Calculations around the mole

1. Find the molar mass for the following:
2. Sodium chloride
3. Silver nitrate
4. Carbon dioxide
5. Triphosphorus dichloride
6. Zinc sulfate
7. Convert the following into moles
8. 2.6 g of water
9. 4.3 g of Magnesium sulfide
10. 1.9 g of barium nitrate
11. How many particles are in each question from #2?
12. Convert the following into a mass
13. 0.98 mol of chromium III oxide
14. 1.5 mol of iron III sulfate
15. 2.9 mol of potassium bromide
16. Convert the following into moles
17. 1.56 x 1024 particles of water
18. 4.87 x 1025 particles of hydrogen peroxide (H2O2)
19. 1.65 x 1023 particles of phosphoric acid
20. What is the mass of each question from #5?
21. How many particles in the following
22. 4.5 mol of iron
23. 1.2 mol of lead
24. What volume is each gas occupying in the following questions?
25. 0.45 mol of hydrogen gas
26. 1.89 mol of fluorine gas
27. 2.084 mol of chlorine gas
28. What is the mass of the substances in question #8?
29. How many moles of gas are contained in the following questions?
30. 5.65 L of neon gas at STP
31. 29.05 L of nitrogen gas at STP
32. 6.75 L of oxygen gas at SATP
33. What is the mass of all gases in question #10?
34. What is the volume for the following?
35. 2.42 g of helium at STP
36. 0.65 mol of oxygen at STP
37. 31.72 g of chlorine gas at SATP
38. 1.30 g of fluorine gas at SATP
39. 1.94 mol of neon gas at STP
40. What are 3 possible ways to calculate the moles of a substance? How do you know which method to use when?