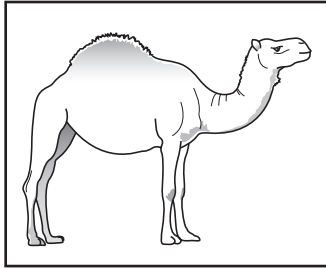


1 The place where an animal lives is called its habitat.

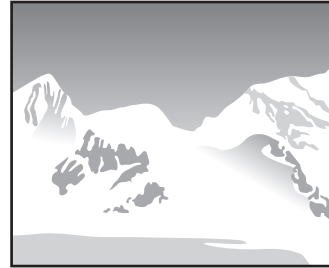
Draw a line to connect each animal in the list to the habitat in which it lives.

Animal

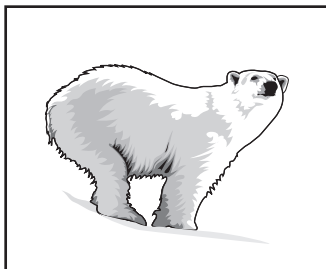
Habitat



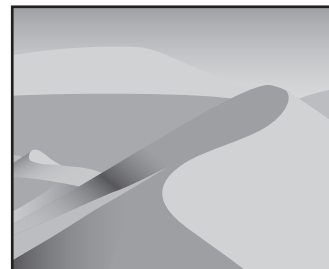
Camel



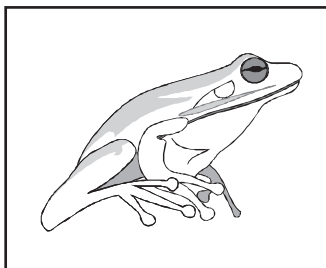
Arctic



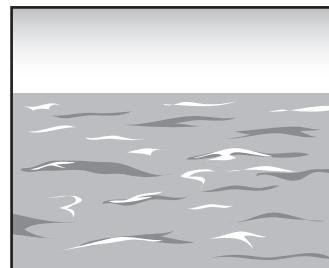
Polar bear



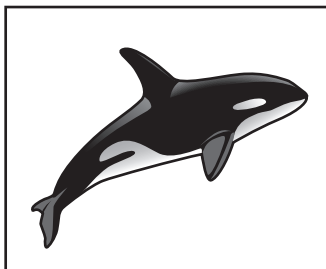
Desert



Tree frog



Ocean



Whale



Rainforest

[3]



Page Total



2 (a) Shirts can be made from synthetic or naturally occurring materials.

Which shirt is made from a naturally occurring material?
Tick (✓) the correct box.



rayon



nylon



polyester



cotton

[1]

(b) The table shows some materials found in Mr. Patel's house.
Tick (✓) the materials which came from living things.

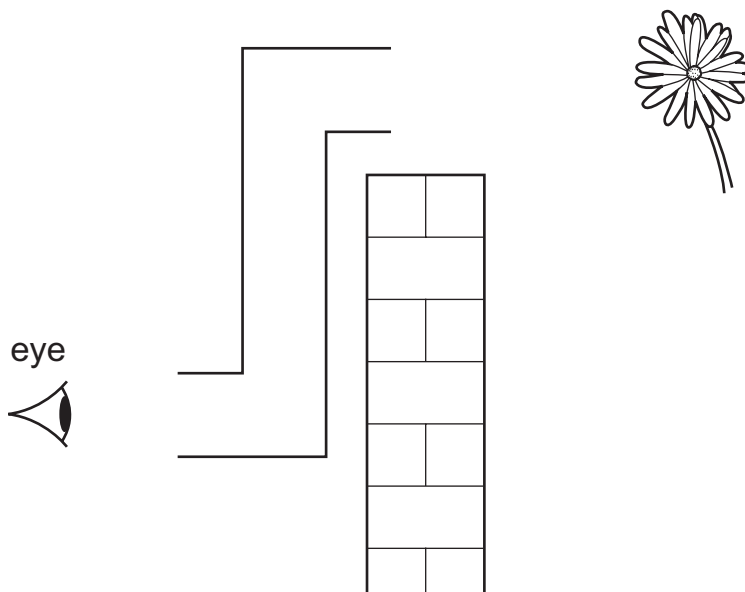
Materials	Made from living things
gold	
wood	
diamonds	
silk	
wool	
slate	

[2]

Page Total

4

3 (a) Freda is investigating light. She makes a periscope from card and two mirrors.



(i) On the diagram, show how Freda needs to position the mirrors so that the periscope will work.

[1]

(ii) Freda can see the flower using her periscope.

