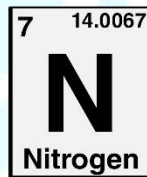
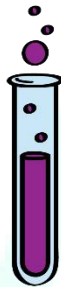
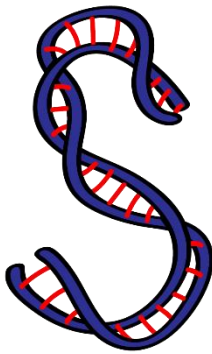




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**Science Department**

**2023/2024**

**Year 4**

**Term 2, Revision packs**

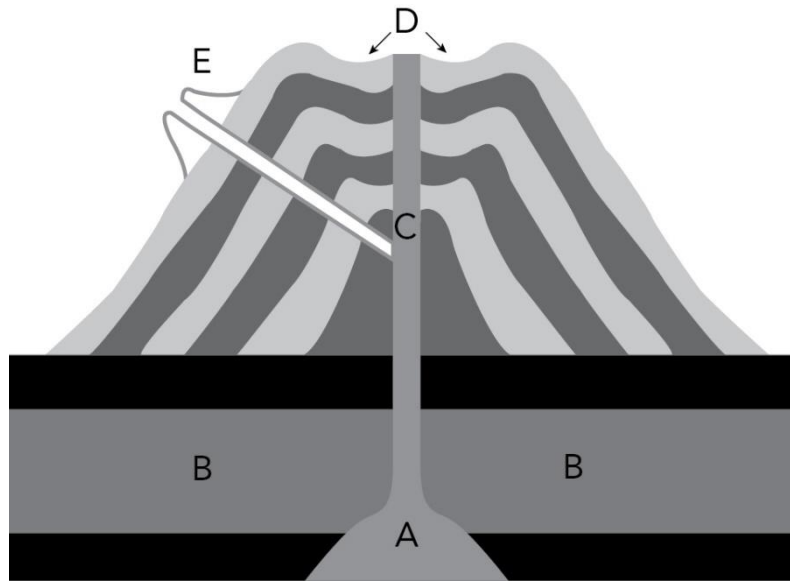
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**Name:** .....

**Class:** .....

1) Name the parts of the volcano labelled A–E



- a- \_\_\_\_\_ **Magma** \_\_\_\_\_ .
- b- \_\_\_\_\_ **Crust** \_\_\_\_\_ .
- c- \_\_\_\_\_ **Pipe / Vent** \_\_\_\_\_ .
- d- \_\_\_\_\_ **Crater** \_\_\_\_\_ .
- e- \_\_\_\_\_ **Secondary cone** \_\_\_\_\_ .

2) Fill in the words to complete these sentences. Use these words:

Composite earthquakes ring ejects tsunami ash lava fire breaks pacific

- a- The volcano \_\_\_\_\_ **ejects** \_\_\_\_\_ material from the crater. The volcano in the diagram is a \_\_\_\_\_ composite \_\_\_\_\_ volcano because it has repeating layers of \_\_\_\_\_ **lava** \_\_\_\_\_ and \_\_\_\_\_ **ash** \_\_\_\_\_.
- b- Volcanoes form where there are \_\_\_\_\_ **breaks** \_\_\_\_\_ in the Earth's crust.
- c- When an earthquake starts under the sea it causes a giant wave called a \_\_\_\_\_ **tsunami** \_\_\_\_\_.
- d- Volcanoes and \_\_\_\_\_ **earthquakes** \_\_\_\_\_ are common around the \_\_\_\_\_ **pacific** \_\_\_\_\_ Ocean. This area is called the Pacific \_\_\_\_\_ **ring** \_\_\_\_\_ of \_\_\_\_\_ **fire** \_\_\_\_\_.

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3) Complete the following sentences by adding 'thicker than' or 'thinner than'

a- The mantle is thicker the crust.

b- The mantle is thinner the core.

4) Complete the following sentences by adding 'hotter than' or 'cooler than'.

a- The crust is cooler the mantle.

b- The core is hotter the mantle.

5) Describe the difference between:

a- the external structure of the Earth and the internal structure of the Earth

External: Describes the outer surface of the Earth.

Internal: Describes the layers inside the Earth.

b- magma and lava

Magma: Liquid rock under the Earth's surface.

Lava: When magma reaches the surface, it's called lava.

c- an earthquake and a tsunami.

