



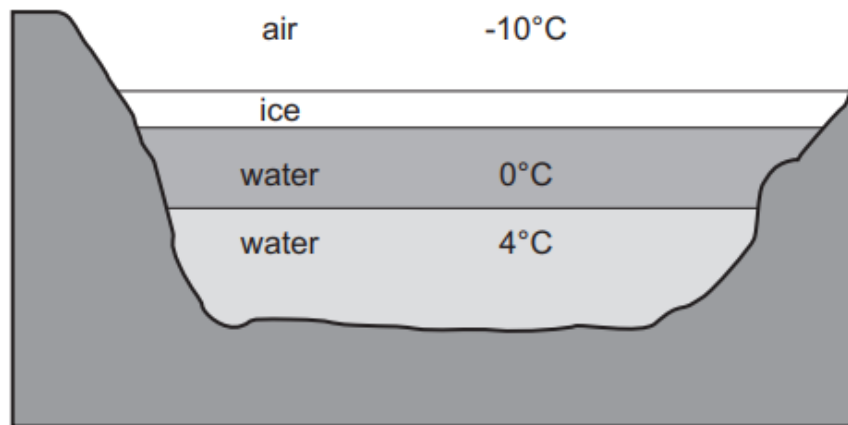
Student's Name: \_\_\_\_\_ Roll No: \_\_\_\_\_ Grade: 4

Marks: 40

Time Duration: 90 minutes

Invigilator's Sign.

**Q.1. Here is a cross section of a lake in winter.**



a. What is the temperature of the coldest liquid? Give the unit. (2)

\_\_\_\_\_

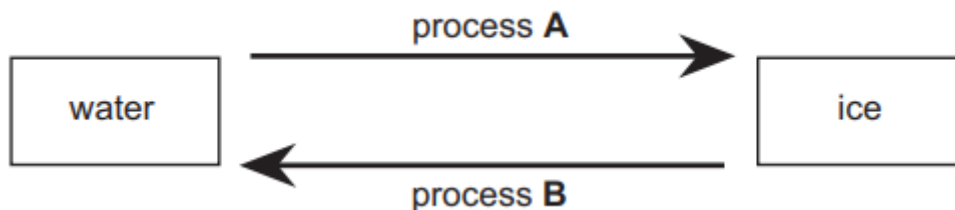
b. What part of the lake is solid? (1)

\_\_\_\_\_

c. What is the temperature of the gas? (1)

\_\_\_\_\_

d. Write the processes that turn water to ice and ice to water. (2)



process A \_\_\_\_\_ is process B is \_\_\_\_\_

**Q.2. Scientists explore the Solar System.**

1. Galileo Galilei was a scientist. He discovered that there are craters on the Moon.  
**What equipment did he use to see the craters on the Moon? (1)**

- a. A flashlight
- b. A telescope
- c. His eyes
- d. His spectacles

2. Oliver says, "If all the light passes through the material give it 10 marks. If no light passes through the material give zero marks."

Blessy says, "We need to make predictions."

Blessy predicts a mark for black card, blue cloth and clear glass. Draw a line from each material to the mark predicts. (2)

<u>Material</u>	<u>Mark</u>
black card	9
blue cloth	1
clear glass	7

3. Blessy makes to more predictions.

**White card=1**

**Green plastic=8**

a. Blessy's predictions are correct. Explain why these materials have different marks. (2)

---

---

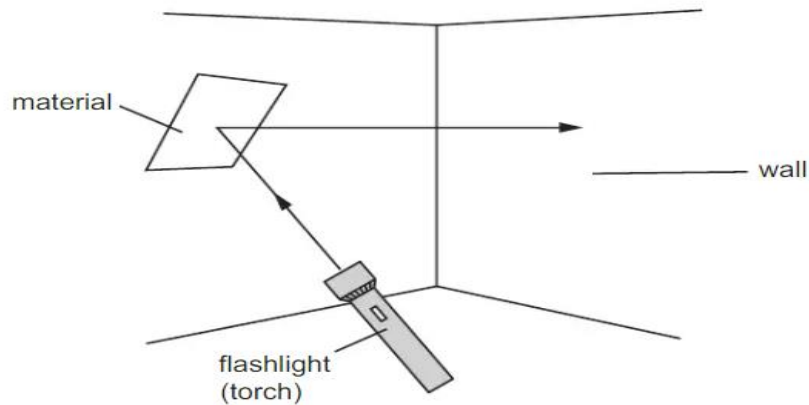
---

---

---

---

**Q.3. Mike and Lily use of flashlight. They shine the light from the flash light on different materials. The light then travels onto the wall.**



a. Write down the name of one material that can be used in this investigation. **(1)**

\_\_\_\_\_

b. Complete the sentences. Choose the best words from the following. **(2)**

**(absorbed, bounced, colour, direction)**

The light from the flashlight is \_\_\_\_\_ by material. When this happens the light changes \_\_\_\_\_.

