

Periods, Groups, Blocks and Valence Electrons (Worksheet 2)

Name _____

Fill in the blank cells in the tables.

Period	Group	Block	Element Name	Valence Electrons	Noble Gas Notation	Metal/non-metal or metalloid
4	13	p	Gallium	3	[Ar] 3d ¹⁰ 4s ² 4p ¹	metal
2	2					
					[Ne] 3s ² 3p ³	
			Nitrogen			
3				1		
	18				[Ne] 3s ² 3p ⁶	
5	17					
					[Ar] 3d ² 4s ²	
2				7		
					[He] 2s ¹	
4	8					
					[Kr] 5s ²	

Number of shells containing electrons	Number of electrons in the outermost shell (valence electrons)	Element Name	Period	Group
4	6	Selenium	4	16
			2	14
3				2
	8		3	
		Sulfur		
2	2			
3				17
	1		3	
		Calcium		
4				12
		Hydrogen		

Periods, Groups, Blocks and Valence Electrons (Worksheet 2)

Name Key

Fill in the blank cells in the tables.

Period	Group	Block	Element Name	Valence Electrons	Noble Gas Notation	Metal/non-metal or metalloid
4	13	p	Gallium	3	[Ar] 3d ¹⁰ 4s ² 4p ¹	metal
2	2	s	Beryllium	2	[He] 2s ²	metal
3	15	p	Phosphorus	5	[Ne] 3s ² 3p ³	non-metal
2	15	p	Nitrogen	5	[He] 2s ² 2p ³	non-metal
3	1	s	Sodium	1	[Ne] 3s ¹	metal
3	18	p	Argon	8	[Ne] 3s ² 3p ⁶	non-metal
5	17	p	Iodine	7	[Kr] 5s ² 4d ¹⁰ 5p ⁵	non-metal
4	4	d	Titanium	2	[Ar] 3d ² 4s ²	metal
2	17	p	Fluorine	7	[He] 2s ² 2p ⁵	non-metal
2	1	s	Lithium	1	[He] 2s ¹	metal
4	8	d	Iron	2	[Ar] 4s ² 3d ⁶	metal
5	2	s	Strontium	2	[Kr] 5s ²	metal

Number of shells containing electrons	Number of electrons in the outermost shell (valence electrons)	Element Name	Period	Group
4	6	Selenium	4	16
2	4	Carbon	2	14
3	2	Magnesium	3	2
3	8	Argon	3	18
3	6	Sulfur	3	16
2	2	Beryllium	2	2
3	7	Chlorine	3	17
3	1	Sodium	3	1
4	2	Calcium	4	2
4	2	Zinc	4	12
1	1	Hydrogen	1	1