Earthquake: Starts on land.

Tsunami: An earthquake under the sea.

6) Read the following information about elephants.

Elephants live in hot, wet regions where there is grass and trees. They spend 12 to 18 hours a day eating! They can eat hundreds of kilograms of grass, leaves and twigs every day. Elephants can also drink up to 200 litres of water a day. They use their long trunks to suck up water and grip grass, twigs and leaves.

a- Describe the habitat of an elephant.

A hot wet region with grass and trees.

b- Describe one way that an elephant is suited to its habitat.

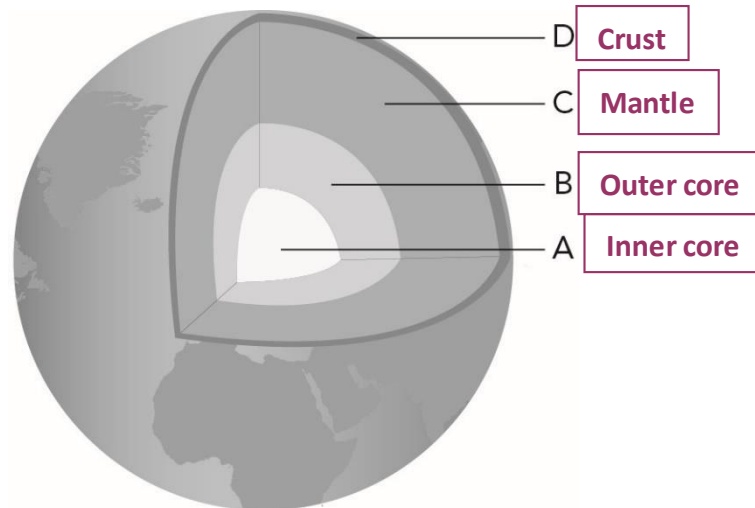
It has a long trunk for sucking up water and gripping leaves and grass.

c- Do you think elephants can survive in a dry habitat? Why?

Not easily, because they drink up too 200 litres of water a day.

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7) Here is a diagram of the internal structure of the Earth. Label



8) Complete the sentences about earthquakes. Choose the words from this list.

Energy noise damage waves crust core

- a- Earthquakes happen because of sudden movements of rocks in the Earth's crust.
- b- When huge pieces of rock move they create a lot of energy.
- c- The energy transfers into waves.

9) Answer

a- Which layer is solid and made of metal?

Inner core

b- Which layer is liquid rock?

Mantle

10) An earthquake occurred in Japan. The epicentre was 10 km off the coast.

Tsunami warnings were sent to everyone living along the coast of Japan and other islands nearby.

a- What is an epicentre?

\_\_\_ **The point on the earth's surface, above the focus, where the earthquake begins.** \_\_\_

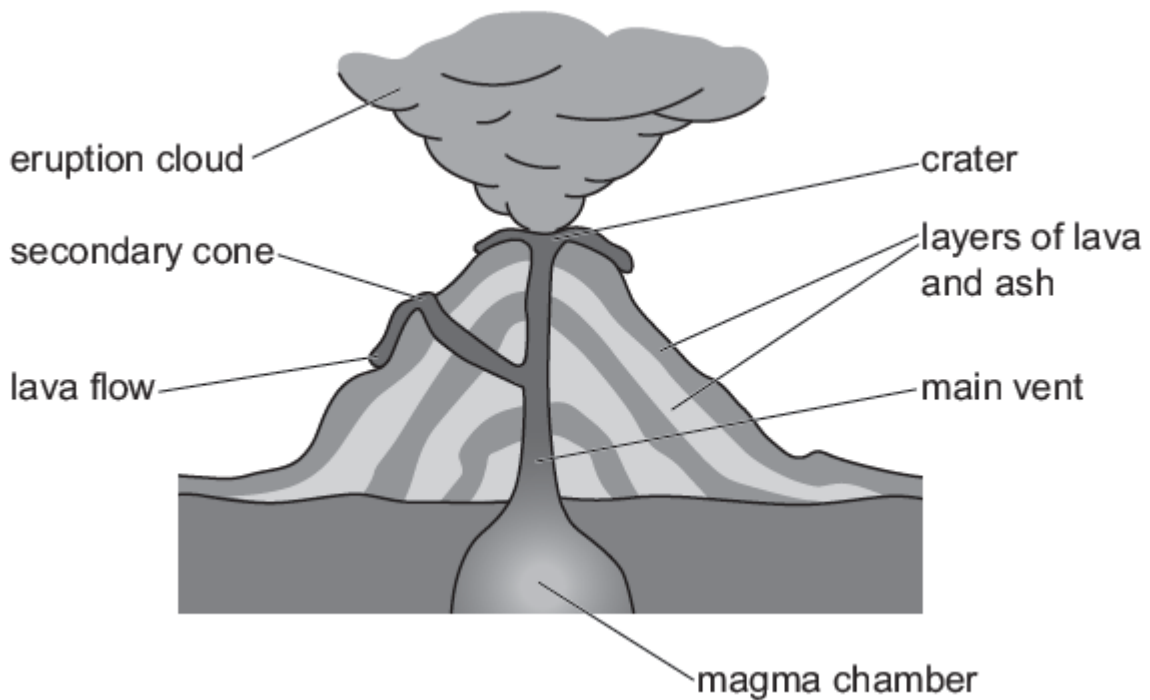
b- Why were warnings sent to people living along the coast?

