
Exercise 1.22 – Molecular formula from percentage composition and relative mass

Q122-01 Find the molecular formula given the following percentage compositions and relative molecular mass information:

Carbon = 80%, Hydrogen = 20%, Mr= 30

Q122-02 Find the molecular formula given the following percentage compositions and relative molecular mass information:

Carbon = 40%, Hydrogen = 6.67%, Oxygen 53.33%, Mr= 60

Q122-03 Find the molecular formula given the following percentage compositions and relative molecular mass information:

Nitrogen = 87.5%, Hydrogen = 12.5%, Mr= 32

Q122-04 Find the molecular formula given the following percentage compositions and relative molecular mass information:

Oxygen = 94.12%, Hydrogen = 5.88% Mr= 34

Q122-05 Find the molecular formula given the following percentage compositions and relative molecular mass information:

Carbon = 40%, Hydrogen = 6.67%, Oxygen 53.33%, Mr= 180

Q122-06 Find the molecular formula given the following percentage compositions and relative molecular mass information:

Sulphur = 23.70%, Oxygen = 23.70%, Chlorine = 52.59%, Mr= 135

Q122-07 Find the molecular formula given the following percentage compositions and relative molecular mass information:

Fluorine = 95%, Hydrogen = 5%, Mr= 20

Q122-08 Find the molecular formula given the following percentage compositions and relative molecular mass information:

Nitrogen = 12.28%, Hydrogen = 3.51%, sulphur 28,07%, Oxygen 56.14%, Mr= 228

Q122-09 Find the molecular formula given the following percentage compositions and relative molecular mass information:

Phosphorus = 10.88%, Iodine = 89.12%, Mr= 570

Q122-10 Find the molecular formula given the following percentage compositions and relative molecular mass information:

Phosphorus = 43.66%, Oxygen = 56.34%, Mr= 284
