

Provincial Exam Practice – Chapters 4.2 & 4.3

1.

Name:

Date:

Which of the following is an ionic compound?

- A. H_2
- B. NH_3
- C. CO_3^{2-}
- D. $\text{K}_2\text{Cr}_2\text{O}_7$

2.

What is the chemical formula for dinitrogen pentoxide?

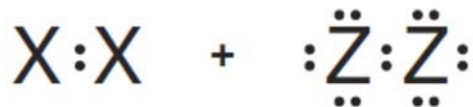
- A. NO
- B. N_2O_5
- C. N_5O_2
- D. $(\text{N}_2\text{O})_5$

3.

What is the name of the compound MnS_2 ?

- A. manganese sulphide
- B. magnesium sulphide
- C. manganese(II) sulphide
- D. manganese(IV) sulphide

4.



X and **Z** represent unknown elements from the periodic table.

Which of the following products could be formed from the two molecules represented above?

- A. water
- B. neon gas
- C. carbon dioxide
- D. hydrogen fluoride

5.

Which of the following would provide the best data to support the Law of Conservation of Mass?

A.



sodium bicarbonate
solid only

B.



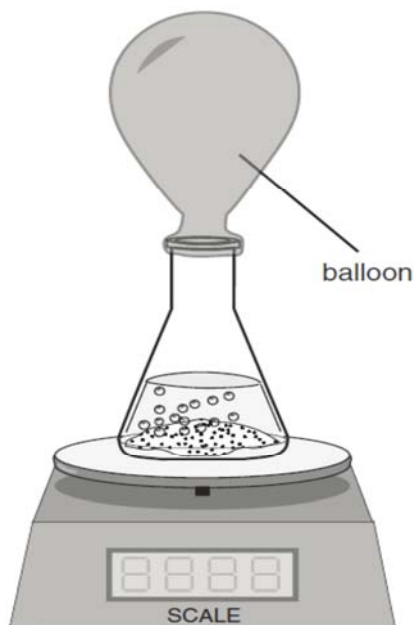
sodium bicarbonate with
acetic acid

C.



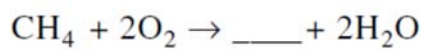
acetic acid only

D.



sodium bicarbonate with
acetic acid

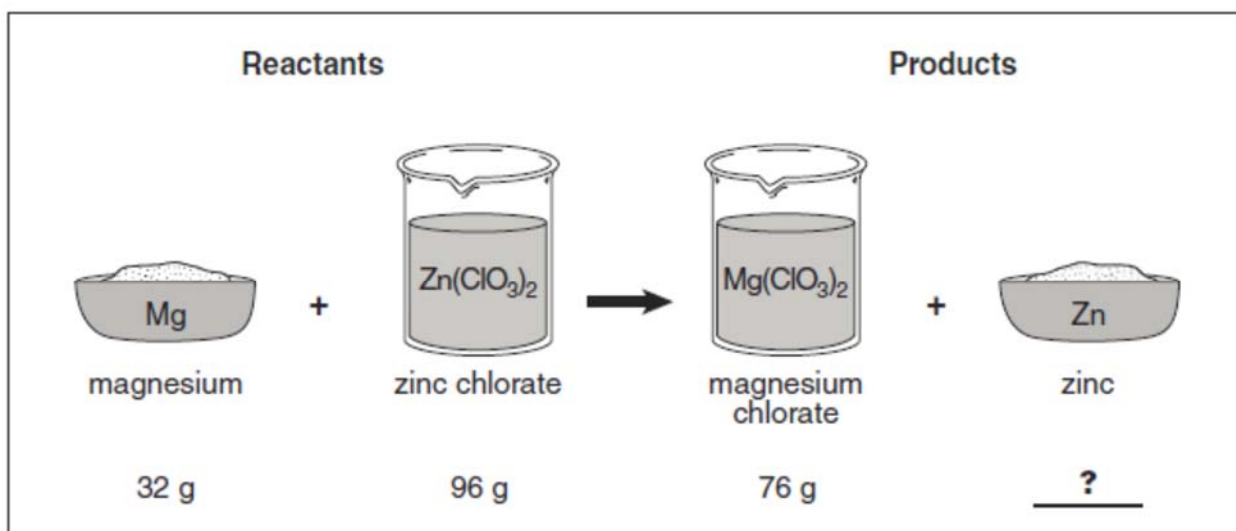
6.



Which of the following products would balance the reaction?

- A. CO
- B. CO₂
- C. 2CO
- D. 2CO₂

7.

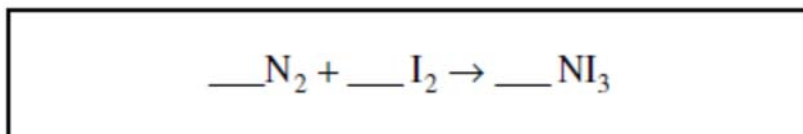


According to the law of conservation of mass, how much zinc was produced?

- A. 20 g
- B. 44 g
- C. 52 g
- D. 128 g

8.

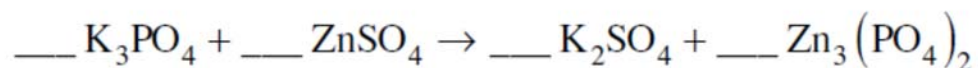
What coefficient is needed for I₂ in order to balance the equation?



- A. 1
- B. 2
- C. 3
- D. 4

9.

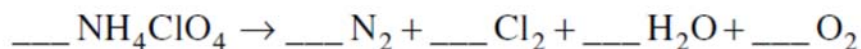
Which set of ordered coefficients correctly balances the following equation?



- A. 1, 2, 3, 2
- B. 2, 1, 3, 2
- C. 2, 2, 1, 3
- D. 2, 3, 3, 1

10.

What is the coefficient needed in front of O_2 in order to balance the following equation?



- A. 1
- B. 2
- C. 3
- D. 4

Check your answers using the answer key below.

My Score: /10

Are you satisfied with this score or with a little more practice could you do better?

Provincial exams tend to recycle very similar questions each year. The more you practice, the more familiar you will become with each type of question. Your hard work will pay off if you keep practicing and keep improving! You can do it!

Answer Key

1) D 2) B 3) D 4) D 5) D 6) B 7) C 8) C 9) D 10) B