

#1

1. What is the mass in grams of 2.00 moles of Antimony?

244g

2. What is the mass in grams of 3.13 moles of Beryllium?

28.2g

3. What is the mass in grams of 1.42 moles of Platinum?

277g

4. What is the mass in grams of 4.67 moles of Cobalt?

275g

#2

5. How many moles of Germanium are in 46.89 grams?

$6.458 \times 10^{-1} \text{ mole}$

6. How many moles of Titanium are in 201.46 grams?

4.208mole

7. How many moles of Silicon are in 66.78 grams?

2.377 mole

8. How many moles of Gold are in 172.61 grams?

$8.7633 \times 10^{-1} \text{ mole}$

#3

9. How many moles are in 2.14×10^{24} atoms of Nitrogen?

3.55mole

10. How many moles are in 5.45×10^{21} atoms of Arsenic?

$9.05 \times 10^{-3} \text{ mole}$

11. How many moles are in 6.87×10^{22} atoms of Palladium?

$1.14 \times 10^{-1} \text{ mole}$

12. How many moles are in 3.33×10^{23} atoms of Chlorine?

$5.53 \times 10^{-1} \text{ mole}$

#4

13. How many atoms are in 6.00 moles of Zinc?

$3.61 \times 10^{24} \text{ atom}$

14. How many atoms are in 2.68 moles of Copper?

$1.61 \times 10^{24} \text{ atom}$

15. How many atoms are in 5.18 moles of Tin?

$3.12 \times 10^{24} \text{ atom}$

16. How many atoms are in 4.31 moles of Sodium?

$2.59 \times 10^{24} \text{ atom}$

#5

17. How many atoms are in 32.68 grams of Sulfur?

$$6.13 \times 10^{23} \text{ atom}$$

18. How many atoms are in 301.20 grams of Silver?

$$1.68 \times 10^{24} \text{ atom}$$

19. How many atoms are in 0.56 grams of Boron?

$$3.1 \times 10^{22} \text{ atom}$$

20. How many atoms are in 264.32 grams of Vanadium?

$$3.12 \times 10^{24} \text{ atom}$$

#6

21. What is the mass in grams of 7.21×10^{21} atoms of Calcium?

$$4.80 \times 10^{-1} \text{ g}$$

22. What is the mass in grams of 1.99×10^{22} atoms of Carbon?

$$3.97 \times 10^{-1} \text{ g}$$

23. What is the mass in grams of 3.65×10^{23} atoms of Iron?

$$3.39 \times 10^0 \text{ g}$$

24. What is the mass in grams of 6.12×10^{24} atoms of Potassium?

$$3.97 \times 10^2 \text{ g}$$