

LOCATION OF ELEMENTS WORKSHEET

	Noble Gas Config.	Period	Block (s, p, d, f)	Group
1	[Ne] 3s ² 3p ²			
2	[Ar] 4s ² 3d ¹⁰ 4p ⁶			
3	[Xe] 6s ²			
4	[Kr] 5s ² 4d ¹⁰ 5p ⁵			
5	[Ar] 4s ² 3d ¹⁰ 4p ¹			
6	[He] 2s ² 2p ³			
7	[Kr] 5s ² 4d ¹⁰ 5p ⁴			
8	[He] 2s ¹			
9	[Xe] 6s ² 4f ¹⁴ 5d ¹⁰ 6p ²			
10	[Rn] 7s ²			

PERIODIC TRENDS (multiple choice w/o using Periodic Table) WORKSHEET

- Which element is most metallic? Group 14, Period ____
(A) 2 (B) 3 (C) 4 (D) 5
- Which element is most nonmetallic? Group 16, Period ____
(A) 2 (B) 3 (C) 4 (D) 5
- Which has the largest atomic radius? Group ____, Period 2
(A) 1 (B) 13 (C) 15 (D) 17
- Which has the highest ionization energy? Group 2, Period ____
(A) 3 (B) 4 (C) 5 (D) 6
- Which has the most metallic properties? Group ____, Period 5
(A) 13 (B) 14 (C) 15 (D) 16
- Which has the greatest electron affinity?
(A) Grp 16, Pd 4 (B) Grp 16, Pd 5 (C) Grp 17, Pd 5 (D) Grp 17, Pd 4
- Which has the smallest atomic radius? Group 15, Period ____
(A) 2 (B) 3 (C) 4 (D) 5
- Which has the lowest electron affinity? Group ____, Period 3
(A) 13 (B) 15 (C) 17 (D) 18
- Which has the lowest ionization energy? Group 1, Period ____
(A) 2 (B) 3 (C) 4 (D) 5

UNIT 5 - PERIODIC TABLE & PERIODIC LAW

- 10.) Which has the most metallic properties?
(A) Grp 15, Pd 5 (B) Grp 16, Pd 5 (C) Grp 15, Pd 6 (D) Grp 16, Pd 6
- 11.) Which would most easily lose its valence electrons?
(A) Grp 1, Pd 3 (B) Grp 14, Pd 2 (C) Grp 17, Pd 3 (D) Grp 18, Pd 2
- 12.) Which would most easily gain electrons?
(A) Grp 13, Pd 3 (B) Grp 14, Pd 2 (C) Grp 15, Pd 2 (D) Grp 17, Pd 3
- 13.) Which has an octet of electrons in its outermost energy level?
(A) Grp 13, Pd 3 (B) Grp 14, Pd 2 (C) Grp 18, Pd 2 (D) Grp 17, Pd 5
- 14.) Which has chemical properties most similar to $[\text{Ar}] 4s^1$? Group ____, Period 3
(A) 1 (B) 2 (C) 13 (D) 14
- 15.) Which is most reactive? Group ____, Period 2
(A) 14 (B) 15 (C) 17 (D) 18
- 16.) Which is most reactive?
(A) Grp 13, Pd 2 (B) Grp 1, Pd 5 (C) Grp 2, Pd 5 (D) Grp 13, Pd 5
- 17.) Which has chemical properties most similar to $[\text{Ne}] 3s^2 3p^5$?
(A) Grp 16, Pd 3 (B) Grp 18, Pd 3 (C) Grp 17, Pd 4 (D) Grp 18, Pd 2
- 18.) Which would never be found in the free state?
(A) Grp 1, Pd 4 (B) Grp 13, Pd 3 (C) Grp 15, Pd 3 (D) Grp 14, Pd 4
- 19.) Which is the least reactive gas? Group ____, Period 2
(A) 16 (B) 15 (C) 17 (D) 18
- 20.) Which is the most reactive gas? Group ____, Period 2
(A) 16 (B) 15 (C) 17 (D) 18
- 21.) Which would never be in a compound?
(A) Grp 1, Pd 1 (B) Grp 18, Pd 1 (C) Grp 13, Pd 2 (D) Grp 1, Pd 2
- 22.) Which would be found in the "d" block of elements?
(A) Grp 1, Pd 3 (B) Grp 11, Pd 4 (C) Grp 17, Pd 5 (D) Grp 14, Pd 2

