

PRIMARY SCIENCE • CHAPTER 1

How Things Burn and Air

Lesson 1 • Practice & Revision Test

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STUDENT NAME	CLASS	DATE (DD / MM / YYYY)	MARK
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Q1 MULTIPLE CHOICE — PART 1

Choose the correct answer for each of the following:

1 Burning is a chemical reaction (combination) that occurs between a substance and _____
- a nitrogen gas
- b oxygen gas
- c carbon dioxide
- d water vapor

2 The combustion (burning) process produces _____
- a heat only
- b light only
- c heat and light
- d sound only

3 Atmospheric air is present around us everywhere, but we _____
- a can see it clearly
- b do not see it with eyes
- c can hold it easily
- d never feel it

4 In the burning activity, we fix the candle firmly on the wooden board using _____
- a metal lid
- b clay
- c bottomless jar
- d lighter

5 As a safety rule in the laboratory, only the _____ should use the lighter to light the candle.
- a teacher
- b student
- c class monitor
- d lab assistant child

6 When a lit candle is covered with a glass jar and closed tightly with a metal lid, the flame _____
- a burns brighter
- b gradually weakens & goes out
- c turns green
- d burns forever

7 The candle flame goes out in a closed jar because the air inside is _____
- a used up (runs out)
- b renewed constantly
- c cooled down
- d turned into water

8 Another scientific term that has the exact same meaning as "Burning" is _____
- a Freezing
- b Combustion
- c Melting
- d Evaporation

9 The glass jar used in the experiment to study combustion is _____
- a bottomless
- b closed completely
- c filled with sand
- d painted black

10 A candle flame burning freely in the open air burns _____ than in a closed bottle.
- a weaker
- b stronger
- c slower
- d colder

Q1 MULTIPLE CHOICE — PART 2 (CONTINUED)

Choose the correct answer for each of the following:

11 A lit candle goes out fastest when it is placed _____
- a) on a table in open air
- b) in jar open top & bottom
- c) in a closed glass jar
- d) in a windy room

12 If there is a small gap at the bottom of the jar and top is closed with a metal lid, the flame goes out _____
- a) immediately
- b) after slightly longer time
- c) never
- d) after two weeks

13 The candle flame continues to burn when _____
- a) top is tightly closed
- b) air runs out completely
- c) gaps exist at top & bottom
- d) placed underwater

14 For things to keep burning continuously, fresh air must _____
- a) be stopped completely
- b) constantly flow in and out
- c) be frozen to ice
- d) be trapped in a box

15 In a closed place where air is not renewed, burning things _____
- a) cannot continue burning
- b) burn much brighter
- c) produce more oxygen
- d) continue forever

16 In an open jar with top and bottom openings, the air is constantly _____ from surroundings.
- a) replaced (renewed)
- b) destroyed
- c) cooled to freezing
- d) trapped permanently

17 Placing a metal lid on the top opening of the glass jar directly blocks _____
- a) fresh air from entering
- b) light from exiting
- c) gravity from acting
- d) heat from rising

18 Which of the following is NOT among the tools used in the candle burning experiment?
- a) Candle and clay
- b) Metal lid and jar
- c) Microscope
- d) Wooden board

19 When oxygen reacts with a burning substance, this scientific process is called a _____
- a) physical change
- b) combination (reaction)
- c) mechanical motion
- d) freezing process

20 Wood burning in a campfire produces light and _____
- a) heat
- b) coldness
- c) electricity
- d) sound waves only

Q2 TRUE OR FALSE

Put a tick (✓) or a cross (✗) in front of each statement:

1. Atmospheric air is present around us everywhere and can be seen clearly with our eyes. ☐
2. Burning is a reaction (combination) that occurs between oxygen and a substance. ☐
3. The combustion process produces heat energy and light energy. ☐
4. A candle covered tightly with a closed glass jar will continue burning without stopping. ☐
5. For things to keep burning, fresh air must constantly flow in and out. ☐
6. When the jar is closed, the flame gradually weakens before it goes out. ☐
7. The candle flame burns stronger in open air than inside a closed bottle. ☐
8. In a place where air is not renewed, things cannot continue in burning. ☐

Q3 SCIENTIFIC TERMS

Write the scientific term for each of the following statements:

1. A reaction (combination) between oxygen and a substance that produces heat and light.
2. The invisible gas mixture present around us everywhere that has a major role in burning.
3. The specific atmospheric gas that reacts with combustible substances during combustion.
4. A cylindrical glass container open at both top and bottom used in the burning experiment.
5. The continuous circulation and replacement of fresh air from the surroundings into a flame.
6. The soft moldable substance used to fix the candle upright onto the wooden board.

Q4 CORRECT THE MISTAKE

Correct the underlined word(s) in each of the following sentences:

1. Burning is a reaction between nitrogen and a substance producing heat and light.
   Ans: .....

2. The candle flame continues to burn when placed in a tightly closed glass jar.
   Ans: .....

3. We can see atmospheric air around us with our naked eyes.
   Ans: .....

4. When the jar is closed, the air inside is constantly renewed.
   Ans: .....

5. A lit candle goes out slower in a closed jar compared to open air.
   Ans: .....

6. Combustion produces heat and coldness.
   Ans: .....

Q5 EXPERIMENT ANALYSIS

Study the following experimental cases carefully, then answer:

Figure 1



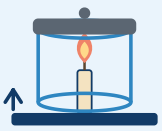
Case 1 — Candle in Open Air

Figure 2



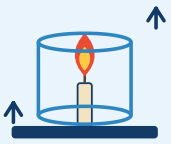
Case 2 — Completely Closed Jar

Figure 3



Case 3 — Bottom Gap + Lid Closed

Figure 4



Case 4 — Gaps at Top & Bottom

A What happens to the candle flame in each case?

Case 1 .....

Case 2 .....

Case 3 .....

Case 4 .....

B Give scientific reasons for:

Flame goes out in **Case (2)**: Because

.....

Flame continues in **Case (4)**: Because

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