

Science

Year 6

Scaled Score Progress Test

Test B

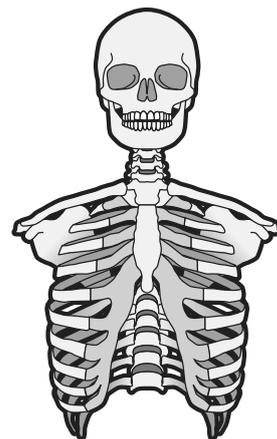
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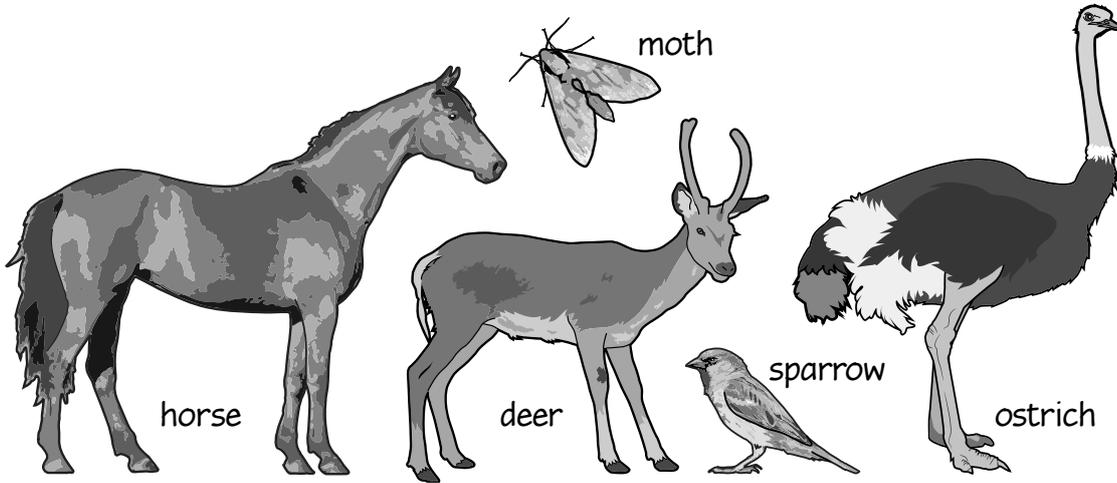
Raw Score

Scaled Score



Section 1: Living things and their habitats

1 Classification



Complete the following:

a Tick **two** boxes to show what the deer and the horse have in common.

They both have horns on their heads.

They both have a tail.

They both have hair or fur on their bodies.

They both have scaly skin.

2 marks

b Complete the classification table below using the animals at the top of the page. Two have been done for you.

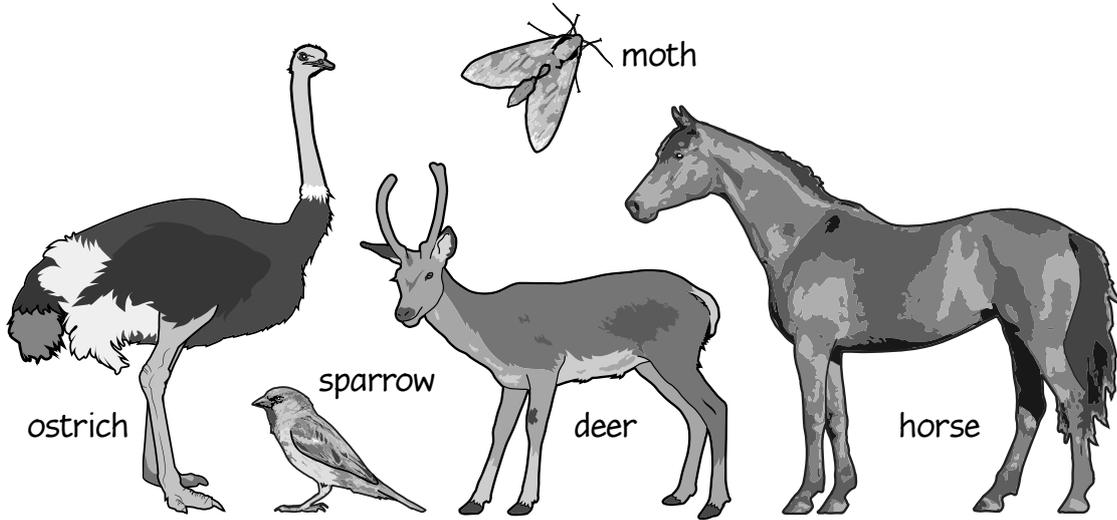
	has feathers	has no feathers
able to fly		
unable to fly		horse deer

