

One Step Mole Conversion Problems

Set A: One Step Problems:

Convert to moles:

1. 12.04×10^{23} atoms He
2. 3.01×10^{23} atoms Cu
3. 3.612×10^{23} atoms Fe
4. 100 atoms Ar
5. 1 atom S
6. 24 grams C
7. 59.3 grams Sn
8. 98.9 grams Na
9. 5000 grams K
10. 0.005 grams Ne

Convert to mass in grams:

11. 10.0 moles Na
12. 2.20 moles Sn
13. 5.00 moles Ag
14. 3.0×10^{-4} moles Au
15. 1.00×10^{-7} moles B

Convert to number of atoms:

16. 3.00 moles Li
17. 8.50 moles Ca
18. 25.0 moles Kr
19. 0.001 moles Cd
20. 1.0×10^{-5} moles Al

Record your answers below:

1. _____ moles He
2. _____ moles Cu
3. _____ moles Fe
4. _____ moles Ar
5. _____ moles S
6. _____ moles C
7. _____ moles Sn
8. _____ moles Na
9. _____ moles K
10. _____ moles Ne

11. _____ grams Na
12. _____ grams Sn
13. _____ grams Ag
14. _____ grams AlP
15. _____ grams BF_3
16. _____ atoms Li
17. _____ atoms Ca
18. _____ atoms Kr
19. _____ atoms Cd
20. _____ atoms Al