Use a ruler to draw a ray of light on the diagram to show how she sees the flower. (Remember to draw the arrowheads to show the direction of the light.)

[2]

(b) (i) Glass in a bathroom window lets light through but we cannot see through it.

What is the name that we give to materials that behave in this way?

..... [1]

(ii) Glass in a normal window lets light through and we can see through it.

What is the name that we give to materials that behave in this way?

..... [1]

Page Total

4 (a) All living things have seven life processes.
Fill in the missing **two**.

Nutrition

Movement

.....
Reproduction

.....
Sensitivity

Respiration

[2]

(b) Life processes are what we use to explain if something is living or not.
Put each item in the list into the correct box in the table.

car dog fallen branch glass seaweed tree

Living	Non-living

[3]

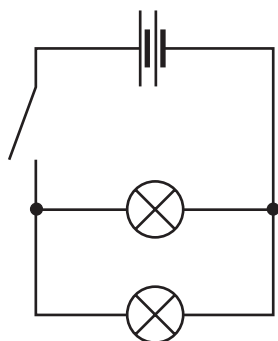
Page Total

6

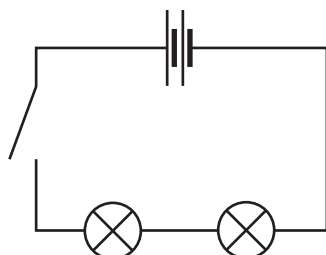
- 5 (a) An electrical circuit has two cells, correctly arranged, and two lamps in series with one switch. When the switch is closed both of the bulbs light up.

Which circuit, **A**, **B** or **C**, matches the description?

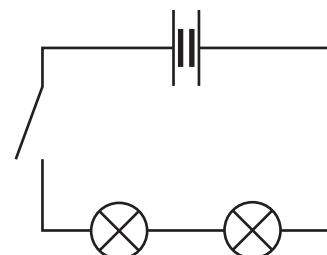
Put a circle around the answer.



A



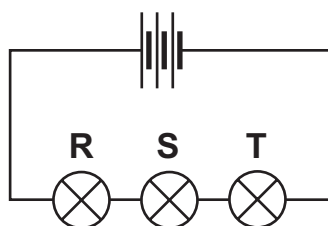
B



C

[1]

- (b) In this circuit, bulb **S** does not light up.



- (i) What happens to bulbs **R** and **T**?

R

T

[1]

- (ii) Why does this happen?

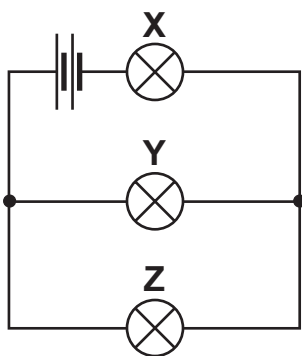
.....

[1]

Page Total

7

(c) In this circuit, bulb Y fails.



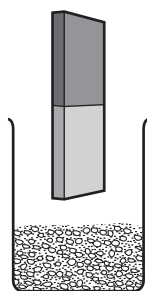
What happens to bulbs X and Z?

X

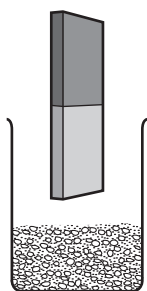
Z

[1]

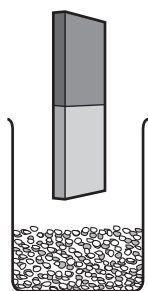
6 Joel is trying to separate the mixtures shown using a magnet.
Tick (✓) **two** mixtures which can be separated using the magnet.



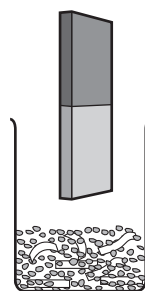
iron and plastic



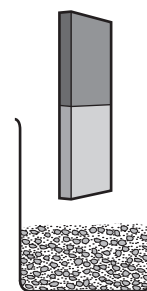
iron and steel



copper and steel



copper and paper

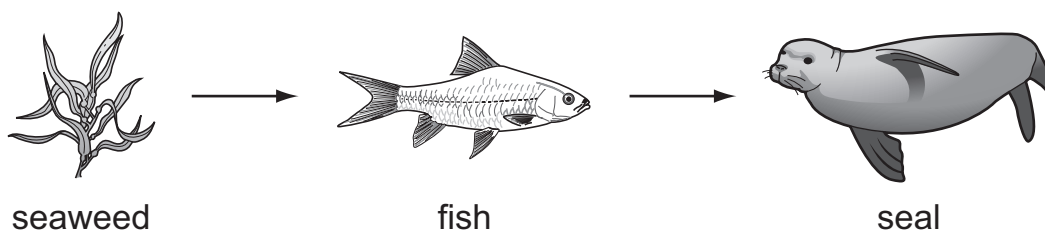


copper and lead

[2]

Page Total

7 This is a picture of a food chain.



(a) What is the name given to the seaweed in the food chain?