2 marks

Page Total

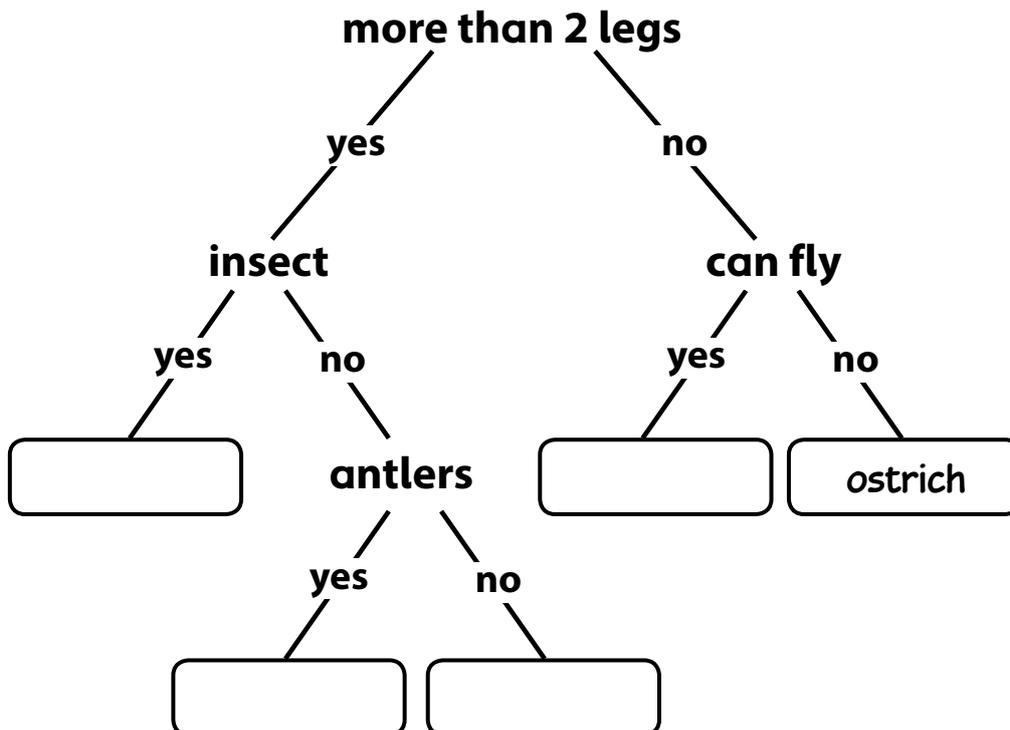
Section 1: Living things and their habitats

2 Reclassify



Complete the following:

The animals from page 1 can be classified in different ways. Put them in the correct place in the classification chart below. One has been done for you.



2 marks

Page Total

Section 1: Living things and their habitats

3 Micro-organisms



Complete the following:

a Which of the sentences below are true? Tick **two** boxes.

Micro-organisms cannot be found in water.

Some plants and some animals are micro-organisms.

Micro-organisms can be classified based on their similarities and differences.

Micro-organisms are all part of the animal kingdom.

2 marks

b Micro-organisms can be involved in the production of food. Draw lines from each food item below to the micro-organism involved in its production.



bacteria



yeast

1 mark

c If meat isn't stored or handled properly it can make humans ill. Why is this?

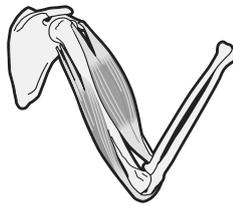
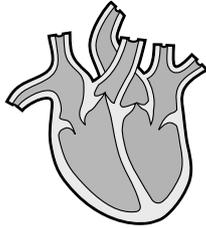
.....

