

DEPARTMENT FOR CURRICULUM,
LIFELONG LEARNING AND EMPLOYABILITY
Educational Assessment Unit

Annual Examinations for Primary Schools 2024

Year 6

SCIENCE

Time: 60 minutes

Name: _____

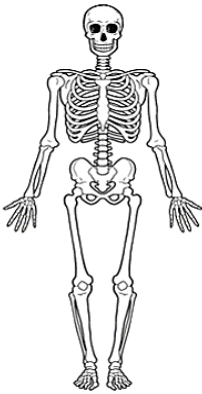
Class: _____

1. The human body is made up of different body systems.

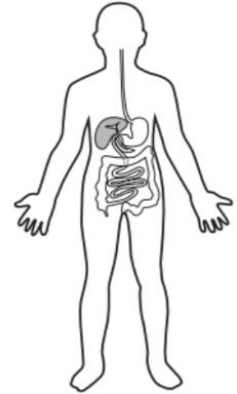
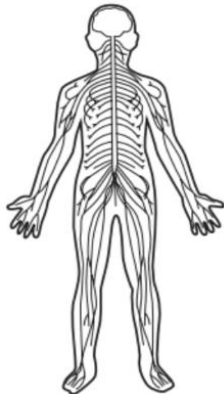
The diagram below shows four of our body systems.

a) Use the word bank below to write the correct body system in the space provided. The first one has been given.

circulatory system	digestive system	skeletal system	nervous system
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skeletal system



(3 marks)

b) Several major organs form part of these body systems.

Tick (✓) the correct body system for each organ.

Organ	Body Systems		
	Digestive System	Circulatory System	Nervous System
heart			
stomach			
brain			

(3 marks)

2. The table below shows four plates with different food items.

Plate A	Plate B	Plate C	Plate D
			
spaghetti with tomato sauce	fruits and vegetables	grilled fish and vegetables	pieces of cake

a) Tick (✓) the plate showing **protein** as the **main** nutrient of the meal.

☐ Plate A ☐ Plate B ☐ Plate C ☐ Plate D (1 mark)

i. Give a reason to support your choice.

(1 mark)

b) Tick (✓) the plate showing **carbohydrates** as the **main** nutrient of the meal.

☐ Plate A ☐ Plate B ☐ Plate C ☐ Plate D (1 mark)

i. Give a reason to support your choice.

(1 mark)

c) We should eat more fruits and vegetables in our diet. This helps prevent several infections and illnesses.

Name the group of nutrients provided by **fruits and vegetables**.

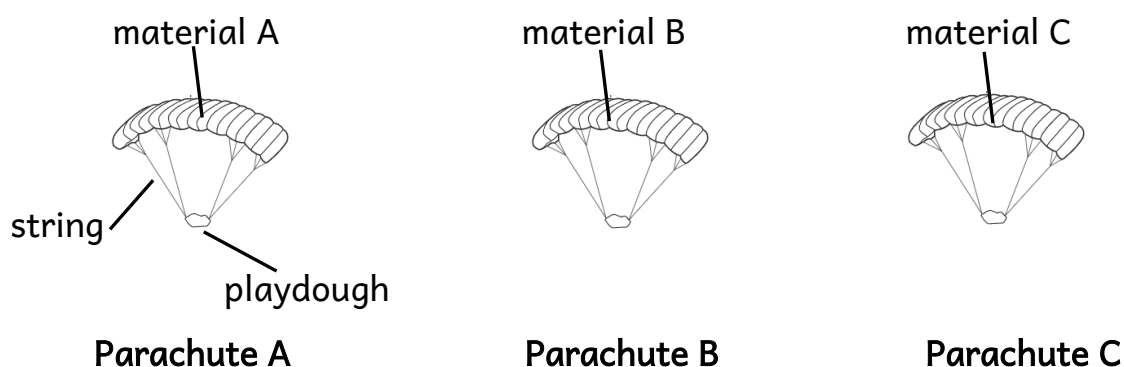
(1 mark)

d) Eating too many unhealthy fats can cause negative effects to our body.

List one **negative** effect.

(1 mark)

3. Luke is investigating the time taken for a falling parachute to touch the ground **safely**. He uses string, playdough and three **different materials** as seen in the diagram below.



- a) Luke wants to make his investigation a fair test.

Tick (✓) the **two** correct statements below that show a fair test.

- ☐ use the same colour of material ☐ use the same mass of playdough
☐ use the same size of material ☐ use the same material

(2 marks)

- b) The table below shows Luke's results.

Parachute	Time to fall in seconds
A	5.3
B	6.5
C	4.9

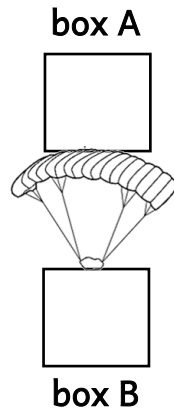
- i. From the table above, tick (✓) the parachute that lands the **safest**.