**Q.4. Here are some bones.**



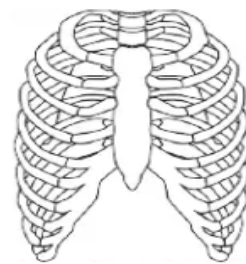
**A**



**B**



**C**



**D**

a. Which two of these sets of bones protect vital organs of the body? Choose from A, B, C and D. **(2)**

\_\_\_\_\_ and \_\_\_\_\_

b. What attaches to these bones to allow movement? **(1)**

\_\_\_\_\_

**Q.5. Henry put a small bit of petroleum jelly on the handle of the teaspoon. He pushed the pearl into the petroleum jelly on the spoon. Daniel poured hot water into a beaker. Henry put the spoon in the beaker containing hot water.**

- a. What will happen to the pearl? Explain the scientific reason related to the above process. **(2)**

---

---

---

---

---

- b. Draw an energy chain for the energy transfers that took place. **(2)**

---

---

- c. Suggest a question that you have investigated in above experiment. **(1)**

---

---

- d. Use your question to write a conclusion. **(1)**

---

---

Q.6. Aaliya wants to identify four animals.



A



B

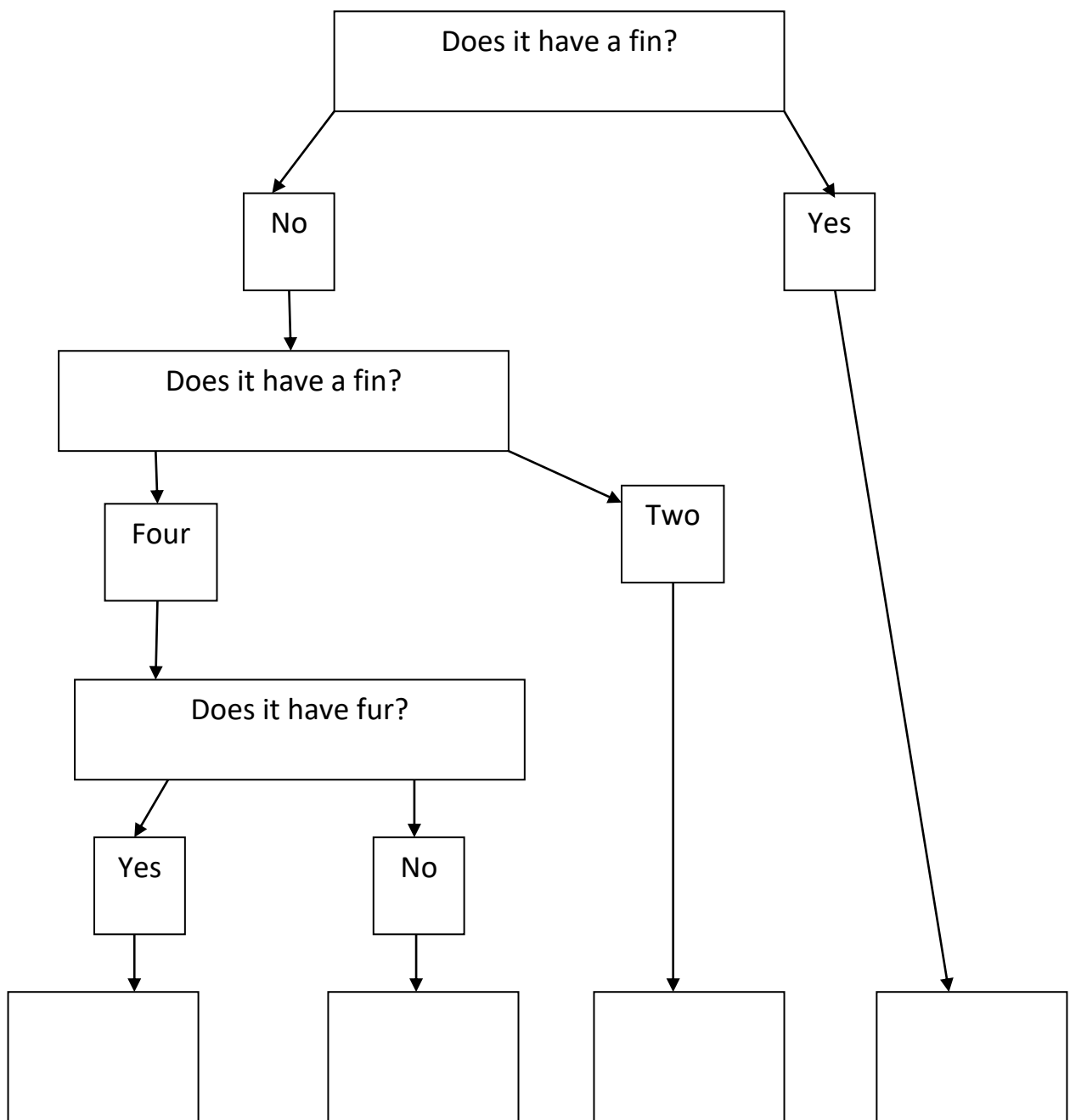


C



D

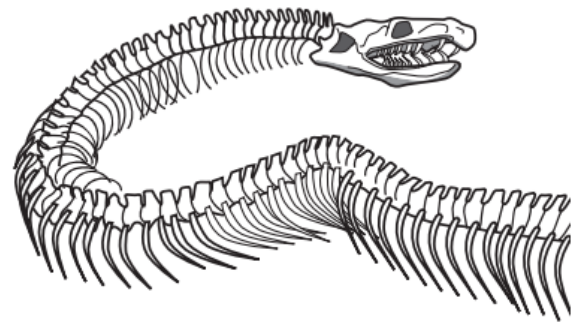
a. Use the key below to identify the four animals. Write the correct letter in each box on the key. (4)



**Q.7. Amenda finds part of a python (a type of snake) in a museum.**

- a. What part of the python's body can Amenda see? **(1)**

\_\_\_\_\_



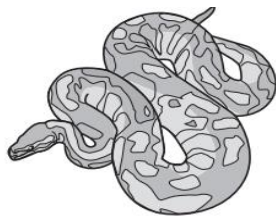
- b. Pythons can grow 10 m long. What must this structure do as a snake grows? **(1)**

\_\_\_\_\_

- c. Pythons catch other animals. How are their teeth suited for this? **(1)**

\_\_\_\_\_

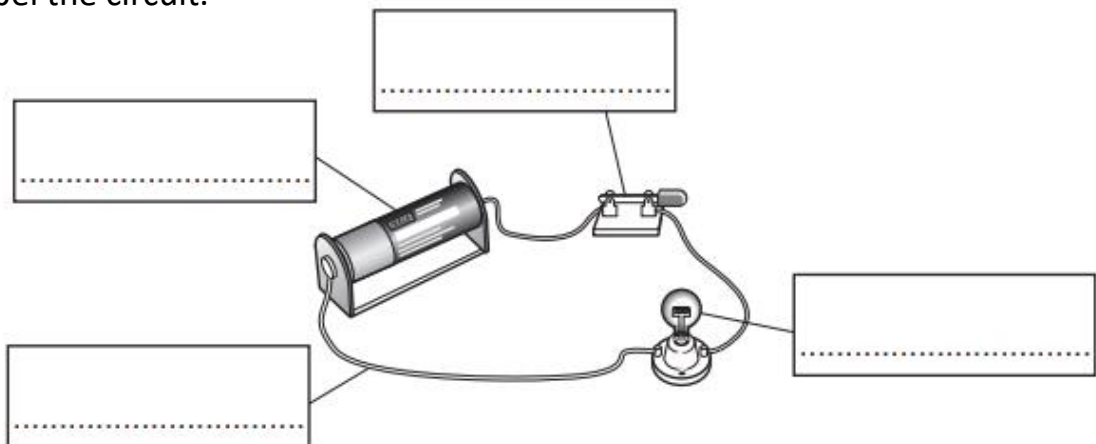
- d. Here is a picture of a python. How is its skin suited for hunting prey? **(1)**