1 mark

Page Total

Section 2: Animals, including humans

4 Major systems of the human body



arteries oesophagus
veins skull biceps
stomach quadriceps rib cage

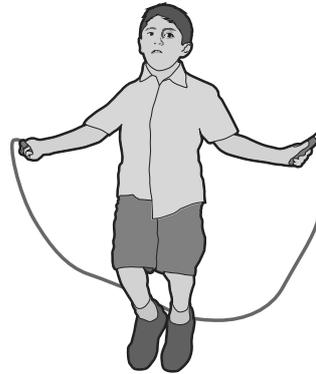
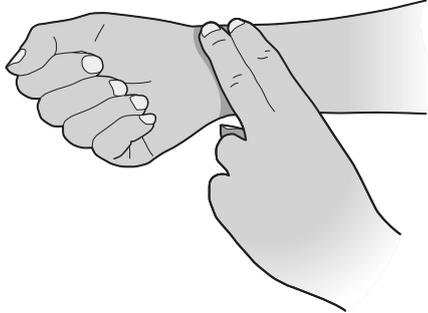
Using the words from the box above, answer the following questions:

- a Name **two** parts of the body that are included in the **digestive** system.
.....
1 mark
- b Name **two** parts of the body that are included in the **circulatory** system.
.....
1 mark
- c Name **two** parts of the body that are included in the **skeletal** system.
.....
1 mark
- d Name **two** parts of the body that are included in the **muscular** system.
.....
1 mark

Page Total

Section 2: Animals, including humans

5 Exercise and drugs



Complete the following:

- a What does regularly increasing the heart rate, as a result of exercise, achieve for the human body?
Tick **two** answers below.

- It means humans could stay healthy on a diet that does not include fruit or vegetables.
- It helps oxygen move to the muscles more efficiently.
- It increases the body's resting heart rate.
- It helps the heart become more efficient at pumping blood.

2 marks

- b Write **true** or **false** next to the statements below.

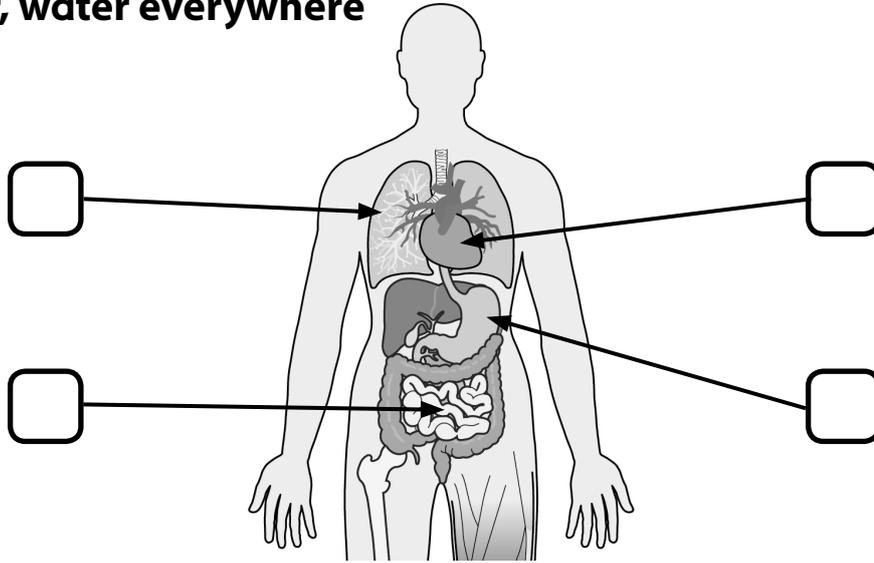
- All drugs are harmful to the human body.
- Cigarettes cause chemical changes, which are harmful to the body.
- Drugs can make a human think they need more drugs.
- If adults exercise regularly, it is safe for them to drink large amounts of alcohol.

2 marks

Page Total

Section 2: Animals, including humans

6 Water, water everywhere



Complete the following:

- a** On the diagram above, label the two parts of the body as shown below. Leave the other boxes blank.

A: stomach B: small intestine

- b** Which of the following is true? Tick **one** box.

- Nutrients and water are broken down by enzymes.
- Water is not broken down by enzymes.
- Nutrients in food are not broken down by enzymes.

- c** How is water transported around the body?

.....

- d** The body loses water through the digestive process (going to the toilet). Write **one** other way that the body loses water.

.....

