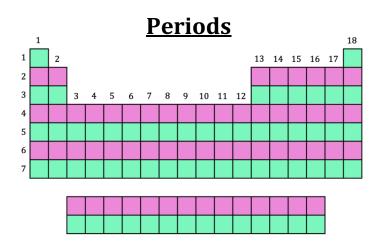
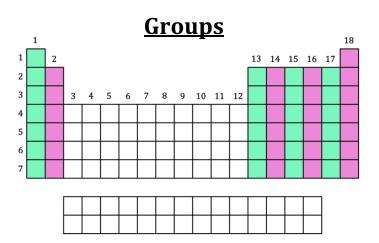
### Intro to the Periodic Table

The periodic table is organized into periods and groups:

- **Periods** the horizontal rows on the periodic table.
- **Groups** the columns on the periodic table. Elements in the same group have the same number of valence electrons.





#### Instructions: Use the periodic table to answer the questions below:

- 1) How many **periods** are there on the periodic table?
- 7
- 2) How many **groups** are there on the periodic table?
- 18
- 3) Which element is found in **Group 2** and **Period 3**?
- magnesium
- 4) Which element is found in **Group 17** and **Period 2**?
- fluorine
- 5) Which element is found in **Group 10** and **Period 4**?
- nickel
- 6) Which element is found in **Group 18** and **Period 6**?
- radon

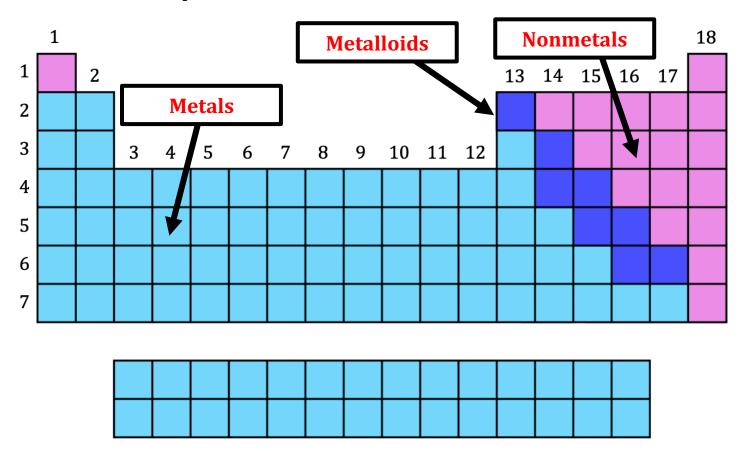
- 7) Which element is found in **Group 1** and **Period 7**?
- francium
- 8) Which element is found in **Group 14** and **Period 6**?
- lead

### Metals, Nonmetals, and Metalloids

The periodic table contains three types of elements:

- Metals hard, shiny elements that conduct heat and electricity.
- Nonmetals poor conductors of heat and electricity.
- <u>Metalloids</u> Have some properties of metals and some of nonmetals.

<u>Instructions</u>: In the periodic table below, label *metals*, *nonmetals*, and *metalloids*.



**Instructions**: Classify the elements below as *metals*, *nonmetals*, or *metalloids*.

1)	Sodium (Na)	metal

- 2) Iodine (I) <u>nonmetal</u>
- 3) Silicon (Si) metalloid
- 4) Zinc (Zn) <u>metal</u>
- 5) Krypton (Kr) nonmetal
- 6) Barium (Ba)

7) Antimony (Sb) metalloid

8) Radium (Ra)

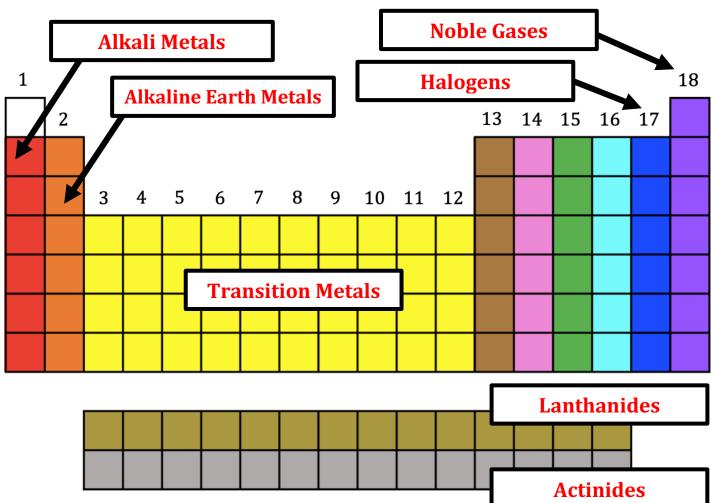
metal

metal

#### Groups of the Periodic Table

- Elements on the periodic table are categorized into groups.
- Elements in the same **group** have similar **properties**.