\_\_\_\_\_  
\_\_\_\_\_

**Q.8. Blessy makes a complete electrical circuit.**

- a. Label the circuit. **(2)**



- b. Blessy connects the electrical circuit for 10 days. After 10 days the lamp does not work. Explain why the lamp does not work. **(2)**

\_\_\_\_\_  
\_\_\_\_\_

**Q.9. Ben, Lea and Rosy investigate how well they can hear the playground bell.**



**Ben wearing fur hat**



**Lea wearing a woolly hat**



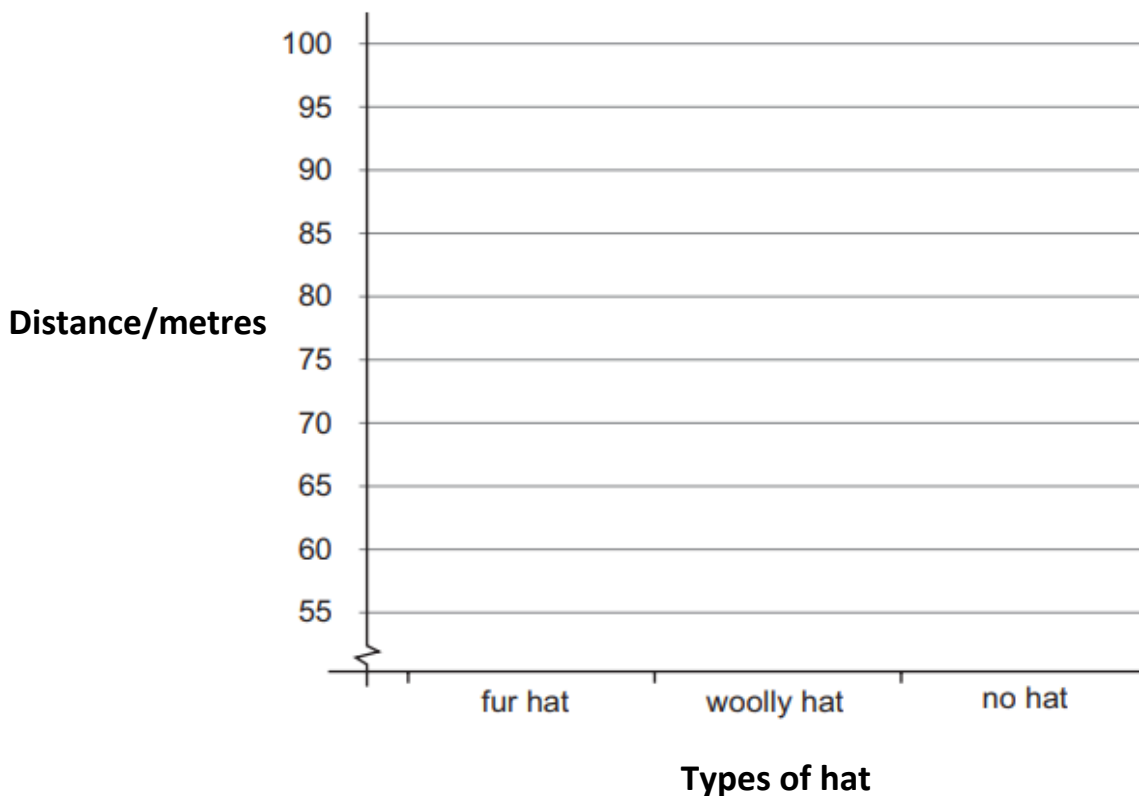
**Rosy has no hat**

Jess rings the bell. Ben, Lea and Rosy walk away from the bell while Jess keeps ringing it. They stop when they can no longer hear the bell. They each have a turn wearing the fur hat, the woolly hat or no hat. Here are their results in metres. Use A larger number means the child is further from the bell.

Types of hat	Ben	Lea	Rosy
Fur hat	80	70	55
Woolly hat	94	85	72
No hat	106	100	89

a. Plot the result on this bar chart for each hat that Lea wears.

**(1)**



b. Which child has the best hearing? Circle the correct name. (1)

**Ben**

**Lea**

**Rosy**

c. When wearing the fur hat, Ben walked 80 m until he could no longer hear the bell. What apparatus did they use to measure this distance? Circle the correct apparatus. (1)

**Metre rule**

**Stop watch**

**long tape measure**

d. The fur hat blocked the sound the most. How can you tell from their results? (1)

---

e. They decide to repeat the test twice more. Why is this good idea? (1)

---

---

\*\*\*\*\*