

Periodic Table Trends 101 Video Review

1. List the trends in the periodic table we will be covering today.

- Number of _____
- Types of _____
- Location and properties of _____
- Phases _____

2. What are valence electrons? _____

3. How many valence electrons do the following elements have:

Be = ___ Cl = ___ Al = ___ Si = ___ S = ___ K = ___ Ne = ___

He = ___ C = ___ F = ___ Ar = ___ Mg = ___ H = ___

4. How do elements get a positive charge? _____
_____ These elements are called _____

5. How do elements get a negative charge? _____
_____ These elements are called _____

6. What type of ion do the following elements form in a chemical bond:

Be = ___ Cl = ___ Al = ___ Si = ___ S = ___ K = ___ Ne = ___

He = ___ C = ___ F = ___ Ar = ___ Mg = ___ H = ___

7. Why do elements in the 18th group have a charge of 0? _____

8. Most of the metals on the periodic table are located _____
Most of the nonmetals on the periodic table are located _____
except for _____. Metalloids are located _____

	State at room temperature	Appearance	Conductivity – ability to conduct electricity	Malleability – able to be bent out of shape without overheating Ductility – can be drawn into thin wires
<u>Metals</u>				
<u>Nonmetals</u>				
<u>Metalloids</u> <u>(Semi-conductors)</u>				

9. Most metals are _____ at room temperature except for _____ which is a _____ at room temperature. Most nonmetals are _____ at room temperature except for _____ which is a _____ at room temperature. All metalloids are _____ at room temperature.

Check for Understanding – Use your notes and knowledge of Periodic Table trends to answer the following:

- What are valence electrons? _____ What do they help determine? _____
- Give the number of valence electrons for the following elements:
Ca = _____ O = _____ Ar = _____ C = _____ Na = _____ Al = _____ P = _____
- What trend do you see in ionic charges as you go from left to right on the periodic table? _____
- Elements that lose electrons have a _____ charge, while elements that gain electrons have a _____ charge.
- What trend do you notice in metals, nonmetals, and metalloids as you move from left to right on the periodic table? _____ Most elements are _____, while the fewest are _____.
- Compare and contrast the properties of metals and nonmetals. _____
- What properties of metalloids often make them a mix between metals and nonmetals? _____
- Most metals tend to be _____ at room temperature except for _____, while most nonmetals tend to be _____ at room temperature except for _____.

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