (Digestive System)

Process Skills: Observing, Comparing, Analysing, Inferring, Evaluating

Suggested Response: 5a) Claim: Part B

Evidence: From the graph, the data point remains constant from A to B.

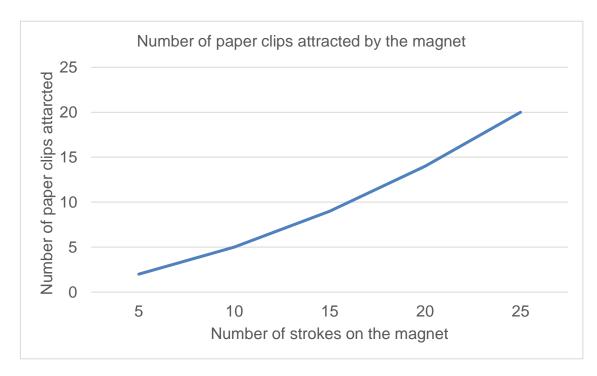
Reason: This shows that the amount of food remains constant from A to B, which

shows no digestion taking place.

5b) Claim: Part E

Evidence: From the graph, there is zero amount of food digested in E. Reason: The large intestine does not contain any digested food as all the digested food has been absorbed into the blood in the small intestine.

6 The graph shows the number of paper clips attracted by the magnet after it was stroked a number of time.



(a) What is the relationship between the number of strokes on the magnet and the number of paper clips attracted? [1]

Topic: Interaction (Magnets)

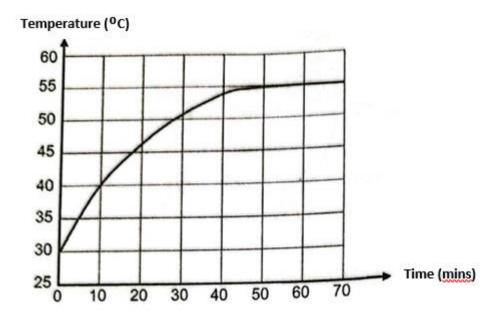
Process Skills: Observing, Comparing, Analysing, Inferring, Evaluating

Suggested Response:

6a) As the number of strokes on the magnets increases, the number of paper clips attracted increases. (cause and effect)

7 Cars parked under the sun become hot quickly as heat that enters the car cannot escape easily.

Alex measured the temperature inside a car parked under the sun. He started timing immediately after the car was parked. His results are as shown.



(a) State what is temperature.

[1]

(b) State the temperature of the surroundings.

[1]

(c) State the time taken for temperature to reach 40 $^{\circ}$ C.

[1]

Topic: Interaction (Heat and Temperature)

Process Skills: Observing, Comparing, Analysing, Inferring, Evaluating Suggested Response:

7a) Temperature is the measurement of how hot or how cold an object is.

7b) 30°c

7c) It takes 10 mins to reach 40°C.