1 mark

1 mark

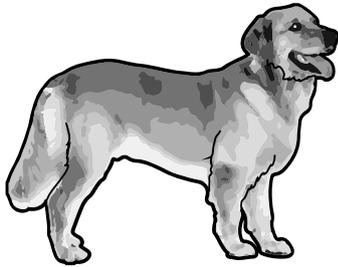
1 mark

1 mark

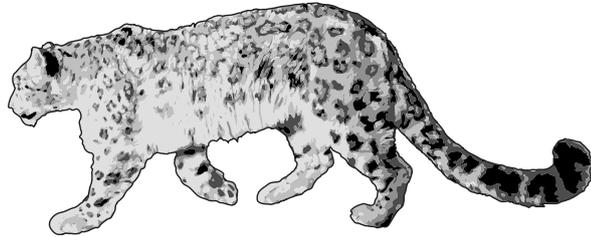
Page Total

Section 3: Evolution and inheritance

7 Inherit or learn?



dog



jaguar

Explain what is meant by each of the following phrases:

a Inherited characteristics:

.....
.....

1 mark

b Learnt characteristics:

.....
.....

1 mark

Write whether each of the following is *learnt* or *inherited*:

c a jaguar's spots

.....

1 mark

d a dog barking when its owner rattles a lead

.....

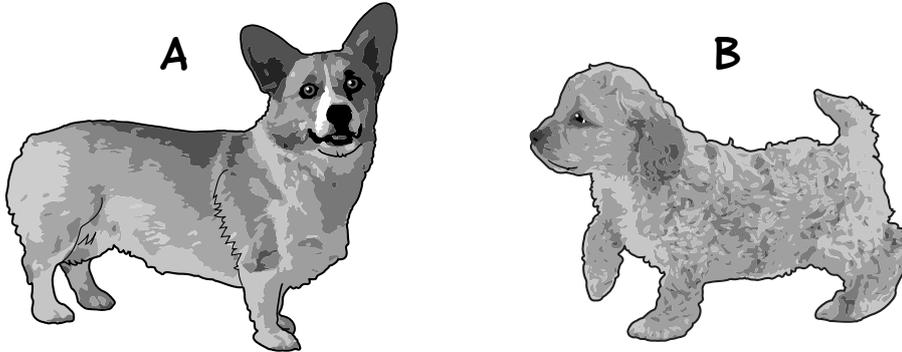
1 mark

Page Total

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Section 3: Evolution and inheritance

8 Inheritance



breed A (mother)	breed B (father)
short, straight hair	short, curly hair
short legs	short legs
upright ears	floppy ears
long nose	short nose

Two dogs, which are different breeds, have puppies together. The dogs are described in the table above.

Write *true* or *false* next to the statements below:

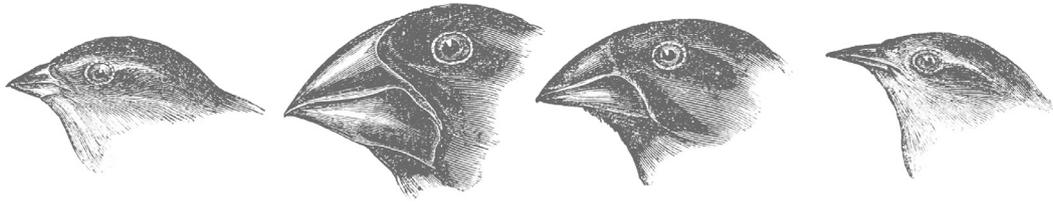
- a The offspring will **definitely** have short, curly hair.
- b It is **likely** that the offspring will have short legs.
- c The offspring will **probably** have either floppy ears or upright ears.
- d The offspring will **definitely** have a short nose.

2 marks

Page Total

Section 3: Evolution and inheritance

9 Charles Darwin



Charles Darwin, explorer and scientist, observed that over many years, finches in different environments on the Galapagos Islands developed different beaks. He noticed that in one environment plants had large seeds. Here, finches with larger beaks could break the seeds open and eat them, but finches with smaller beaks could not.

Complete the following:

- a In the environment with the large seeds, which finches would be more likely to survive? Circle your answer.

larger-beaked finches

smaller-beaked finches

1 mark

- b What would be the impact on the number of smaller-beaked finches?

.....

1 mark

- c Use your answers to **a** and **b** to help explain what Darwin meant by the term 'survival of the fittest'.

.....

.....