- ☐ Parachute A ☐ Parachute B ☐ Parachute C (1 mark)

- ii. Give **one** reason to support your choice.

(1 mark)

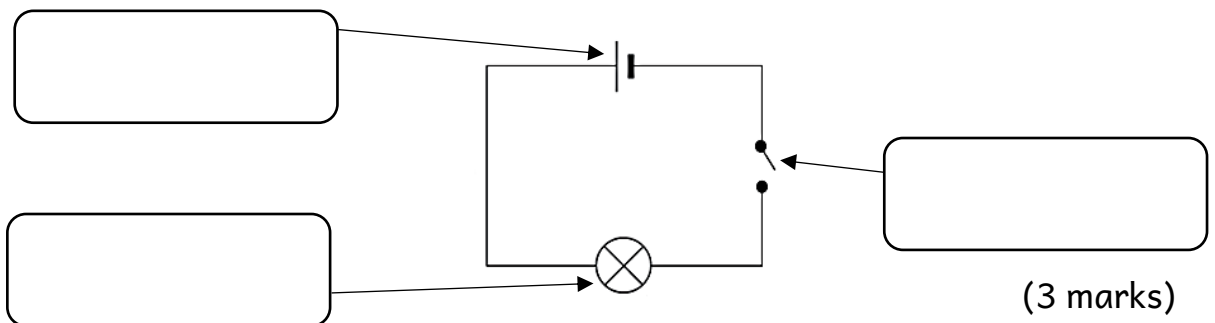
- c) The diagram below shows the falling parachute.
- Draw **an arrow** in **box A** to show the **direction of air resistance** on the parachute.
 - Draw **an arrow** in **box B** to show the **direction of gravity** on the parachute.



(2 marks)

4. Nina is learning about electrical circuits.
She draws the following diagram using circuit symbols.

- a) Label the circuit symbols in the diagram below.



(3 marks)

- b) Tick (✓) the correct box to show whether the bulb in the circuit above will light up.

☐

Yes

☐

No

(1 mark)

- i. Give **one** reason to support your choice.

(1 mark)

- c) Renewable energy can be used to generate electricity.

Name **two** renewable sources of energy.

Renewable source of energy 1: _____

Renewable source of energy 2: _____

(2 marks)

5. Julia, Emma and Elias are carrying out a clean-up at Golden Bay.



- a) The children want to measure the **amount** of litter they have collected.
Tick (✓) the correct statement below that shows what they need to measure.

☐ the colour of the litter

☐ the mass of the litter

☐ the shape of the litter

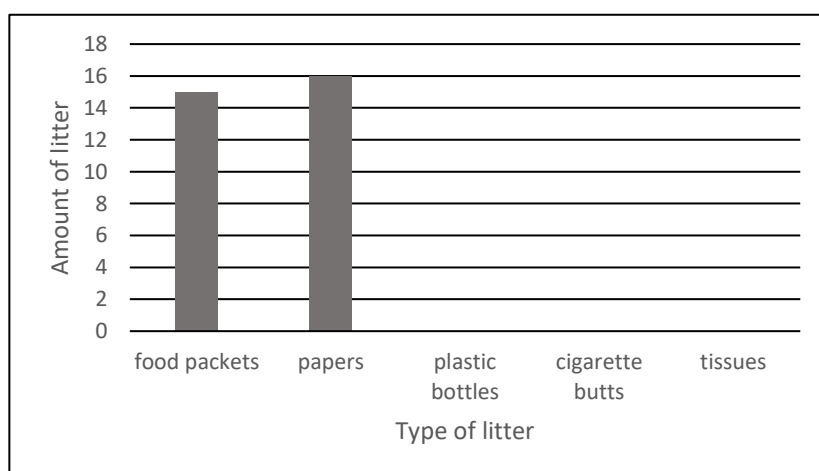
☐ the length of the litter

(1 mark)

- b) The children count all the things they have collected.
After separating the litter, they note down their findings in the table below.

food packets	papers	plastic bottles	cigarette butts	tissues
15	16	10	17	8

- i. From the table above, complete the bar graph below. The first two bars have been given.



(3 marks)

- ii. From the information above, name the **most common** type of litter found on the beach.

(1 mark)

- iii. Julia, Emma and Elias start a litter campaign to reduce litter on the beach.
Name **one action** we can take to help stop beach littering.

(1 mark)

- iv. Litter found on the beach can have a very negative effect on the environment. Write **one negative effect** that litter on the beach can have on the environment.

(1 mark)

- v. Humans also affect the environment.

Name **two** human actions (**other than littering**) that **harm** the environment.