\_\_\_ **The tsunami will flood the coast and people will drown.** \_\_\_

c- Why does Japan often have earthquakes?

\_\_\_ **It's on the Pacific ring of fire.** \_\_\_

11) The diagram shows the features of a volcano.



a- Use the diagram to help you.

Liquid rock is found below ground in the **magma**. When the volcano erupts lava flows out of the secondary cone and out of the **crater**.

b- Volcanoes are found at breaks in the Earth's crust.

What word describes the sudden movement of the Earth's crust?

\_\_\_ **Earthquakes** \_\_\_

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12) Mike also sees this bird.



The bird has a beak suited to help it feed in the habitat where it lives.

Tick (✓) **one** box that describes how the bird feeds. Use the picture to help you.

uses its beak to pick up seeds from the ground

uses its beak to pull insects from the mud

uses its beak to scoop up large fish into its mouth

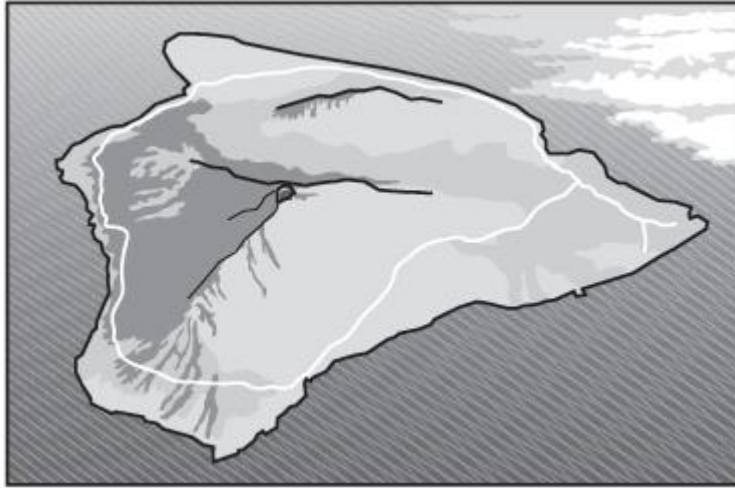
uses its beak to pull plants from the water

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13) The largest active volcano is Mauna Loa in Hawaii.



Describe what causes volcanoes. Circle the correct answer.

**a break between the land and sea**

**a break in the Earth's crust**

**a break in the Earth's core**

**a break in the Earth's mantle**

14) Fill in 'better than' or 'worse than' to complete these sentences.

a- A mirror reflects light **better than** any other surface.

b- A sheet of brown paper reflects light **worse than** a sheet of aluminium foil.

15) Describe where most of the asteroids are in the solar system.

**In the asteroids belt between Mars and Jupiter**.

16) Describe a comet.

**A lump of ice and dirt that moves in a large orbit around the sun**.

17) Complete these sentences to describe the pattern in the results.

In the morning the shadow became **shorter**. After midday the shadow became **longer**.

18) What Earth movement causes day and night?

