

DEPARTMENT FOR CURRICULUM,
LIFELONG LEARNING AND EMPLOYABILITY
Directorate for Learning and Assessment Programmes
Educational Assessment Unit

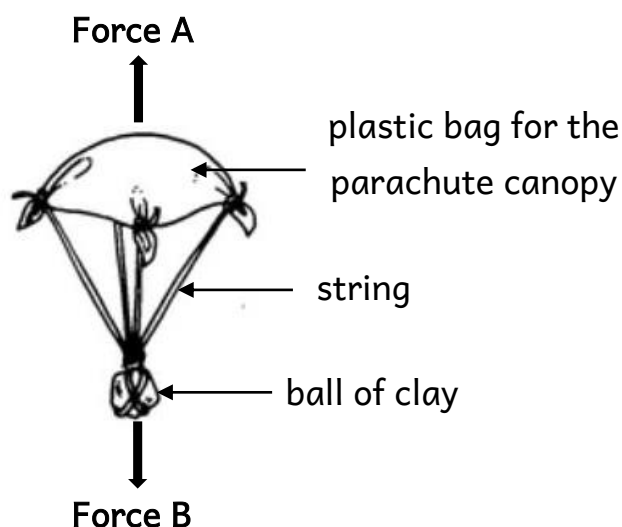
Annual Examinations for Primary Schools 2022

Year 6	SCIENCE	Time: 60 minutes
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Name: _____

Class: _____

1. Karl made a parachute using a plastic bag, string and a ball of clay as shown in the diagram on the right. He drops the parachute from a height.



- a) Name the **two forces** (A and B) acting on the falling parachute.

Force A: _____

Force B: _____

(2 marks)

- b) What effect does **Force A** have on the falling parachute?

(1 mark)

- c) Read the following statements. Underline the correct statement.

How can Karl make the parachute fall faster?

- i. Make the clay ball larger.
- ii. Shorten the parachute's strings.
- iii. Make the parachute canopy larger.
- iv. Make the parachute canopy smaller.

(1 mark)

2. All living things do seven life processes. Some of these life processes include movement, sensitivity, reproduction, excretion and nutrition.

a) List the other **two** life processes.

1. _____

2. _____ (2 marks)

b) Life processes indicate whether something is **living** or **non-living**.

Complete the table below. Write the correct word from the word bank below, under column A or column B to indicate which things are living or non-living.

The first one has been done for you.

Column A: Living	Column B: Non-Living
monkey	

water

~~monkey~~

fallen leaf

corals

seaweed

clouds

(5 marks)

c) Trees are living things. Every year thousands of trees are cut down in forests.

This is known as **deforestation**. Animals die as a result.

Give **two** reasons to explain why animals die because of deforestation.

Reason 1: _____

Reason 2: _____ (2 marks)

d) The diagram below shows a label printed on the back of a paper bag. It indicates that paper used to make the bag was made from wood taken from sustainable forests. In sustainable forests, new trees are planted to replace trees that are cut down.



Give **one** reason to explain why it is important to replace trees that are cut down.

_____ (1 mark)

3. Water can be found in three different states of matter – **solid**, **liquid** or **gas**.

a) Write the correct word under each picture below to indicate the state of water.

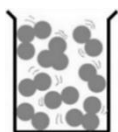
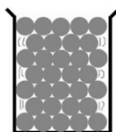
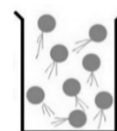


(3 marks)

b) How can water in the liquid state be changed into a gas?

(1 mark)

c) The diagrams below show particle arrangement in the three states of matter. Write the correct word under each diagram to indicate whether the particles represent a **solid**, a **liquid** or a **gas**.



(3 marks)

4. Jake moved into a new house. He noticed that every time he shouted in an empty room, soon after he heard another similar sound.

a) Name the sound effect Jake heard.

(1 mark)

b) Explain using scientific terms, how the sound effect Jake heard is formed.

(1 mark)

c) Describe **two** ways how this sound effect can be reduced.

1. _____

2. _____

(2 marks)

5. Ella is investigating electricity in circuits.
She sets up the circuit as seen in the picture below.



- a) i. Circle the **switch** on the picture above. (1 mark)
ii. What is the function of the **switch** in a circuit?

_____ (1 mark)

- b) Ella notices that the bulb in the diagram above **does not light up**.
Give **one** reason to explain her observation.