..... [1]

(b) What other name, apart from consumer and carnivore, can be given to the seal in the food chain?

..... [1]

(c) In the box, construct a food chain to show the relationship between a plant, a cat, a bird and a caterpillar.

[2]

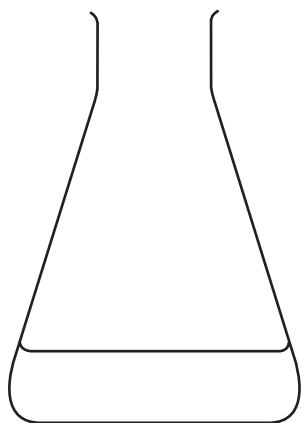
Page Total

8 (a) The water from conical flask 1 was poured into the test tube.

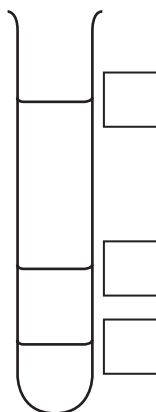
(i) Which line represents the water level in the test tube?
Tick (✓) the correct box.

The water was then poured from the test tube into conical flask 2.

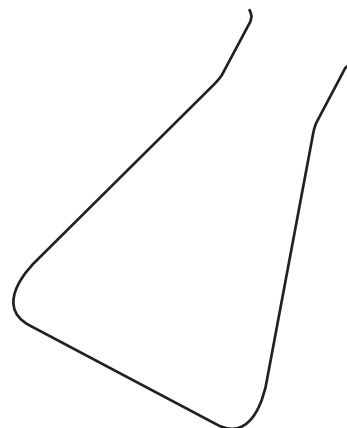
(ii) Draw the approximate water level in conical flask 2.



conical flask 1



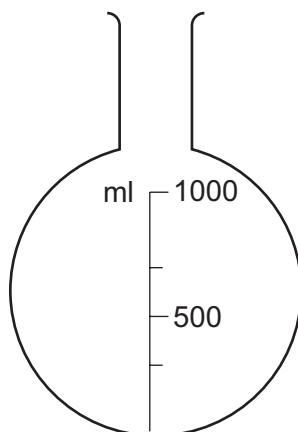
test tube



conical flask 2

[2]

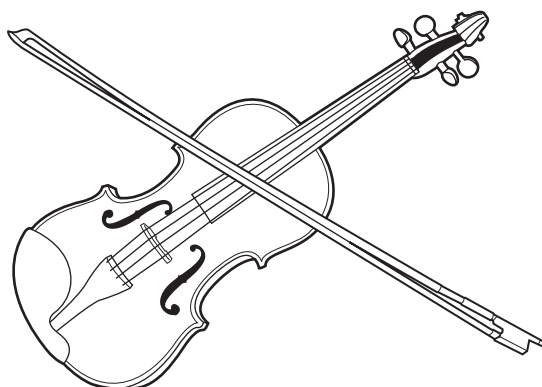
(b) James poured 750 cm³ of orange juice into the flask. Draw a line to show the surface of the juice.



[1]

Page Total

9 (a) Anita plays the violin with a bow.



(i) How would she make the volume quieter?

..... [1]

(ii) What **two** things could she do to play a note with a higher pitch?

1

2 [2]

(b) Here are four statements about how a violin makes a note and the sound reaches our ear.

Put numbers in the boxes next to each statement to show their correct order.

The body of the violin makes the sound louder.

The sound carries vibrating air particles until they reach our ears.

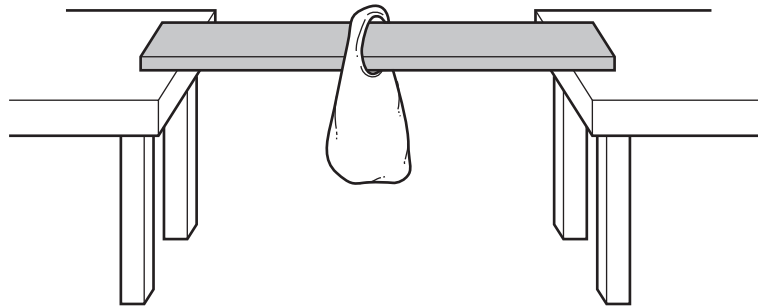
The vibrations enter the body of the violin.

The violin string vibrates.

