

Percent composition from the chemical formula

Name

$$\% \text{ by mass} = \frac{\text{mass of element in one mole}}{\text{molar mass of compound}} \times 100$$

Write all numbers with
one decimal place

00.0

Find the percent compositions of all the elements in the following compounds:

| NaOH | | | | |
|------------------------|--------|------------|-------|--------------------------|
| element | #Atoms | Molar mass | Total | % of composition by mass |
| Na | | | | |
| O | | | | |
| H | | | | |
| molar mass of compound | | | | Total=100% |

| (NH ₄) ₂ S | | | | |
|-----------------------------------|--------|------------|-------|--------------------------|
| element | #Atoms | Molar mass | Total | % of composition by mass |
| N | | | | |
| H | | | | |
| S | | | | |
| molar mass of compound | | | | Total=100% |

| C ₁₂ H ₂₂ O ₁₁ | | | | |
|---|--------|------------|-------|--------------------------|
| element | #Atoms | Molar mass | Total | % of composition by mass |
| | | | | |
| | | | | |
| | | | | |
| molar mass of compound | | | | Total=100% |

| CH ₃ COOH | | | | |
|------------------------|--------|------------|-------|--------------------------|
| element | #Atoms | Molar mass | Total | % of composition by mass |
| | | | | |
| | | | | |
| | | | | |
| molar mass of compound | | | | Total=100% |

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