



Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 33

1 Key words**[4]**

Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

collage curiosity distillation hypothesis model objective practical work precaution
report survey

Scientific learning begins with _____, the wish to know that comes when we observe an object or an event. A guess about the answer that can be tested is called a _____. Work done with real things, inside or outside a laboratory, to test a fact for ourselves is called _____. The detailed description of such work, from its title to its conclusion, is a _____. The purpose of the work, written just after the title, is its _____. A sample made to show something we can't see directly, like the inside of the chest, is a _____. A model made by sticking small pieces of paper or seeds onto a surface is a _____. A dissolved solid can be separated from the liquid it is dissolved in by _____.

2 Multiple choice**[5]**

Choose the correct option for each of the following questions.

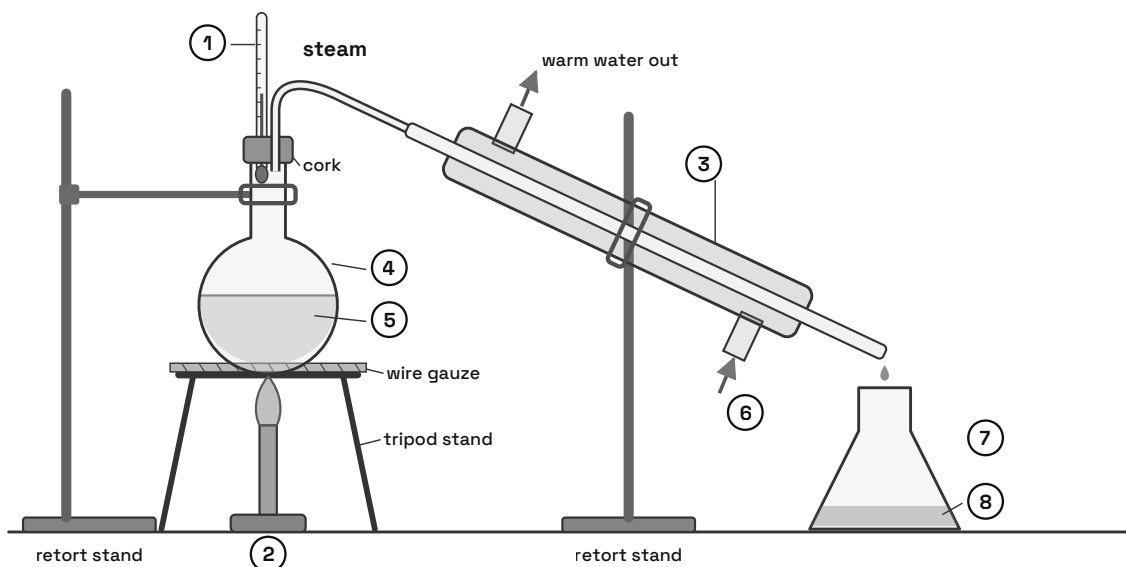
- i. How does the scientific learning process about an object or event begin? **[1]**
- a. by doing practical work
 - b. by analyzing the objects or events
 - c. with the curiosity raised by seeing the objects or events
 - d. by collecting data about the objects or events
- ii. Which of these is practical work done in a laboratory? **[1]**
- a. separating salt crystals from salt solution
 - b. identifying natural resources on a field visit
 - c. learning the jobs of the parts of a flower by observing them
 - d. making static electricity by rubbing a comb on your hair
- iii. Which of these is written first in the report of a practical work? **[1]**
- a. objective
 - b. result
 - c. observation
 - d. procedure
- iv. In distillation, what happens in the **condenser**? **[1]**
- a. the salt solution boils
 - b. the steam is cooled and turns back into water
 - c. the salt is collected
 - d. the water is heated



- v. In the bottle model, what does the **rubber sheet** stand for? [1]
- | | |
|------------------|-----------------|
| a. the lungs | b. the windpipe |
| c. the diaphragm | d. the ribs |

3 Label the diagram [4]

The diagram shows salt water being distilled in the laboratory. Write the names of the parts numbered 1 to 8. Each carries 0.5 mark.



- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |

4 Very short answers [4]

Write very short answers to the following questions.

- a. What is a hypothesis? [1]
- _____
- b. In which tense is the procedure of a report written? [1]
- _____
- c. By how many degrees is the axis of a globe tilted from the upright? [1]
- _____
- d. Why do we make models in science? [1]
- _____



5 Short answers

[10]

Write short answers to the following questions.

a. What is scientific learning?

[2]

b. Write any two differences between observation and result.

[2]

c. Write any two differences between practical work and a model.

[2]

d. Give a reason: in distillation, the cold water enters the condenser at its lower end.

[2]

e. In the candle experiment, a burning candle was covered with an upside-down glass standing in water. What did the students observe, and what does it show about air?

[2]

6 Long answer

[4]

Write a long answer to the following question.

How does scientific learning begin after seeing the objects or events around us? Explain with an example.



7 Think

[2]

Think, then answer.

Before electricity reached every village, many homes in Nepal were lit by a kerosene lantern, with a glass around its flame. A lantern has small holes near its bottom and at its top. Why? Would a lantern burn properly without them?

8 Activity: Squeeze a bottle (Sample report 1)

(not marked)

Close the lid of an empty plastic bottle tightly, squeeze the bottle as hard as you can, then open the lid. Write a short report of what you did.

Part of the report	What you write
Title	
Objective	
Required materials	
Observation	
Result	
Conclusion	

Why must the lid be closed tightly?

