



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

GET: INTERMEDIATE PHASE

GRADE 5

NATURAL SCIENCES AND TECHNOLOGY

15 AUGUST 2025

TERM 3 PRACTICAL TASK

MARKS: 20

DURATIN: 60 Minutes

This question paper consists of 5 pages including the cover page.

INSTRUCTIONS:

1. Read and thoroughly understand the instructions before answering.
2. The practical must be conducted under teacher supervision
3. All the questions must be answered individually on the provided spaces.
4. Write neatly and legibly.

STRAND: Energy and Change

TOPIC: Investigating the Relationship between Combustion and the Presence of Oxygen.

PROCESS SKILLS: Observation, Measuring, Recording, Drawing Conclusions

SURNAME & NAME: _____

SCHOOL NAME: _____

GRADE & CLASS: _____

Practical Task:

You have learned that combustion is a scientific word for burning of fuel. Now, in this experiment you will be investigating the relationship between fire and oxygen. The aim of this experiment is to see what happens when we burn a candle inside a glass jar compared to a candle that is burning outside of a glass jar.

More Instructions

1. This practical task will be done in groups of not more than 4 members.
2. Each person in the group must participate in the investigation and answer the questions in the spaces provided.
3. Each person in the group must record their individual answers in their answer sheet for assessment.
4. Your teacher will supervise you while you are completing the task and will answer any questions that you may have.
5. You will be working with lit candles. **BE CAREFUL AND BE RESPONSIBLE AT ALL TIMES.**
6. After completing the assignment return all equipment and tidy your work areas.

Materials

Each group will need the following materials and equipment to do the investigation:

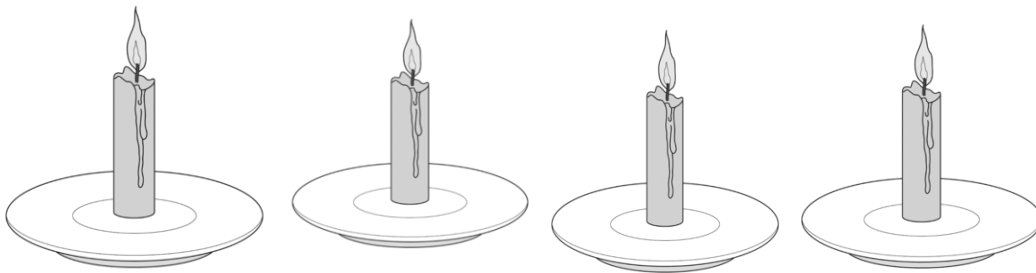
- Three glass bottles or glasses of different sizes: small, medium, and large
- Four candles
- Four saucers or bottle lids
- Matches
- A cell phone timer, clock, or a watch

PART 1

EXPERIMENT SET-UP AND METHODS

Read through the experiment set-up. You have 5 minutes to set-up the experiment.

1. Light one of the candles.
2. Drip a little bit of wax on each lid or saucer.
3. Place one candle on each of the four saucers or plates in the melted wax as shown below.



4. The four candles should now be standing firmly on each plate.
5. Blow out the burning candles.

Questions:

Answer the following questions in the spaces provided.

- 1.1 What do you predict the difference will be between the candle burning outside of the jar and the candle burning inside the glass jar? (2)

- 1.2 What is the heat source in this experiment? (1)

- 1.3 What is the fuel source in this experiment? (1)

PART 2

Carefully light one candle and place the medium sized glass jar over the burning candle. Watch the candle flame.

2.1.1 What do you observe happens to the flame after a few minutes? (1)

2.1.2 Why do you think this has happened? (2)

2.1.3 What three things are necessary for a fire to burn? (3)

2.2 Complete the table below.

2.2.1 Complete the ESTIMATED TIME on the table by: (1)

Estimating how long you think the candle will burn under the small jar.

Estimating how long you think the candle will burn under the medium jar.

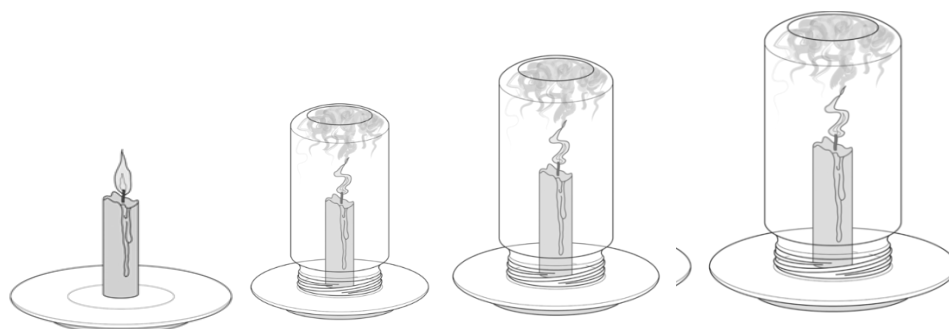
Estimating how long you think the candle will burn under the large jar.

Record your answers.

Jar	Estimated time	Actual time
Small		
Medium		
Large		

2.2.2 Which candle do you think will stop burning first? Give a reason for your answer. (2)

- Now light all four candles.
- Cover the three candles as shown below with each of the different sized jars.



Uncovered candle small jar medium jar large jar

- Using a cell phone timer, a clock or a watch, measure the amount of time it takes for each candle to stop burning.
- Record the ACTUAL TIMES on the table in question 2.2.1. (1)

2.2 Looking at the data you collected and recorded on the table, answer the following questions.

a) Which candle stopped burning first? (1)

b) Why do you think this candle stopped burning first? (1)

c) Which covered candle stopped burning last? (1)

d) Why do you think this candle burnt for longer than the candle under the small jar? (1)

Which candle is still burning? (1)

e) Why is this candle still burning? (1)

TOTAL: 20 MARKS