

Practice quiz answers

1. a and c

2. a and c

3. b

4. a

5. b

6. b

7. b

8. f

9. b

10. b

11. a

12. c

13.

Nuclear Symbol	Atomic #	Mass #	# p ⁺	#e ⁻	#n ⁰	Hyphen Notation
²⁷ ₁₃ Al	13	27	13	13	14	Aluminum-27
²⁰⁷ ₈₂ Pb	82	207	82	82	125	Lead-207
⁸⁸ ₃₈ Sr	38	88	38	38	50	STRONTIUM-88

14. Ions

Nuclear Symbol	Atomic #	Mass #	# p ⁺	#e ⁻	#n ⁰	Charge

$^{113}_{48}\text{Cd}^{+2}$	48	113	48	46	65	+2
$^{85}_{33}\text{As}^{-3}$	33	85	33	36	39	-3
$^{23}_{11}\text{Na}^{+1}$	11	23	11	10	12	+1

15.	1s	2s	2p	3s	3p	4s	3d	4p	5s	4d	5p
	X	X	X	X	X	X	X	X	X	X	\
			X		X		X	X		X	\
			X		X		X	X		X	
					X					X	
					X					X	

16. E

17. PIECE, PROPERTIES

18. 2S 3D 5S 5P 4F 6P 5F 6D

19. $1S^2 2S^2 2P^6 3S^2 3P^6 4S^2 3D^{10} 4P^6 5S^2 4D^{10} 5P^6 6S^2$

20. $1S^2 2S^2 2P^6 3S^2 3P^1$

21. $[\text{Ar}] 4S^2 3D^{10} 4P^2$

22. $[\text{Kr}] 5S^2 4D^{10} 5P^1$

23. $4D^8$

24. $5P^4$

25. $(.0935)(205.946) + (.738)(206.941) + (.145)(207.941) + (.0235)(208.939)$

$= 19.3 + 153 + 30.2 + 4.9$

$= 207 \text{ amu}$