

Name: _____

**Science 9 – Unit Test – Matter and Chemical Change
Version 1**

Part A – Multiple Choice

1. A B C D
2. A B C D
3. A B C D
4. A B C D
5. A B C D
6. A B C D
7. A B C D
8. A B C D
9. A B C D
10. A B C D
11. A B C D
12. A B C D
13. A B C D
14. A B C D
15. A B C D
16. A B C D
17. A B C D
18. A B C D
19. A B C D
20. A B C D
21. A B C D
22. A B C D
23. A B C D
24. A B C D
25. A B C D

Numerical Response

1. 2. 3.

Part B – Written Response

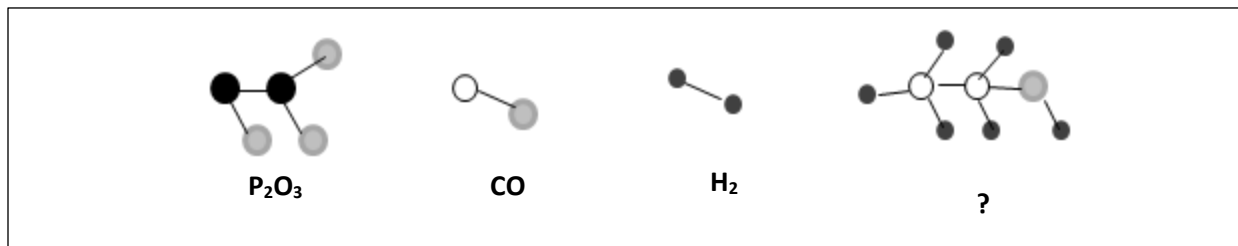
Written Response 1

Fill in the missing information from the table below (5 marks)

Chemical Formula	Type of compound (ionic or molecular?)	Chemical name
MgO		
		sodium sulfide
CH ₄		
		diphosphorus pentoxide
Be ₃ N ₂		

Written Response 2

Use the following information to answer Written Response 2



a.) What is the **chemical formula** for the unknown molecule? (1 mark)

b.) Write the **chemical equation** for the combustion of the unknown molecule (*Hint: the unknown molecule is the fuel source*) (2 marks)

Written Response 3

Use the following information to answer Written Response 3

Billy is trying to determine the chemical formula for the compound that forms between rubidium and sulfur. He does the following work:

Step 1: Rb^{1+}

S^{2-}

Step 4: RbS_2

Step 2: Rb^{1+}

Answer: The compound that forms between rubidium and sulfur is

Step 3: $2+$

$2-$

RbS_2 .

Billy's friend Alice says that he is wrong, and that the right answer is Rb_2S . Who is correct?

Explain your answer. (2 marks)