[1]

Page Total

10 Sam and Emily are experimenting to find the best material for building bridges. They measure the strength of the materials by hanging weights in a bag from each material as shown in the diagram.



Their results are shown in the table

Material	Mass supported (g)
cardboard	25
metal	150
plastic	95
thin card	5
wood	65

(a) Before they started the tests, Emily said that metal would be the strongest.

What is this statement called? [1]

(b) (i) Name **two** things they could do to make their tests fair.

- 1
- 2 [2]

(ii) How could they make their results more reliable?

..... [1]

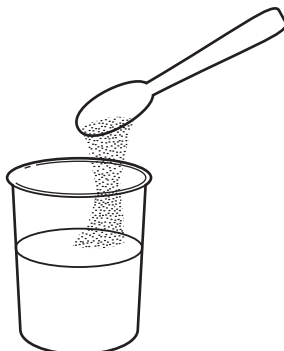
(c) From their results, which is the **third** best material for making a bridge?

..... [1]

Page Total

11 When a solid dissolves in water you cannot filter out the solid.

Aravinder makes a sugar solution by adding sugar to water.



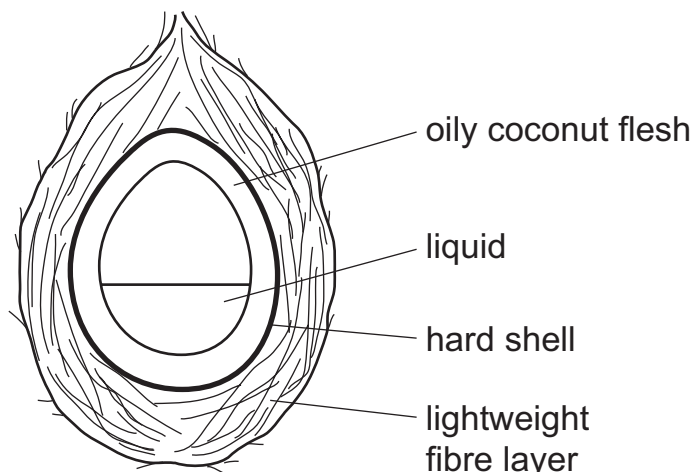
(a) Complete the sentences using either the word **solute** or **solvent** in each of the spaces.

Aravinder leaves the solution he made for a long time in a warm room, the evaporates. When all the has gone, only the is left. [2]

(b) What is the name of the process used to get the solid back from the solution? [1]

(c) What happens to the concentration of the sugar solution as the water is removed? [1]

12 (a) The diagram shows a section through a coconut fruit.



Which part of the fruit stores the food that is used for germination?

..... [1]

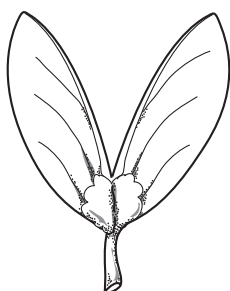
(b) A seed is produced when the male and female sex cells join.
What is this process called?

..... [1]

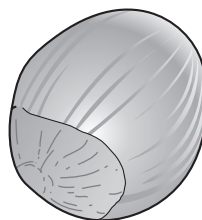
(c) The drawings show four fruits.



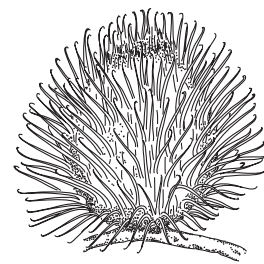
dandelion



maple



hazelnut



burdock

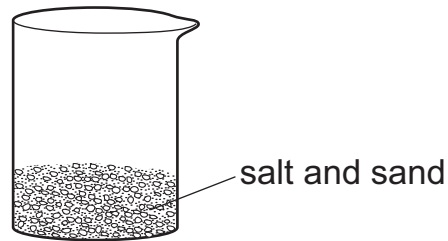
Which **two** of these plants rely on animals to disperse their fruits?

..... and [2]

Page Total

14

13 Leroy has a beaker containing salt and sand. He wants to separate the salt from the sand.



He has a list of what to do but it is muddled up.
Write the numbers in the correct order to do the separation.
One has been done for you.

evaporate off the water

5

stir to dissolve the salt

pour salt water into an evaporating basin

filter off the sand

add water

[1]

Page Total

14 Changes can be either reversible or irreversible.

(a) Draw straight lines from each of the changes to show if they are reversible or irreversible.

condensing water

nail rusting

breaking an egg

evaporating water

reversible

irreversible

[2]

(b) Which **one** of the above irreversible reactions is **not** a chemical change?

[1]

.....

Page Total

16

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