

General Chemistry Multiple Choice Questions Chapter 7

1 Which of the following contains 6.00×10^{16} atoms?

a 6.00×10^{16} H₂O molecules

b 3.00×10^{16} Cl₂ molecules

c 2.00×10^{16} P₄ molecules

d 1.50×10^{16} CaSO₄ empirical units

	7.1
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2 How many atoms of iron are in 3.2 moles of iron?

a 1.93×10^{24} atoms

b 4.62×10^{24} atoms

c 1.93×10^{23} atoms

d 4.62×10^{23} atoms

	7.1
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3 How many moles of carbon are there in 1.00×10^{25} atoms of carbon?

a 15.2 moles

b 16.6 moles

c 25.2 moles

d 5.9 moles

	7.1
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1 How many atoms are there in 36.20 g of P₄?

a 4.677×10^{22} atoms

b 4.677×10^{23} atoms

c 7.040×10^{22} atoms

d 7.040×10^{23} atoms

	7.2
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2 How many moles are there in 50. grams of carbon dioxide?

a 0.82 moles

b 0.85 moles

c 1.1 moles

d 0.91 moles

	7.2
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3 What is the mass of 2.56 moles of carbon tetrachloride?

a 303 grams

b 394 grams

c 368 grams

d 484 grams

	7.2
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General Chemistry Multiple Choice Questions Chapter 7

1 What is the gram molar mass of CuSO_4 ?

a 159.6 g/mol

c 168.2 g/mol

b 145.9 g/mol

d 132.2 g/mol

	7.3
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2 What is the gram molar mass of water?

a 16 g/mol

c 18 g/mol

b 8 g/mol

d 25 g/mol

	7.3
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3 What is the gram molar mass of Acetic Acid?

a 52 g/mol

c 73 g/mol

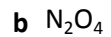
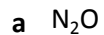
b 60 g/mol

d 112 g/mol

	7.3
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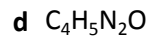
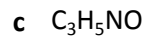
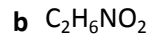
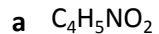
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1 Which of the following is *not* an empirical formula?



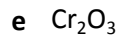
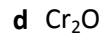
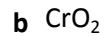
	7.5
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2 What is the empirical formula of caffeine if it contains 5.19% H, 28.85% N, 16.48% O, and 49.48% C by weight?



	7.5
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3 What is the empirical formula of an oxide of chromium that is 48 percent oxygen by mass?



	7.5
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