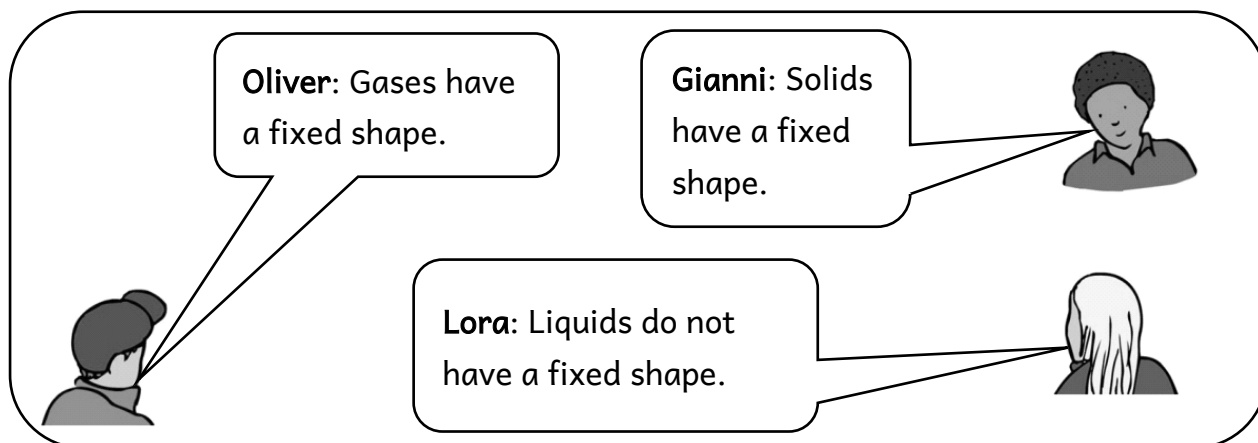
Action 1: _____

Action 2: _____

(2 marks)

6. Oliver, Gianni and Lora are learning about solids, liquids and gases.

Look at the cartoon below and answer the questions that follow.



- a) Only two students are correct.

Tick (✓) the name of the student who is **not** correct.

☐

Oliver

☐

Lora

☐

Gianni

(1 mark)

- b) Give a reason to support your choice. Use the word **particles** in your answer.

(2 marks)

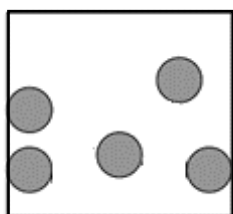
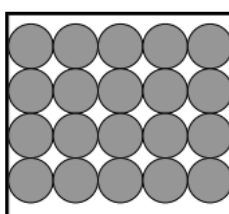
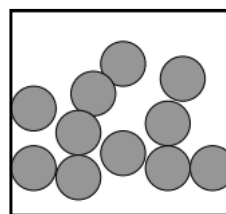
- c) The state of a material can be changed by heating or cooling.

Write numbers **1 to 4** to match the statement in **Column A** to the word in **Column B** to show the change that takes place.

	Column A		Column B
1	Water becomes ice.		melting
2	Water vapour becomes water droplets.		evaporation
3	An iceberg becomes water.		condensation
4	Boiling water becomes water vapour.		freezing

(4 marks)

- d) Tick (✓) the diagram that shows the particles in a **solid**.


☐

☐

☐

(1 mark)

7. Choose the correct word from the word bank below to complete the following sentences about chemical changes.

cake	taste	substance	reversed	vinegar	gas
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Chemical changes occur when two or more substances combine to form a new _____. There are many examples of chemical changes such as when you mix bicarbonate of soda with _____. When mixed together, they react and produce bubbles of _____. Another example is when you bake a _____. When mixed, the ingredients transform into a new substance with a different _____ and texture. Most chemical changes cannot be _____.

(6 marks)

8. Glenn is learning about outer space.

Tick (✓) the correct column in the table below to show whether each statement about outer space is **True** or **False**.

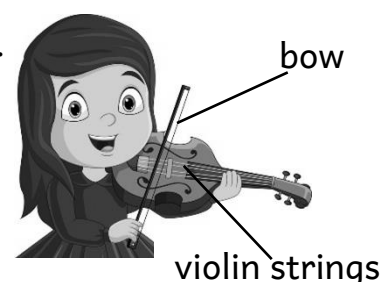
		True	False
a.	The Sun is a star found at the centre of our solar system.		
b.	Our Sun is the only star in space.		
c.	Our solar system is part of the Andromeda Galaxy.		
d.	Caroline Herschel is the first woman who discovered the first comet.		
e.	A galaxy is a huge collection of gas, dust, and stars and their solar systems.		
f.	The Milky Way is one of the planets found in our solar system.		

(6 marks)

9. The picture on the right shows Emily playing the violin.

a) What happens to the **violin strings** when the bow is pulled across the strings?

_____ (1 mark)



b) Emily tightens the strings of the violin. What happens to the note Emily hears? Tick (✓) the correct answer.

☐ She hears a higher pitched note. ☐ She hears a lower pitched note. (1 mark)

c) Emily observes that the violin produces notes that reach our ears.

Write numbers **1 to 4** in the table below to show the correct order of how sound reaches our ears.

The sound waves enter the ear canal.	
The inner ear sends messages to the brain to hear the sound.	
The sound waves reach the outer ear.	
The sound waves hit the ear drum and make it vibrate.	

(4 marks)