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CHEMISTRY TEST - CHAPTER 4: STOICHIOMETRY

Name:		Roll No.		Section:

Total Time: 2:30 Hour
Time Allowed: 150 Minutes

Total Marks: 150

PAPER OBJECTIVE
SECTION-A (MARKS 150)

NOTE: Section-A is compulsory. All parts of this section are to be answered on these pages and handed over to the center superintendent. Deleting / overwriting is not allowed. Do not use lead pencil.

Q.1 Fill the relevant bubble for each part. All parts carry one mark.

Questions	A	B	C	D	A B C D
1. The study of the quantitative relationships between reactants and products in a chemical reaction is called:	electrochemistry	thermochemistry	stoichiometry	kinetics	○○●○
2. The word stoichiometry is derived from the Greek words meaning:	energy and matter	atom and mass	element and measurement	reaction and rate	○○●○
3. A mole is the amount of substance that contains:	6.023×10^{22} representative particles	6.023×10^{23} representative particles	1.602×10^{-19} representative particles	6.023×10^{24} representative particles	○●○○
4. The experimentally determined number 6.023×10^{23} is known as:	Avogadro's number	Faraday's constant	Rydberg constant	Planck's constant	●○○○
5. The representative particle of an ionic compound such as NaCl is the:	formula unit	molecule	atom	electron	●○○○
6. One mole of oxygen atoms has a mass of:	32 g	6.023 g	16 g	8 g	○○●○
7. One mole of oxygen molecules (O_2) has a mass of:	8 g	32 g	16 g	64 g	○●○○
8. One mole of water molecules has a mass of:	2 g	16 g	18 g	36 g	○○●○
9. One mole of NaCl formula units has a mass of:	58.5 g	35.5 g	23 g	117 g	●○○○
10. One mole of any gas at STP occupies a volume of:	11.2 dm^3	2.2414 dm^3	224.14 dm^3	22.414 dm^3	○○○●
11. The volume of one mole of a gas at STP is called its:	molar volume	molarity	molar mass	molality	●○○○
12. 22.414 dm^3 of any gas at STP contains:	3.01×10^{23} molecules	1.2×10^{24} molecules	6.02×10^{23} molecules	6.02×10^{22} molecules	○○●○
13. The volume occupied by 2.5 moles of chlorine gas at STP is about:	112 dm^3	5.6 dm^3	56.0 dm^3	22.4 dm^3	○○●○
14. The mass of 22.414 dm^3 of NH_3 at STP is:	14 g	34 g	17 g	3 g	○○●○

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Questions	A	B	C	D	A B C D
15. The mass of 22.414 dm^3 of H_2 at STP is:	4 g	2 g	1 g	22.4 g	○●○○
16. At STP, the density of a gas depends upon its:	colour	molar mass	number of neutrons only	boiling point only	○●○○
17. A gas having a higher molar mass has:	the same density as all gases	a higher density at STP	zero density	a lower density at STP	○●○○
18. A gas has a density of 1.43 g/dm^3 at STP. Its molar mass is about:	44 g/mol	32 g/mol	16 g/mol	28 g/mol	○●○○
19. A gas has a density of 1.25 g/dm^3 at STP. Its molecular mass is about:	28	16	32	44	●○○○
20. Which of the following gases has the highest density at STP?	CO_2	H_2	O_2	N_2	●○○○
21. The number of moles of oxygen in 20.0 dm^3 of O_2 at STP is about:	2.24	1.12	0.89	0.45	○○●○
22. The volume occupied by 0.6 mole of H_2 gas at STP is about:	2.24 dm^3	6.7 dm^3	22.4 dm^3	13.4 dm^3	○○○●
23. In the reaction $2H_2 + O_2 \rightarrow 2H_2O$, two moles of hydrogen combine with ___ of oxygen.	half a mole	one mole	two moles	four moles	○●○○
24. In the reaction $2H_2 + O_2 \rightarrow 2H_2O$, 4 g of H_2 combine with 32 g of O_2 to give:	18 g of H_2O	28 g of H_2O	36 g of H_2O	72 g of H_2O	○○●○
25. At STP, 2 × 22.414 dm^3 of H_2 combine with ___ of O_2 to form water.	2 × 22.414 dm^3	22.414 dm^3	11.2 dm^3	44.8 g	○●○○
26. In the equation $2H_2 + O_2 \rightarrow 2H_2O$, 2 × 6.02 × 10^{23} molecules of hydrogen react with:	3 × 6.02 × 10^{23} molecules of oxygen	2 × 6.02 × 10^{23} molecules of oxygen	6.02 × 10^{23} molecules of oxygen	12.04 × 10^{24} molecules of oxygen	○○●○
27. For the complete burning of one mole of CH_4 ($CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$), the moles of O_2 required are:	1	2	3	4	○●○○
28. One mole of methane on complete combustion produces how many moles of water?	3	1	4	2	○○○●
29. When 4 moles of Mg react with excess oxygen ($2Mg + O_2 \rightarrow 2MgO$), the moles of MgO formed are:	1	2	8	4	○○○●
30. The moles of oxygen required to react completely with 4 moles of magnesium are:	2	8	4	1	●○○○
31. The molar mass of $KClO_3$ is:	74.5 g/mol	122.5 g/mol	138.5 g/mol	106.5 g/mol	○●○○

