Question 1: {'question': 'Which of the following does not have the same number atoms as the other three choices?', 'options': ['A) three', 'B) six', 'C) nine', 'D) five']}

Question 2: {'question': 'The molar mass of a compound Al2(XO4', 'options': ['A) 31', 'B) 32', 'C) 52', 'D) 55']}

Question 3: {'question': 'The theoretical number of moles of nitrogen produced from 6 moles of NaN3 is \_\_\_\_\_\_\_\_.', 'options': ['A) 2', 'B) 6', 'C) 9', 'D) 18']}

Question 4: {'question': 'A sample is composed of 2.78 g of iron and 1.19 g of oxygen. The empirical formula is \_\_\_\_\_\_\_\_.', 'options': ['A) FeO2', 'B) Fe2O5', 'C) Fe2O3', 'D) FeO']}

Question 5: {'question': '12 g of carbon is equal to \_\_\_\_\_\_\_\_.', 'options': ['A) the', 'B) the', 'C) the', 'D) the']}

Question 6: {'question': 'Which is the correct statement about one mole of ammonia, NH3?', 'options': ['A) It', 'B) It', 'C) It', 'D) all']}

Question 7: {'question': 'Alkynes have the general molecular formula CnH2n-2. Thus, when n = 2, the alkyne is C2H2 etc. If an alkyne has a molecular mass between 75 and 85, this alkyne is \_\_\_\_\_\_\_\_.', 'options': ['A) C5H12', 'B) C5H10', 'C) C6H3', 'D) C6H12', 'A) C6H10', 'B) C6H12', 'C) C5H16', 'D) C7H12']}

Question 8: {'question': "A sample of oxygen gas that contains Avogadro's number of molecules has a mass of \_\_\_\_\_\_\_\_.", 'options': ['A) 8', 'B) 16', 'C) 32', 'D) 64']}

Question 9: {'question': 'The theoretical number of moles of sodium produced from 4 moles of NaN3 is \_\_\_\_\_\_\_\_.', 'options': ['A) 100', 'B) 50', 'C) 17', 'D) 8', 'A) 1', 'B) 2', 'C) 4', 'D) 8']}

Question 10: {'question': 'The total number of atoms in two moles SO3 is \_\_\_\_\_\_\_\_.', 'options': ['A) 4', 'B) 8', 'C) 1', 'D) 4']}