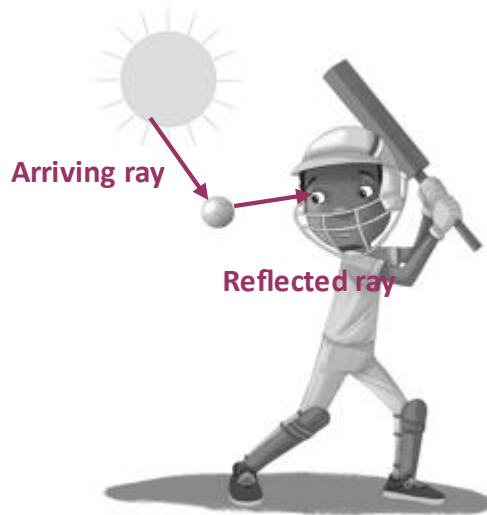
**Spinning on its axis**.

19) How long does this movement take?

**24 hours (1 day)**.

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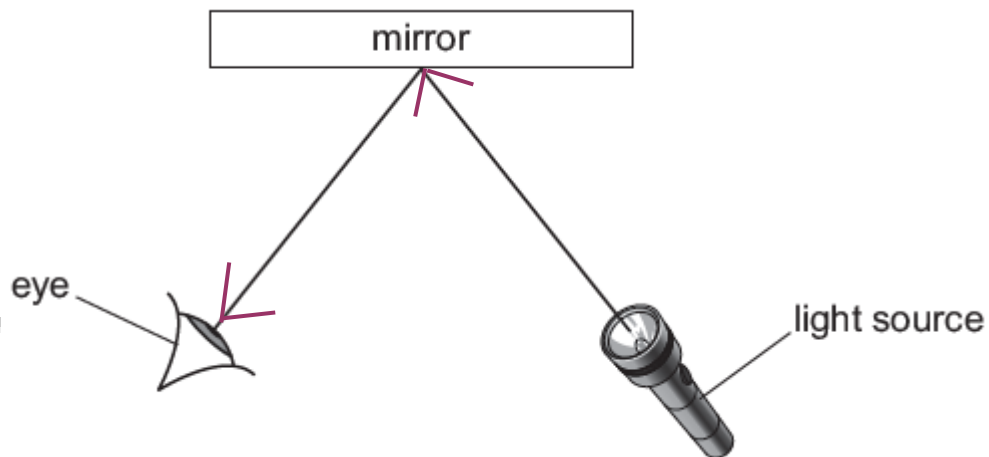
20) Draw rays on this diagram to show how Marcus sees the cricket ball. Label the rays.



21) Our Solar System contains planets and a star.  
Write down **one other** object found in our Solar System.

\_\_\_\_\_ **Asteroids / comets** \_\_\_\_\_

22) Carlos draws a diagram of his science investigation.



a- Draw **two** arrows on the diagram to show the direction light travels.

b- Complete these sentences about light.

Light travels in \_\_\_ **straight** \_\_\_ lines. When light reaches the mirror the light changes direction because it is  
\_\_\_\_\_ **reflected** \_\_\_\_\_ .



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23) Complete the sentence



a- Choose from the following

It has food.

It is camouflaged.

It is dry.

It is hot.

It is cold.

b- The color of the toad makes it suited to living in its habitat because

\_\_\_\_\_ **Camouflage** \_\_\_\_\_

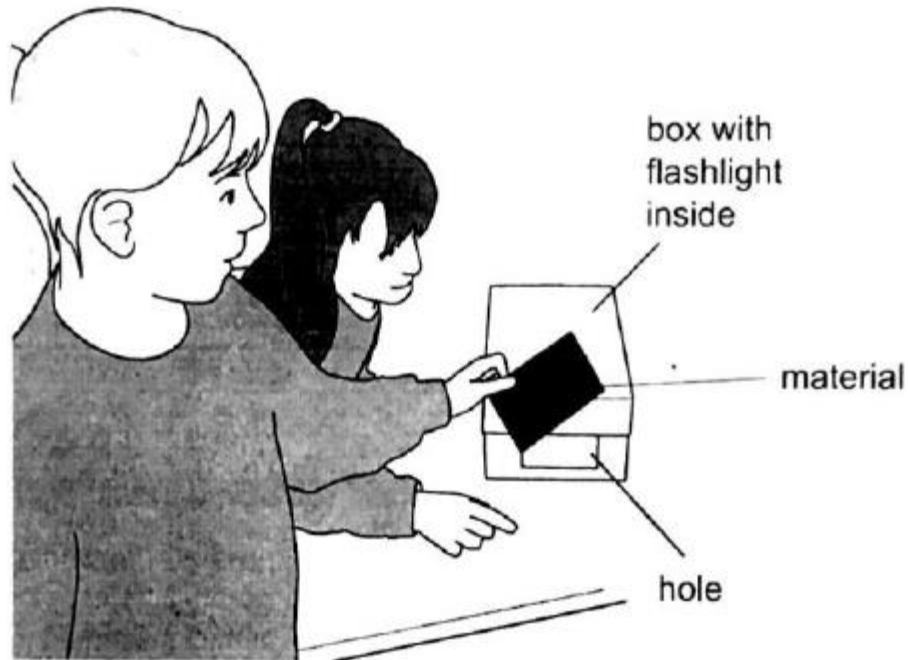
c- Frogs need oxygen from their habitat. What 2 other things does the frog need from its habitat?