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Questions	A	B	C	D	A B C D
32. The number of moles in 25 g of $KClO_3$ is about:	0.204	2.04	0.408	0.102	●○○○
33. $2KClO_3 \rightarrow 2KCl + 3O_2$. The moles of O_2 produced from 0.204 mole of $KClO_3$ are:	0.136	0.306	0.204	0.612	○●○○
34. The mass of O_2 produced by decomposing 25 g of $KClO_3$ is about:	9.8 g	32 g	19.6 g	4.9 g	●○○○
35. $Mg + 2HCl \rightarrow MgCl_2 + H_2$. The volume of H_2 at STP from 100 g of Mg is about:	186 dm^3	46.5 dm^3	93 dm^3	22.4 dm^3	○○●○
36. $Fe_2O_3 + 3CO \rightarrow 2Fe + 3CO_2$. The moles of CO needed to reduce 5 moles of Fe_2O_3 are:	10	3	5	15	○○○●
37. $Ca_3P_2 + 6H_2O \rightarrow 3Ca(OH)_2 + 2PH_3$. One mole of Ca_3P_2 gives ___ moles of PH_3:	1	2	3	6	○●○○
38. $2CH_3OH + 3O_2 \rightarrow 2CO_2 + 4H_2O$. The moles of oxygen used when 3.50 moles of methanol burn are:	5.25	7.00	2.33	3.50	●○○○
39. In the same reaction, 3.50 moles of methanol produce how many moles of water?	7.00	1.75	5.25	3.50	●○○○
40. When 490 g of $KClO_3$ decompose, the volume of O_2 at STP is about:	44.8 dm^3	268 dm^3	89.6 dm^3	134 dm^3	○○○●
41. When 490 g of $KClO_3$ decompose, the number of O_2 molecules produced is about:	2.4×10^{24}	3.6×10^{24}	6.0×10^{23}	1.2×10^{24}	○●○○
42. The number of molecules in 20 g of H_2SO_4 (molar mass 98 g/mol) is about:	2.45×10^{23}	1.23×10^{22}	6.02×10^{23}	1.23×10^{23}	○○○●
43. When 20 g of H_2SO_4 ionize completely, the number of H^+ ions is about:	4.92×10^{23}	2.46×10^{23}	6.02×10^{23}	1.23×10^{23}	○●○○
44. The mass of zinc needed to produce 100 cm^3 of H_2 at STP ($Zn + 2HCl \rightarrow ZnCl_2 + H_2$; Zn = 65.4) is about:	2.9 g	0.29 g	0.029 g	65.4 g	○●○○
45. When 58.5 g of NaCl dissolve in water, the mass of Na^+ ions produced is:	35.5 g	11.5 g	58.5 g	23 g	○○○●
46. One mole of NaCl dissolved in water gives how many moles of ions in total?	4	2	3	1	○●○○
47. When 0.2 mole of Na_2SO_4 is completely ionised, the number of Na^+ ions produced is:	2.4×10^{22}	1.2×10^{23}	6.02×10^{23}	2.4×10^{23}	○○○●
48. Excess N_2 reacts with 3 g of H_2 to form NH_3. The volume of NH_3 at STP is about:	44.8 dm^3	11.2 dm^3	22.4 dm^3	33.6 dm^3	○○●○