**Instructions**: In the periodic table below, label each identified group.



**Instructions**: Identify the *group* that each element belongs to.

1)	Calcium	(Ca)	Alkaline Earth Metals
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2) Neon (Ne) Noble Gases

3) Bromine (Br) Halogens

4) Copper (Cu) Transition Metals

5) Lithium (Li)

Alkali Metals

6) Silver (Ag)

**Transition Metals** 

7) Xenon (Xe)

**Noble Gases** 

8) Thorium (Th) <u>Actinides</u>

Name					Period
Intro to	the Perio	die 1	<u> able</u>	<b>-</b> (	Questions
<u>Instructions</u> : Use t	he periodic table to a	nswer tl	ne questio	ns bel	low:
1) Which element	is found in <b>Group 1</b> ar	nd <b>Perio</b> o	d <b>6</b> ?		cesium
2) Which element		tellurium			
3) Which element		gold			
4) Which element		neon			
5) Which element		aluminum			
,	•				
<u>Instructions</u> : Class	ify the elements belo	w as me	tals, nonm	etals,	or metalloids.
6) Cesium (Cs)	metal	9)	Silver (Ag	g)	metal
7) Boron (B)	metalloid	10)	Nitrogen	(N)	nonmetal
8) Chlorine (Cl)	nonmetal	11)	Carbon (0	C)	nonmetal
<u>Instructions</u> : Use	the periodic table to	answer	he questi	ons be	elow about <i>groups</i> .
12) <b>Argon (Ar)</b> is part of what periodic group?					oble Gases
13) <b>Chromium (Cr)</b> is part of what periodic group?				Transition Metals	
14) <b>Francium (Fr)</b> is part of what periodic group?				Alkali Metals	
15) <b>Beryllium (Be)</b> is part of what periodic group?				Alkaline Earth Metals	
16) <b>Cesium (Cs)</b> is part of what periodic group?				Alkali Metals	

17) **Chlorine (Cl)** is part of what periodic group?

Halogens

Instructions: Identify the *group number* and *period* of each element below.

Identify whether that element is a *metal, metalloid*, or *nonmetal*.

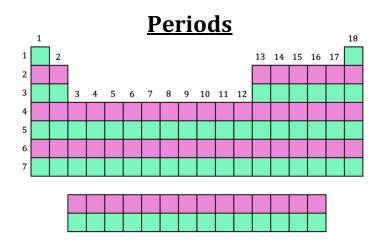
Name the *group* that each element belongs to.

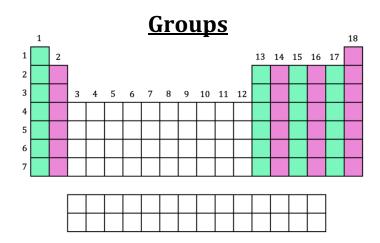
Element	Group Number	Period Number	Metal, Metalloid, Nonmetal	Group Name
Magnesium (Mg)	2	3	Metal	Alkaline Earth Metals
Chlorine (Cl)	17	3	Nonmetal	Halogens
Zirconium (Zr)	4	5	Metal	Transition Metals
Potassium (K)	1	4	Metal	Alkali Metals
Radon (Rn)	18	6	Nonmetal	Noble Gases
Lithium (Li)	1	2	Metal	Alkali Metals
Cadmium (Cd)	12	5	Metal	Transition Metals
Strontium (Sr)	2	5	Metal	Alkaline Earth Metals
Helium (He)	18	1	Nonmetal	Noble Gases
Astatine (At)	17	6	Metalloid	Halogens
Rubidium (Rb)	1	5	Metal	Alkali Metals

## Intro to the Periodic Table

The periodic table is organized into \_\_\_\_\_ and \_\_\_\_:

- **Periods** the horizontal rows on the periodic table.
- **Groups** the columns on the periodic table. Elements in the same group have the same number of valence electrons.





#### Instructions: Use the periodic table to answer the questions below:

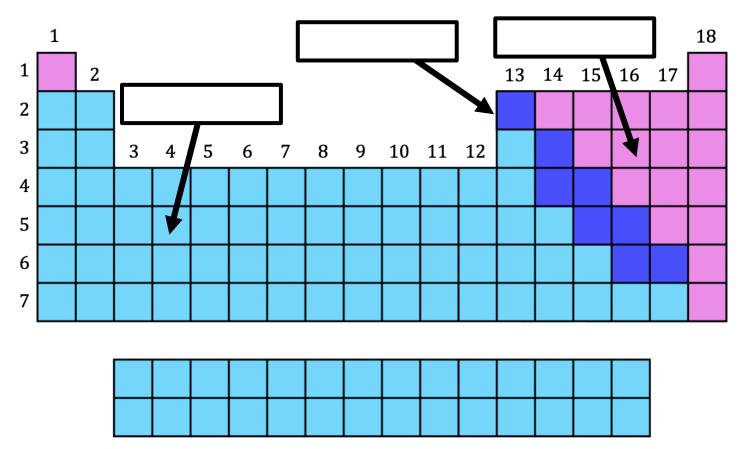
- 1) How many **periods** are there on the periodic table?
- 2) How many **groups** are there on the periodic table?
- 3) Which element is found in **Group 2** and **Period 3**?
- 4) Which element is found in **Group 17** and **Period 2**?
- 5) Which element is found in **Group 10** and **Period 4**?
- 6) Which element is found in **Group 18** and **Period 6**?
- 7) Which element is found in **Group 1** and **Period 7**?
- 8) Which element is found in **Group 14** and **Period 6**?