1 mark

- d How does the process of adaptation happen? Circle your answer.

by cross breeding

by selective breeding

by natural selection

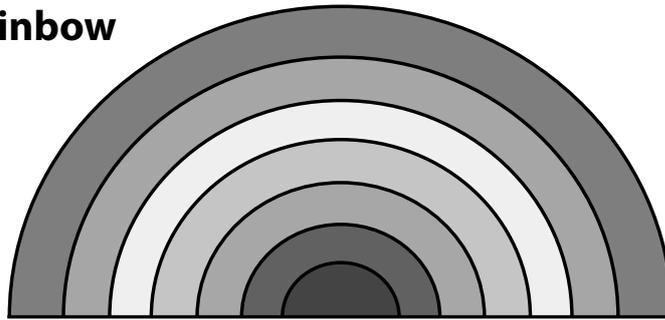
by human intervention

1 mark

Page Total

Section 4: Light

10 Over the rainbow



Complete the following:

a Write *true* or *false* next to the statements below.

When sunlight shines onto raindrops, rainbows can form.

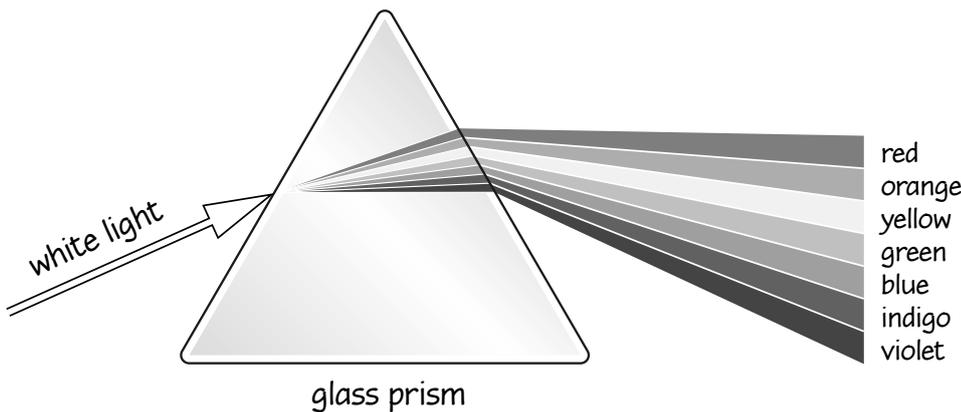
Rainbows can form when the sunlight curves above raindrops.

Rainbows can be seen on a completely dark night, even if the Moon and stars cannot be seen.

b Light shining onto a glass prism is a similar process to the formation of rainbows. Tick one sentence below which explains what happens.

The glass prism separates the white light into colours.

The prism is opaque and so the white light is blocked.



2 marks

1 mark

Page Total

Section 4: Light

11 Seeing things!



picture on wall



Bartek sits in a completely dark room. The torch is not on.

Complete the following:

a Can Bartek see the picture?

Explain your answer.

.....

1 mark

b Explain how Bartek sees the picture when the torch is switched on so that there is light in the room.

.....

.....

1 mark

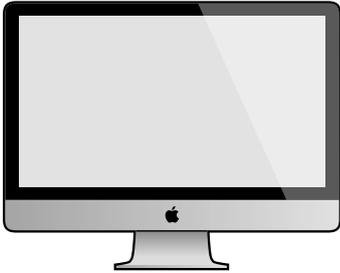
c Draw **two** lines with **arrows** in the diagram at the top of the page to illustrate how Bartek is able to see the picture when the torch is switched on.

1 mark

Page Total

Section 4: Light

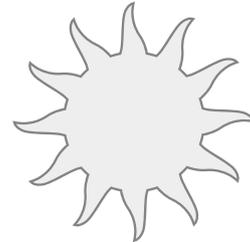
12 Let there be light!



computer screen



car headlights



Sun

Complete the following:

a Which of the above is a source of natural light?

.....

1 mark

b Write **true** or **false** next to the statements below.

On a cloudy day, shadows are bigger than on a sunny day.

.....

If you look at a person's shadow, you can tell if their eyes are open.

.....

When a pencil is placed into a jar of water, it appears to bend.

.....

Light always travels in curved lines.