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Questions	A	B	C	D	A B C D
49. 0.1 mole of laughing gas (N_2O) contains how many atoms?	1.806×10^{23}	1.204×10^{23}	6.022×10^{22}	6.022×10^{23}	●○○○
50. Mole Day is celebrated on October 23 between 6:02 am and 6:02 pm because it honours:	Boyle's law	Dalton's theory	Avogadro's constant	Planck's constant	○○●○
51. The mass of 1.204×10^{23} molecules of CO_2 is:	88 g	44 g	8.8 g	4.4 g	○○●○
52. The number of molecules in 18 g of steam is:	half of Avogadro's number	18 × Avogadro's number	Avogadro's number	twice Avogadro's number	○○●○
53. 58.5 g of NaCl contains Avogadro's number of:	molecules	covalent bonds	formula units	neutral atoms	○○●○
54. One mole of Na and one mole of Al have:	the same mass	different numbers of atoms	the same volume	the same number of atoms	○○○●
55. The mass of 0.74 mole of $KMnO_4$ (molar mass 158 g/mol) is about:	11.7 g	74 g	117 g	158 g	○○●○
56. The number of moles of O atoms in 9.22 g of $Mg(NO_3)_2$ (molar mass 148 g/mol) is about:	0.74	0.37	0.12	0.062	○●○○
57. The total number of covalent bonds in 22 g of dry ice (CO_2) is about:	6.0×10^{23}	1.2×10^{24}	2.4×10^{24}	3.0×10^{23}	○●○○
58. The number of moles in 315 mg of graphite is about:	0.026	2.6	0.0026	0.26	●○○○
59. The number of carbon atoms in 315 mg of graphite is about:	1.6×10^{22}	1.6×10^{21}	1.6×10^{23}	6.0×10^{23}	●○○○
60. The total number of ions in one mole of $CaBr_2$ is:	$2 \times 6.02 \times 10^{23}$	$1.5 \times 6.02 \times 10^{23}$	6.02×10^{23}	$3 \times 6.02 \times 10^{23}$	○○○●
61. The number of atoms in one mole of water molecules is:	9.0×10^{23}	6.0×10^{23}	1.8×10^{24}	1.2×10^{24}	○○●○
62. The mass in kg of 2.6×10^{23} molecules of SO_2 (molar mass 64 g/mol) is about:	0.028 kg	0.28 kg	2.8 kg	0.0028 kg	●○○○
63. The mass of 3.22×10^{22} atoms of manganese (atomic mass 55) is about:	29 g	0.29 g	2.9 g	55 g	○○●○
64. $2Na + Cl_2 \rightarrow 2NaCl$. The moles of sodium that react with one mole of chlorine gas are:	0.5	2	4	1	○●○○
65. Molarity is defined as the number of moles of solute dissolved per:	kg of solvent	kg of solution	dm^3 of solvent	dm^3 of solution	○○○●