# Metals, Nonmetals, and Metalloids

The periodic table contains three types of elements:

- \_\_\_\_\_\_ hard, shiny elements that conduct heat and electricity.
- \_\_\_\_\_\_ poor conductors of heat and electricity.
- \_\_\_\_\_\_ Have some properties of metals and some of nonmetals.

<u>Instructions</u>: In the periodic table below, label *metals*, *nonmetals*, and *metalloids*.



<u>Instructions</u>: Classify the elements below as *metals*, *nonmetals*, or *metalloids*.

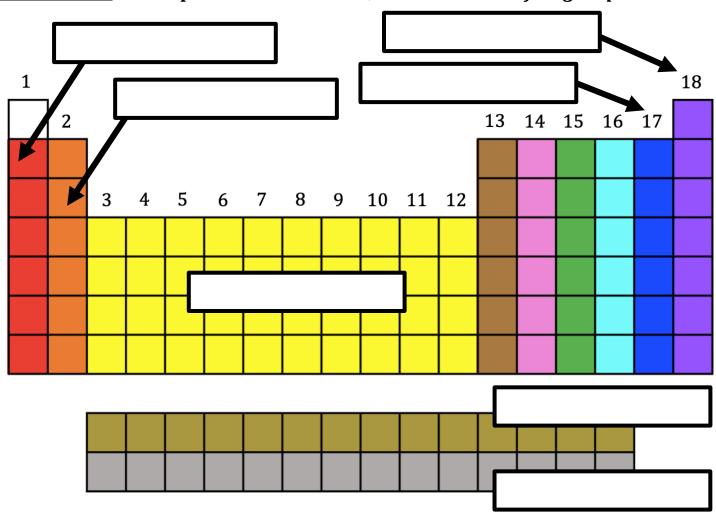
- 1) Sodium (Na) \_\_\_\_\_
- 2) Iodine (I) \_\_\_\_\_
- 3) Silicon (Si)
- 4) Zinc (Zn) \_\_\_\_\_

- 5) Krypton (Kr) \_\_\_\_\_\_
- 6) Barium (Ba)
- 7) Antimony (Sb)
- 8) Radium (Ra) \_\_\_\_\_

#### Groups of the Periodic Table

- Elements on the periodic table are categorized into \_\_\_\_\_\_.
- Elements in the same **group** have similar **properties**.

**Instructions**: In the periodic table below, label each identified group.



**Instructions**: Identify the *group* that each element belongs to.

- 1) Calcium (Ca) \_\_\_\_\_
- 2) Neon (Ne)
- 3) Bromine (Br) \_\_\_\_\_
- 4) Copper (Cu)
- 5) Lithium (Li)
- 6) Silver (Ag)
- 7) Xenon (Xe)
- 8) Thorium (Th)

Name	Period							
Intro to the Periodic Ta	ble – Questions							
<u>Instructions</u> : Use the periodic table to answer the <b>q</b>	uestions below:							
1) Which element is found in <b>Group 1</b> and <b>Period 7</b> ?								
2) Which element is found in <b>Group 16</b> and <b>Period 5</b> ?								
3) Which element is found in <b>Group 11</b> and <b>Period 6</b> ?								
4) Which element is found in <b>Group 18</b> and <b>Period 2</b> ?								
5) Which element is found in <b>Group 13</b> and <b>Period 3</b> ?								
Instructions: Classify the elements below as metals,	nonmetals, or metalloids.							
6) Cesium (Cs) 9) Silv	ver (Ag)							
7) Boron (B) 10) Nit	rogen (N)							
8) Chlorine (Cl) 11) Car	rbon (C)							
Instructions: Use the periodic table to answer the <b>o</b>	questions below about <i>groups</i> .							
12) Argon (Ar) is part of what periodic group?								
13) <b>Chromium (Cr)</b> is part of what periodic group?								
14) Francium (Fr) is part of what periodic group?								
15) <b>Beryllium (Be)</b> is part of what periodic group?								
16) <b>Cesium (Cs)</b> is part of what periodic group?								
17) <b>Chlorine (Cl)</b> is part of what periodic group?								

Instructions: Identify the *group number* and *period* of each element below.

Identify whether that element is a *metal, metalloid*, or *nonmetal*.

Name the *group* that each element belongs to.

Element	Group Number	Period Number	Metal, Metalloid, Nonmetal	Group Name
Magnesium (Mg)				
Chlorine (Cl)				
Zirconium (Zr)				
Potassium (K)				
Radon (Rn)				
Lithium (Li)				
Cadmium (Cd)				
Strontium (Sr)				
Helium (He)				
Astatine (At)				
Rubidium (Rb)				