1- \_\_\_\_\_ **Food** \_\_\_\_\_

2- \_\_\_\_\_ **Shelter** \_\_\_\_\_

Science Department  
24)

- A hole is cut in a box.
- A flashlight is put inside the box.
- Different materials are put over the hole in the box.



(a) Predict what will happen if the material is **transparent**.

Complete the sentence.

If the material is transparent I predict .....

.....  
**Light will pass through the material**  
.....

(b) Why do we see light from the flashlight?

Circle the correct answer.

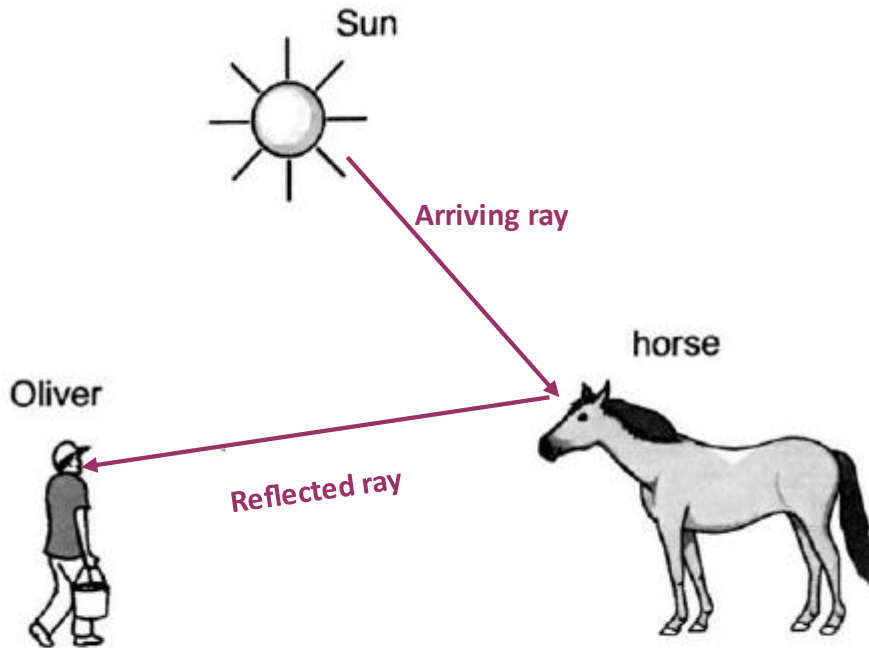
**light goes into our eyes**

**light is reflected by our eyes**

**light goes into the flashlight**

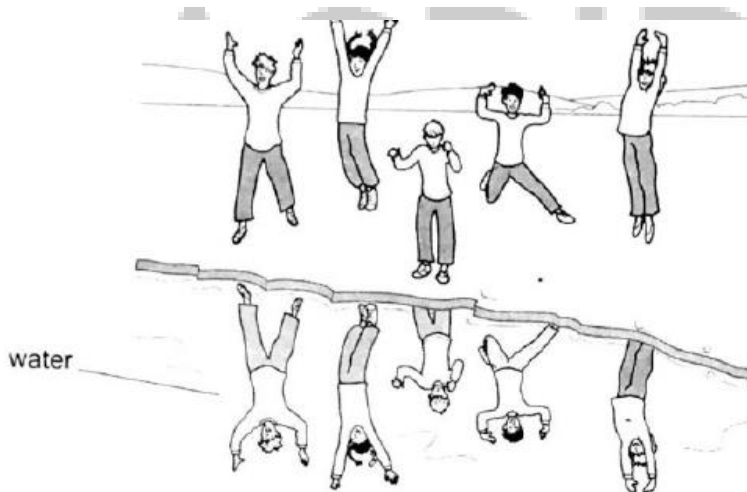
**light is reflected by the flashlight**

Here is a diagram of Oliver and his horse.