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Questions	A	B	C	D	A B C D
66. The unit of molarity is:	$dm^3\ mol^{-1}$	$mol\ dm^{-3}$	$mol\ kg^{-1}$	$g\ dm^{-3}$	○●○○
67. A label on a bottle of concentrated H_2SO_4 says 18 M. This means:	18 moles of H_2SO_4 per kg of water	18 g of H_2SO_4 per dm^3 of solution	18% H_2SO_4 by volume	18 moles of H_2SO_4 per dm^3 of solution	○○○●
68. Concentrated HCl is 12.1 M. This means that 1 dm^3 of solution contains:	1.21 moles of HCl	12.1 g of HCl	121 moles of HCl	12.1 moles of HCl	○○○●
69. A solution contains 40 g of urea (molar mass 60 g/mol) in 500 cm^3 of solution. Its molarity is about:	0.33 M	0.67 M	1.33 M	2.67 M	○○●○
70. 250 cm^3 of 0.1 M $AgNO_3$ solution contain how many moles of $AgNO_3$?	0.025	0.1	0.25	0.0025	●○○○
71. When 0.025 mole of $AgNO_3$ reacts with excess NaCl, the mass of AgCl produced (molar mass 143.5 g/mol) is about:	3.6 g	7.2 g	0.36 g	14.4 g	●○○○
72. What volume of 0.5 M Na_2SO_4 reacts completely with 275 cm^3 of 0.25 M $BaCl_2$?	68.75 cm^3	137.5 cm^3	550 cm^3	275 cm^3	○●○○
73. The molarity of a solution containing 1.5 moles of $KClO_3$ in 250 cm^3 of solution is:	3 M	1.5 M	0.375 M	6 M	○○○●
74. The molarity of a solution made by dissolving 75 g of $KClO_3$ in 1.25 dm^3 of solution is about:	0.61 M	1.2 M	0.49 M	0.24 M	○○●○
75. The mass of NaOH required to neutralise 40 cm^3 of 0.5 M HCl is:	0.4 g	0.8 g	2.0 g	1.6 g	○●○○
76. $2LiOH + H_2SO_4 \rightarrow Li_2SO_4 + 2H_2O$. The volume of 0.25 M LiOH that reacts with 0.500 dm^3 of 0.25 M H_2SO_4 is:	0.25 dm^3	2.0 dm^3	1.0 dm^3	0.5 dm^3	○○●○
77. The mass of $CaCO_3$ needed to react completely with 100 cm^3 of 0.5 M HCl is:	2.5 g	1.25 g	10 g	5.0 g	●○○○
78. A biologist needs 1 dm^3 of 11.5 M formalin. The mass of formaldehyde (HCHO, molar mass 30 g/mol) required is:	345 g	690 g	30 g	11.5 g	●○○○
79. The mass of NaCl needed to prepare 500 cm^3 of 0.2 M solution is:	58.5 g	2.9 g	11.7 g	5.85 g	○○○●
80. The molarity of a solution containing 4 g of NaOH in 500 cm^3 of solution is:	0.1 M	2.0 M	0.4 M	0.2 M	○○○●
81. The reactant that is completely consumed in a reaction and limits the amount of product is called the:	limiting reactant	catalyst	excess reactant	solvent	●○○○
82. The reactant that is left unreacted after the reaction is complete is called the:	excess (non-limiting) reactant	limiting reactant	precipitate	product	●○○○

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Questions	A	B	C	D	A B C D
83. One mole of O_2 and one mole of H_2 are mixed to form water. The limiting reactant is:	water	O_2	H_2	neither of them	○○●○
84. In the reaction of 1 mole of H_2 with 1 mole of O_2, the amount of O_2 left unreacted is:	1 mole	zero	0.25 mole	0.5 mole	○○○●
85. The amount of product formed in a reaction is determined by the:	catalyst	solvent	limiting reactant	excess reactant	○○●○
86. Calcium nitride is formed from 54.9 g of Ca and 43.2 g of N_2 ($3Ca + N_2 \rightarrow Ca_3N_2$). The limiting reactant is:	Ca_3N_2	neither	N_2	Ca	○○○●
87. The number of moles of Ca in 54.9 g (Ca = 40 g/mol) is about:	2.74	5.49	1.37	0.69	○○●○
88. The number of moles of Ca_3N_2 that 1.37 moles of Ca can produce is about:	0.457	1.37	0.685	4.11	●○○○
89. The mass of Ca_3N_2 formed (molar mass 148 g/mol) from 0.457 mole is about:	67.6 g	135 g	33.8 g	148 g	●○○○
90. 500 molecules each of H_2 and O_2 react to form water. The limiting reactant is:	H_2	neither	H_2O	O_2	●○○○
91. In the same reaction, how many molecules of H_2O are formed?	250	500	1000	750	○●○○
92. In the same reaction, how many O_2 molecules remain unreacted?	500	750	zero	250	○○○●
93. If the number of O_2 molecules in the above reaction is doubled, the amount of water formed:	doubles	remains the same	becomes half	becomes zero	○●○○
94. The amount of product calculated from a balanced chemical equation is called the:	percentage yield	theoretical yield	actual yield	excess yield	○●○○
95. The quantity of product obtained experimentally is called the:	balanced yield	actual yield	limiting yield	theoretical yield	○●○○
96. Percentage yield is calculated as:	actual yield × theoretical yield	actual yield − theoretical yield	(actual yield / theoretical yield) × 100	(theoretical yield / actual yield) × 100	○○●○
97. Actual yield is usually less than the theoretical yield because of:	extra reactants only	side reactions and incomplete reactions	absence of limiting reactant	increase in mass	○●○○
98. 10 g of O_2 are converted to ozone ($3O_2 \rightarrow 2O_3$). The theoretical yield of O_3 is about:	10 g	5 g	15 g	20 g	●○○○
99. In the ozone preparation, the actual yield is 1.05 g and the theoretical yield is 10 g. The percentage yield is:	10.5%	105%	95%	1.05%	●○○○

