

Name: _____

Block: _____

6.2 and 6.3 WS 1

Putting the Elements in Order: The Periodic Table

1. Who was the great scientist who helped create the periodic table?

2. What is an element?

3. Approximately how many elements are there?

4. Look at your periodic table:

Match each element with the correct symbol by writing the number next to the correct symbol

1. Mercury	W
2. Arsenic	Pd
3. Tin	Sn
4. Potassium	Fr
5. Francium	Fe
6. Palladium	As
7. Antimony	P
8. Phosphorus	Hg
9. Iron	K
10. Tungsten	SB

4. What are the three main divisions on the periodic table:

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5. What does the atomic number tell you on the periodic table?

6. What does the atomic mass tell you on the periodic table?

7. How can you tell if an atom is charged or un charged?

8. What does the order on the periodic table tell you about the elements?

9. When Mendeleev had to make a choice between grouping based on mass or grouping by similar properties, which did he choose? Why do you think he made this choice?

10. A new elements has been discovered. All you know at this point is that it is a metal. Based on that please predict the following:

- a. its state at room temp _____
- b. whether it will be shiny or dull _____
- c. whether it will be brittle or malleable _____
- d. whether it will conduct electricity or not _____

11. A new element has been discovered that is solid, brittle, and shiny and it conducts electricity. To which group of elements does it belong?

Explain your answer:

12. Mercury is the only metal that is liquid at room temperature. What properties do you think mercury has that make it a metal?

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13. Match each symbol with the metal it represents:

Symbol	Element
a. Rn	Iodine
b. Si	Potassium
c. Cd	Calcium
d. P	Silver
e. K	Iron
f. Fe	Phosphorus
g. I	Silicon
h. Ca	Radium
i. Ra	Cadmium
j. Ag	Radon

14. Which group of elements- metals non metals or metalloids is used to create semiconductors needed by cell phones and computers?

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15. Give three examples or elements that are in substances or objects that you use:

Substance	Element in it

16. Mercury and Sodium are both metals. List the way they are

Similar	Different

17. Which is the lightest element?

18. Which element is a better conductor of electricity: Silver or Gold?

19. Which elements are used to make steel?

20. Explain why sodium may not be a great metal to make into drinking glasses?

21. Which elements makes up over 90% of the atoms in the universe?

22. Why did Mendeleev leave gaps in the periodic table?

23. What did he predict about these undiscovered elements?

Fill in the following table:

Atom Name	Atomic #	Atomic Mass	Protons	Neutrons	Electrons
Lithium					
Magnesium					
Potassium					
Rubidium					
Chromium					
Cobalt					
Carbon					
Phosphorus					
Oxygen					
Flourine					