Draw rays of light on the diagram to show how the horse can see Oliver.

26)



Explain why it looks like there are ten friends in the picture.

**Light is reflected**

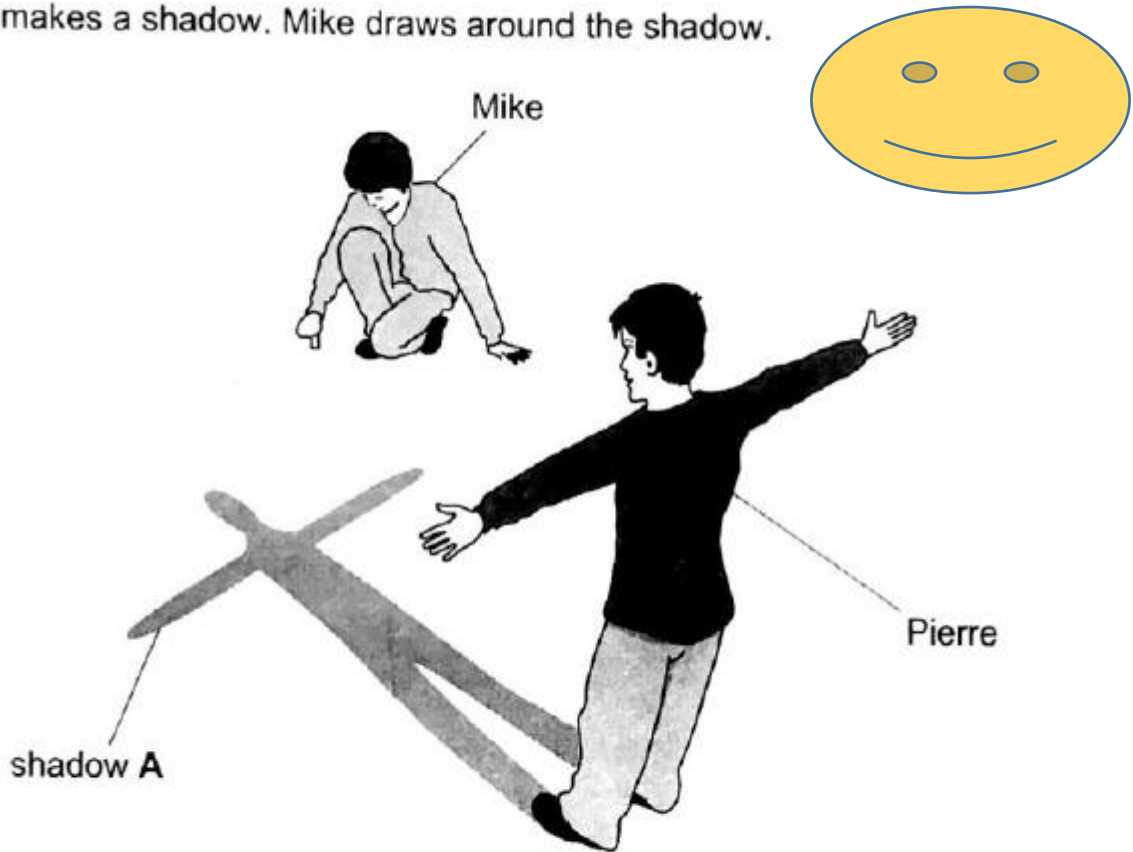
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27)

Pierre and Mike investigate shadows.

Pierre makes a shadow. Mike draws around the shadow.



