Empirical Formula Questions

Question 1

What is the empirical formula of a compound containing 60.0% sulfur and 40.0% oxygen by mass?

Question 2

A compound is found to contain 23.3% magnesium, 30.7% sulfur and 46.0% oxygen. What is the empirical formula of this compound?

Question 3

What is the empirical formula for a compound containing 38.8% carbon, 16.2% hydrogen and 45.1% nitrogen?

Question 4

A sample of an oxide of nitrogen is found to contain 30.4% nitrogen. What is its empirical formula?

Question 5

A sample of an oxide of arsenic is found to contain 75.74% arsenic. What is its empirical formula?

Question 6

What is the empirical formula for a compound containing 26.57% potassium, 35.36% chromium, and 38.07% oxygen?

Question 7

What is the empirical formula of a compound comprised of 1.8% hydrogen, 56.1% sulfur and 42.1% oxygen?

Question 8

A borane is a compound containing only boron and hydrogen. If a borane is found to contain 88.45% boron, what is its empirical formula?

Question 9

Find the empirical formula for a compound containing 40.6% carbon, 5.1% hydrogen, and 54.2% oxygen.

Question 10

What is the empirical formula of a compound containing 47.37% carbon, 10.59% hydrogen and 42.04% oxygen?

Answers

1. SO_3
2. $MgSO_3$
3. CH_5N
4. NO_2
5. As_2O_3
6. $K_2Cr_2O_7$
7. $H_2S_2O_3$
8. B_5H_7
9. $C_2H_3O_2$
10. $C_3H_8O_2$