



**Subject:** Grade 9 Natural Sciences  
**Topic:** Reactions of non-metals with oxygen  
**Total:** 33 Marks

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Question 1: True/False**

2 marks

Sulphur dioxide is a whitish gas that irritates the nasal passages and the skin.

TRUE

FALSE

**Question 2: True/False**

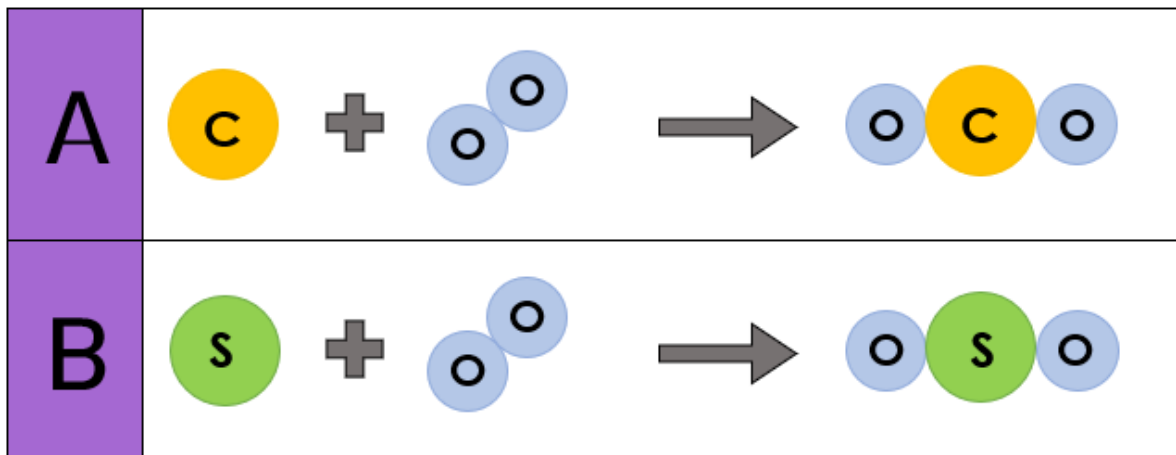
2 marks

When sulphur and oxygen react, the product is sulphur oxide.

TRUE

FALSE

This image refers to question: 3



**Question 3: Please Fill In The Blanks**

4 marks

Study the diagram carefully.

When the reaction in (1) occurs, you will notice that the flame colour is (2) .

Possible Answers: A | B | blue | green

1

2

**Question 4: Multiple Choice**

4 marks

What is the positive test for carbon dioxide?

- |          |                                  |
|----------|----------------------------------|
| <b>A</b> | milk turns grey                  |
| <b>B</b> | clear lime water turns milky     |
| <b>C</b> | milky water turns to clear water |
| <b>D</b> | clear water turns milky          |
- 

**Question 5: Multiple Choice**

4 marks

Which of the following are allotropes of sulphur?

- A - orthorhombic
- B - monoclinic
- C - wood
- D - glass

- |          |         |
|----------|---------|
| <b>A</b> | B and D |
| <b>B</b> | A and C |
| <b>C</b> | C and D |
| <b>D</b> | A and B |
- 

**Question 6: Text Input**

3 marks

Write a balanced equation for nitrogen oxide reacting with oxygen.

Use --&gt; as your arrow.

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**Question 7: Multiple Choice**

4 marks

Which of the following is not an allotrope of carbon?

- |          |                      |
|----------|----------------------|
| <b>A</b> | granite              |
| <b>B</b> | buckminsterfullerene |
| <b>C</b> | coal                 |
| <b>D</b> | diamond              |
-

**Question 8: Please Fill In The Blanks**  
**Non metal + oxygen → ...**

4 marks

In the above reaction, the non-metal and oxygen are the (1) and it will result in a (2) .

Possible Answers: reactants | products | metal oxide | non-metal oxide

<b>1</b>	
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<b>2</b>	
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**Question 9: Text Input**

3 marks

What word or phrase is used to describe different forms of the same element?

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**Question 10: Text Input**

3 marks

What process uses the sun's energy, and utilizes *carbon dioxide*, to make food for plants?

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**Total: 33 Marks**