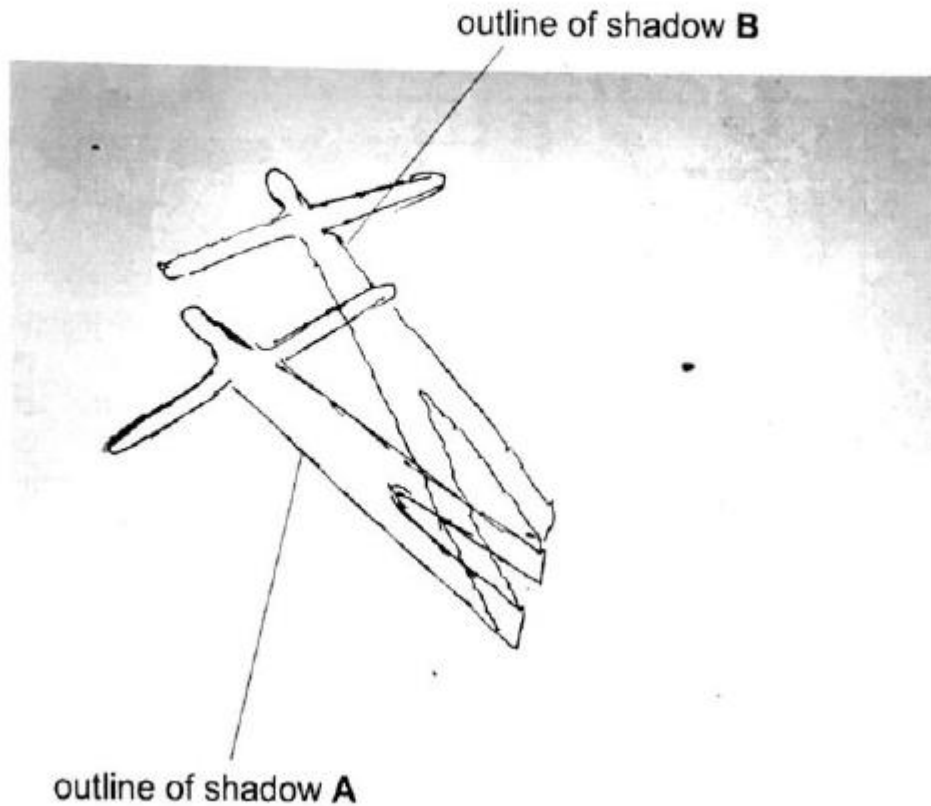
(a) Explain why there is a shadow.

Sunlight is blocked

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Pierre makes another shadow. Mike draws around this shadow.

Here are their results.



b) Describe **two** differences between shadow **A** and shadow **B**.

difference 1      **Shadow A is shorter**

difference 2      **Different positions**

c) Why is there a difference between shadow **A** and shadow **B**?

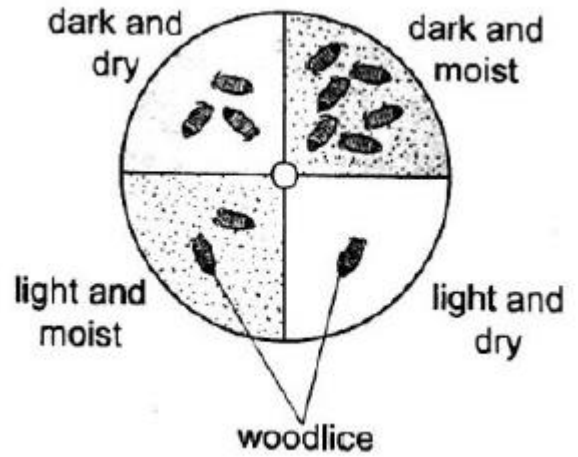
**Different positions**

28)