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100. A reaction has a theoretical yield of 50 g but only 40 g of product is obtained. The percentage yield is:	125%	20%	90%	80%	○○○●
101. A student obtains 4.5 g of a product whose theoretical yield is 5.0 g. The percentage yield is:	90%	50%	110%	45%	●○○○
102. 20 g of NH_3 and 30 g of CO_2 react to form $NaHCO_3$ ($NaCl + H_2O + CO_2 + NH_3 \rightarrow NaHCO_3 + NH_4Cl$). The limiting reactant is:	NaCl	H_2O	NH_3	CO_2	○○○●
103. In the same reaction, 40 g of $NaHCO_3$ are obtained (theoretical yield about 57 g). The percentage yield is about:	57%	40%	70%	143%	○○●○
104. The limiting reactant is:	the reactant completely consumed	always the one present in the smaller mass	always the one with the smaller molar mass	always present in the larger amount	●○○○
105. A basic assumption in stoichiometric calculations is that the reaction:	goes to completion with 100% of the limiting reactant converted	produces only side products	stops at 50% conversion	has no limiting reactant	●○○○
106. In the preparation of antibiotics, stoichiometry ensures that:	every drug is a gas	no reactants are used	each dose matches the required amount of active ingredient	doses are random	○○●○
107. Stoichiometry helps in the use of insulin by ensuring:	a change in blood colour	removal of water	an increase in body mass	precise control of blood sugar levels	○○○●
108. In vaccine preparation, stoichiometry helps to determine the:	boiling point of water	mass of the syringe	colour of the vaccine	concentration of viral antigens	○○○●
109. Which of the following are the reactants in the synthesis of aspirin?	Benzene and ethanol	Salicylic acid and acetic anhydride	Phenol and sodium chloride	Acetic acid and glycerol	○●○○
110. In the synthesis of aspirin, a few drops of sulphuric acid are added to:	dissolve the aspirin	catalyse the reaction	cool the flask	neutralise aspirin	○●○○
111. In the aspirin activity, the flask is placed in an ice bath to:	cool the reaction mixture	heat the reaction mixture	produce light	evaporate the acetic acid	●○○○
112. In the aspirin activity, sodium hydrogen carbonate solution is added to:	increase the acidity	neutralise excess acid	form a gas only	dissolve aspirin	○●○○
113. In the aspirin activity, the efficiency of synthesis is assessed by comparing:	actual yield with theoretical yield	mass of flask with mass of ice	boiling point with melting point	colour with odour	●○○○
114. Which sample produces the most hydrogen with excess HCl?	0.25 mol Na	0.25 mol Ca	0.25 mol Al	0.25 mol Zn	○○●○
115. When 1 mole of each hydrocarbon is completely burnt, which gives the greatest mass of CO_2?	Ethyne (C_2H_2)	Methane (CH_4)	Ethane (C_2H_6)	Propane (C_3H_8)	○○○●
116. Which sample occupies the greatest volume at STP?	1 g of H_2	1 g of O_2	1 g of NO_2	1 g of CH_4	●○○○

