

Exercise 1.13 – Moles and particles

Q113-01 How many molecules are there in 180g of H₂O?

- A. 6.02×10^{22}
 - B. 6.02×10^{23}
 - C. 6.02×10^{24}
 - D. 6.02×10^{25}
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Q113-02 What is the total number of atoms contained in 2.00 moles of nickel?

- A. 58.9
 - B. 118
 - C. 6.02×10^{23}
 - D. 1.2×10^{24}
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Q113-03 Which sample contains the largest amount of oxygen?

- A. 0.3 mol of H₂SO₄
 - B. 0.6 mol O₃
 - C. 0.7 mol HCOOH
 - D. 0.8 mol H₂O
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Q113-04 What amount of oxygen, O₂, in (moles) contains 1.8×10^{22} molecules?

- A. 0.0030
 - B. 0.030
 - C. 0.30
 - D. 3.0
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Q113-05 How many carbon atoms are present in 0.10 mol of ethanoic acid, formula CH₃COOH?

- A. 6.02×10^{22}
 - B. 1.24×10^{23}
 - C. 6.02×10^{23}
 - D. 1.20×10^{24}
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Q113-06 How many ions are there in 1 mole of [copper nitrate](#)?

Q113-07 How many ions are there in 0.05 moles of [ammonium chloride](#)?

Q113-08 How many ions are present in 0.01 moles of [aluminium oxide](#)?

Q113-09 How many moles of hydrogen atoms are there in 0.01 moles of benzene, C₆H₆?

Q113-10 How many moles of water could be made from 1.204×10^{22} molecules of hydrogen?