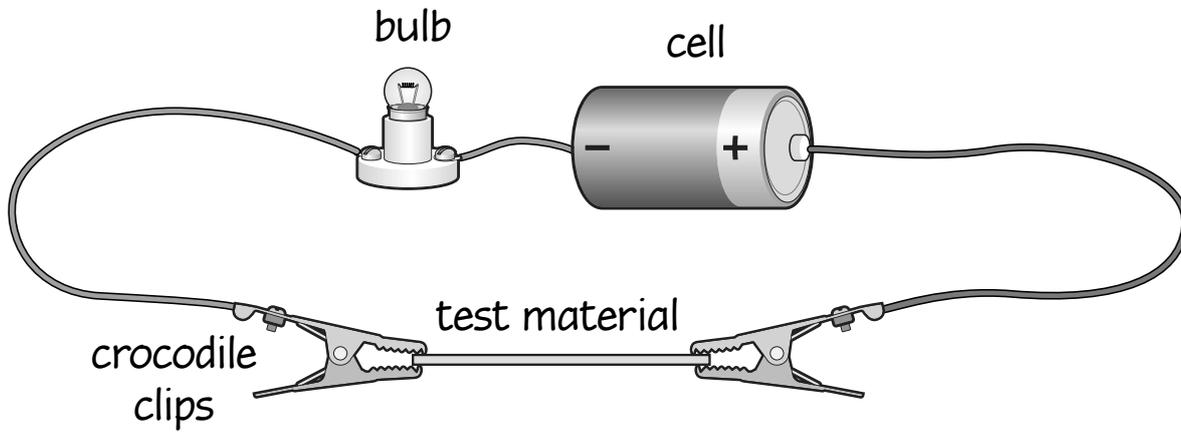
.....

2 marks

Page Total

Section 5: Electricity

13 Testing conductivity



Achmed investigates the conductivity of materials. He cuts each material he is testing to the same size and puts it in the circuit above in the same way.

Complete the following:

a If the material is a conductor, what will happen to the bulb?

.....
.....

1 mark

b Achmed tested different materials. What did he do to make sure his test was a fair test?

.....
.....

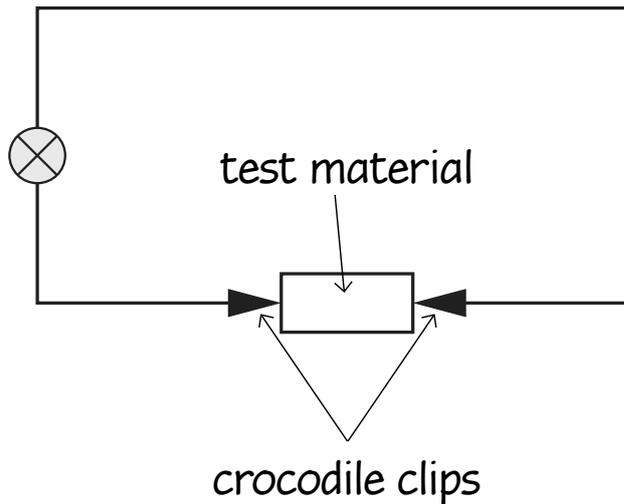
1 mark

Page Total

Section 5: Electricity

14 Circuit tests

Complete the following:



a Megan wants to test some materials to see if they will conduct electricity. She makes the circuit shown in the diagram above. The bulb does not light for any of the materials. What is missing from Megan's circuit?

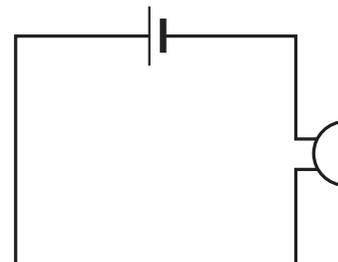
.....

1 mark

b Carlos has made a circuit with a buzzer, but the buzzer sounds constantly. He needs the buzzer to sound **only** when he wants it to.

What does he need to add to the circuit?

.....

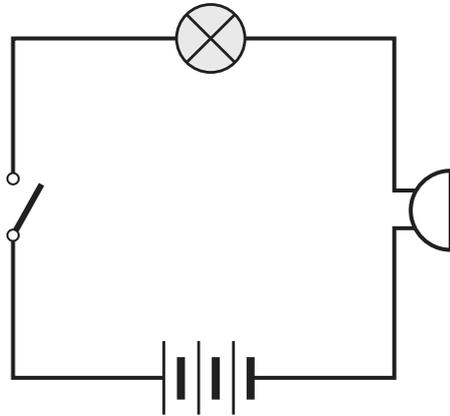


1 mark

Page Total

Section 5: Electricity

15 Circuit symbols



Name these components:

- a 
- 
- 
- 

1 mark

1 mark

1 mark

1 mark

Complete the following:

- b Year 6 made the circuit shown at the top of the page. When the switch is closed, the bulb shines brightly. Without opening the switch, how could they make the bulb shine less brightly?
.....

1 mark

Page Total

Test Total /50