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117. A flask contains 500 cm^3 of SO_2 at STP. The number of SO_2 molecules it contains is about:	1.3×10^{21}	1.3×10^{22}	1.3×10^{23}	6.0×10^{23}	○●○○
118. 49 g of H_2SO_4 and 49 g of H_3PO_4 contain:	different numbers of molecules	a different number of molecules and the same number of atoms	the same number of molecules but different numbers of atoms	the same number of atoms	○○●○
119. Different gases of different masses occupy the same volume at STP when they have:	equal molar masses	equal densities	equal boiling points	equal number of moles	○○○●
120. NaCl is said to have formula units rather than molecules because it is:	a covalent compound	a liquid	an ionic compound	a gas	○○●○
121. The mass of oxygen required for complete combustion of one mole of octane (C_8H_{18}) is:	800 g	114 g	200 g	400 g	○○○●
122. $SO_2 + 2NaOH \rightarrow Na_2SO_3 + H_2O$. The mass of SO_2 absorbed by 33 g of NaOH is about:	13.2 g	64 g	26.4 g	52.8 g	○○●○
123. The mass of 0.5 mole of H_2SO_4 (molar mass 98 g/mol) is:	24.5 g	98 g	196 g	49 g	○○○●
124. The number of moles in 36 g of water is:	0.5	1	4	2	○○○●
125. The volume of 44 g of CO_2 at STP is about:	22.4 dm^3	44.8 dm^3	2.24 dm^3	11.2 dm^3	●○○○
126. The number of moles of O_2 in 11.2 dm^3 at STP is:	2	0.5	1	0.25	○●○○
127. The mass of 11.2 dm^3 of O_2 at STP is:	8 g	22.4 g	32 g	16 g	○○○●
128. The number of molecules in 5.6 dm^3 of any gas at STP is about:	3.0×10^{23}	1.5×10^{23}	6.0×10^{23}	1.5×10^{22}	○●○○
129. The number of moles in 88 g of CO_2 is:	1	0.5	4	2	○○○●
130. The number of atoms in 12 g of carbon is:	6.023×10^{23}	3.0×10^{23}	6.023×10^{22}	$12 \times 6.023 \times 10^{23}$	●○○○
131. The mass of 3.01×10^{23} atoms of oxygen is:	4 g	8 g	16 g	32 g	○●○○
132. In $2H_2 + O_2 \rightarrow 2H_2O$, the mass of water formed from 8 g of H_2 with excess O_2 is:	144 g	18 g	36 g	72 g	○○○●
133. In $N_2 + 3H_2 \rightarrow 2NH_3$, the moles of NH_3 formed from 3 moles of H_2 (excess N_2) are:	1	3	2	6	○○●○

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Questions	A	B	C	D	A B C D
134. In $N_2 + 3H_2 \rightarrow 2NH_3$, the moles of N_2 needed to make 4 moles of NH_3 are:	1	2	4	6	○●○○
135. $CaCO_3 \rightarrow CaO + CO_2$. The mass of CaO obtained from 100 g of $CaCO_3$ is:	44 g	100 g	28 g	56 g	○○○●
136. $CaCO_3 \rightarrow CaO + CO_2$. The volume of CO_2 at STP from 100 g of $CaCO_3$ is about:	22.4 dm^3	11.2 dm^3	2.24 dm^3	44.8 dm^3	●○○○
137. $Zn + 2HCl \rightarrow ZnCl_2 + H_2$. The moles of HCl required to react with one mole of Zn are:	3	0.5	1	2	○○○●
138. The molarity of a solution containing 2 moles of solute in 4 dm^3 of solution is:	2 M	8 M	0.25 M	0.5 M	○○○●
139. The number of moles of solute in 200 cm^3 of 0.5 M solution is:	0.01	0.1	0.25	1.0	○●○○
140. The mass of NaOH present in 250 cm^3 of 0.1 M NaOH solution is:	10 g	4.0 g	0.1 g	1.0 g	○○○●
141. For reacting solutions with the relation between their moles, the volumes may be used in:	cm^3 only	dm^3 only	different units for each solution	either dm^3 or cm^3 as long as both use the same unit	○○○●
142. 2 moles of Mg and 2 moles of O_2 are mixed ($2Mg + O_2 \rightarrow 2MgO$). The limiting reactant is:	Mg	MgO	O_2	neither	●○○○
143. 3 moles of H_2 and 3 moles of N_2 react to form NH_3. The limiting reactant is:	N_2	neither	H_2	NH_3	○○●○
144. 4 moles of H_2 react with 1 mole of O_2 to form water. The limiting reactant and moles of water formed are:	H_2; 2 moles	O_2; 1 mole	O_2; 2 moles	H_2; 4 moles	○○●○
145. The theoretical yield of a product is 25 g and the percentage yield is 80%. The actual yield is:	5 g	20 g	25 g	31 g	○●○○
146. The actual yield is 15 g and the percentage yield is 75%. The theoretical yield is:	20 g	15 g	11.25 g	75 g	●○○○
147. Under normal laboratory conditions, the percentage yield of a reaction is usually:	more than 100%	exactly 100%	less than 100%	zero	○○●○
148. The coefficients in a balanced chemical equation indicate the:	boiling points	colour of substances	mole ratio of reactants and products	number of electrons only	○○●○
149. The first step in any stoichiometric calculation is to:	boil the reactants	measure the density	find the colour of products	write a balanced chemical equation	○○○●
150. The mass of 2 moles of NaOH (molar mass 40 g/mol) is:	80 g	20 g	40 g	160 g	●○○○

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