Aiko investigates different conditions animals like to live in

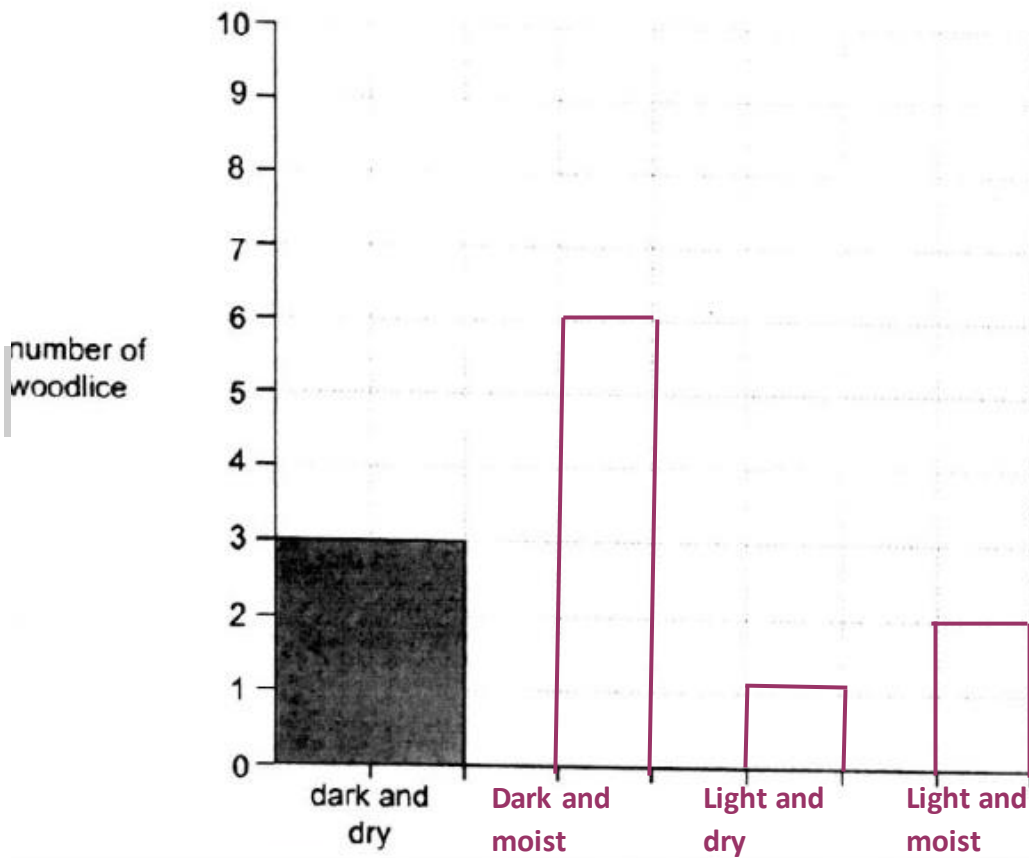
- She sets up a dish with four different conditions.
- She puts 12 woodlice into the dish.
- She leaves the woodlice for 30 minutes.

Here are her results.



) Complete the bar chart of her results.

The first one has been done for you.

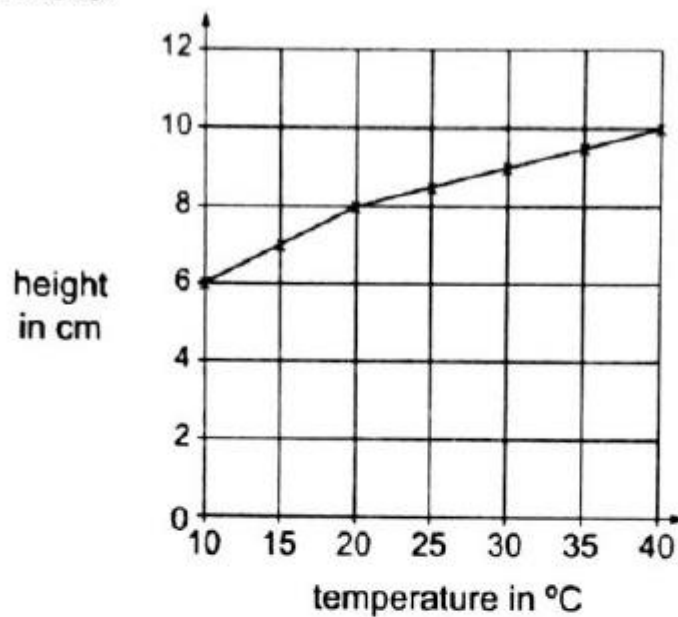


29) Carlos investigates how temperature affects the growth of tomato plants.

In his investigation he:

- puts some tomato seeds in soil
- adds water to the seeds
- keeps the seeds at different temperatures
- measures the height of the tomato plants after 30 days.

Here are his results.



Complete the sentences about the graph.

When the temperature is 10 °C the height of the plant is .....6..... cm.

When the temperature is 40 °C the height of the plant is .....10..... cm.

The difference in height between 10 °C and 40 °C is .....4..... cm.

As the temperature increases the height of the tomato plants .....increases.....