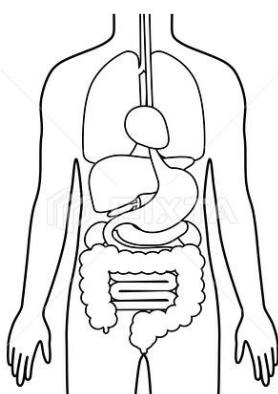
_____ (1 mark)

- c) The following symbols are used to represent components in a circuit.
Circle the symbol used to indicate a **switch** in a circuit.



(1 mark)

6. The diagram below shows the internal organs of the human body.



- a) On the diagram above, shade the organ responsible for **pumping blood around the body**. (1 mark)
b) Name the organ shaded in question '6a'.

_____ (1 mark)

c) The table below shows six different activities.

Tick (✓) **two** boxes to show which **two activities** would make the organ named in question '6b' **work faster**.

eating an apple ☐	walking the dog ☐	drinking milk ☐
playing football ☐	resting ☐	sunbathing ☐

(2 marks)

d) Complete the sentence below with a suitable word from the word bank.

People who are less active need to eat _____ fats to avoid gaining _____.

speed

more

weight

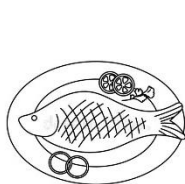
less

energy

(2 marks)

e) Food groups in a balanced diet have a special function in the human body.

Look at the pictures of food items below.



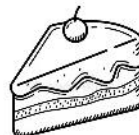
fish



olive oil



potatoes



~~cake~~



chicken



spaghetti

Complete the table below. Write the correct food item under the correct column (A, B or C). The first one has been done as an example.

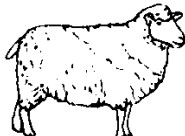
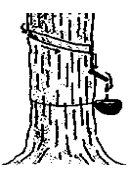
<u>Column A</u> Carbohydrates	<u>Column B</u> Proteins	<u>Column C</u> Fats and Oils
		cake

(5 marks)

7. Many items of clothing are made from natural raw materials.

Write the correct letter next to each item of clothing, to match the raw material to the item of clothing.

The first one has been done for you.

	Raw Materials		Item of Clothing
A			 silk scarf
B			 cotton T shirt
C		A	 woollen hat
D			 rubber boots

(3 marks)

8. Tom and Jody are learning about the Earth and space.

a) The following statements relate to our solar system and beyond.

Tick (✓) the correct column to indicate whether the statement is True or False.

	Statement	True	False
i.	The Moon makes one complete revolution around the Earth every year.		
ii.	Earth's Moon has 2 phases.		
iii.	Not all planets in our solar system have moons.		
iv.	Earth's Sun is the only sun in our galaxy.		

(4 marks)

b) Complete the table below.

Write the correct word in the space below to indicate the correct order of size, **smallest first**. The first one has been done as an example.

Smallest			Biggest
Moon	_____	_____	_____

~~Moon~~

Sun

Galaxy

Earth

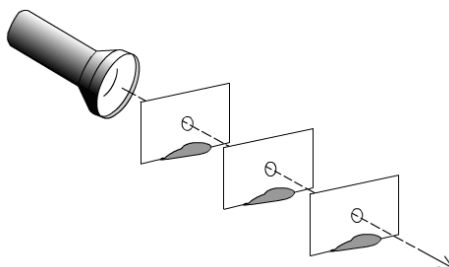
(3 marks)

9. The picture below shows Kate reading the newspaper.



a) On the picture above, draw the ray of light to indicate how Kate can see the page she is reading. (2 marks)

b) Kate is investigating light. She uses a torch and cards with a hole in the middle as shown in the diagram below.



What can you conclude from Kate's observations?

(1 mark)

- c) Kate would like to observe garden insects in more detail.

Name **one scientific tool** that Kate may use to help her see a bigger image of the insects.

(1 mark)

10. Elise records the weather for a day.

She notes her findings under Column A in the table below.

- a) Complete Column B in the table below by choosing the correct word from the word bank.

One example has been done for you.

Column A <u>Weather Measurement</u>	Column B <u>What is measured?</u>
North West	
F 7 – 8	
15 °C	
10 mm	
UV 5	UV index

temperature

wind speed

wind direction

~~UV index~~

rainfall

(4 marks)

- b) From the information provided in the table above, do you think Elise recorded the weather on a windy day?

- i. Tick (✓) the correct box to indicate your answer.

Yes

☐

No

☐

(1 mark)

- ii. Give a reason to explain your choice.

(1 mark)

END OF EXAM