Name:

The Periodic Table

https://learner.org/series/interactive-the-periodic-table/

Introduction: The Periodic Table

(Read through this section... you will not need to write anything down)

Atom Basics: In the Beginning

1. Who was the person that first presented the idea of the atom? _____
2. What does the Greek word 'atomoz' mean in English? _____
3. Who was the person that argued against the idea of the atom? _____

Atom Basics: The Atom

4. Who reintroduced the idea of the atom in 1808? _____
5. Define: *element*- _____
   _____
6. True or False (_____): Molecules can only form from whole number ratios.

   All atoms are composed of a set of subatomic particles: _____, _____, _____. They have _____ arrangements for any given element.

Atom Basics: Atomic Structure

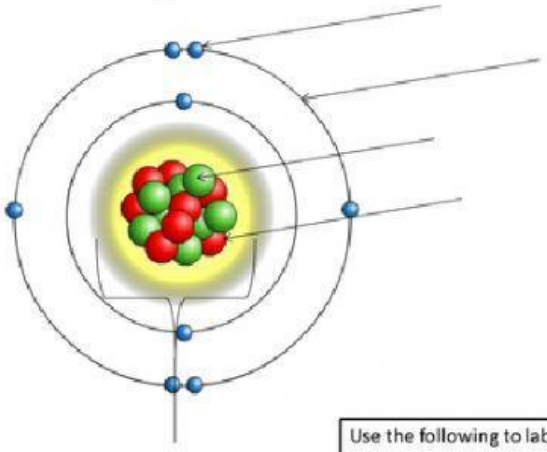
7. Define: *protons*- _____
   neutrons- _____
   electrons- _____
8. Protons and neutrons are located in the_____ of an atom while electrons are located in _____.
9. 1 proton= _____ electrons
10. True or False (_____): We do not count the mass of the electrons in calculating the mass of the atom because electrons weigh so much less than protons.

LIVEWORKSHEETS

Name:

Labeling an atom

Name:_____



Use the following to label the atom:

Nucleus Proton Neutron Shell Electron

Atom Basics: Periodicity

11. The tendency to show a regular repeating pattern is known as _____ . This explains why we organize our periodic table of elements.
12. _____ of an element is equal to the number of protons in the nuclei of its atoms.
13. An _____ is an atom in which the number of protons differs from the number of electrons.
14. If an atom has more electrons than protons, the ion is known as an _____(It is negatively – charged).
15. If it has fewer electrons than protons, it is known as a _____(It is positively + charged)
16. An _____ is an atom in which the number of protons and neutrons differ.
17. The number of _____ in an atom determines what element it is.

Atom Basics: The Periodic Table

(Read through this section... you will not need to write anything down)

Atom Basics: Interactive

→You will need to go back through your notes to be able to answer these questions.

18. Name That Atom Challenge: _____/12 *(MUST SCORE AT LEAST 10/12; TAKE A PICTURE OF YOUR SCORE AND POST IT ON CLASSROOM)*

LIVEWORKSHEETS

Name:

SKIP TO THE TAB CALLED "WHAT'S IN THE BOX."

What's In the Box: Periods

19. Define: *periods-* _____
20. Periods tell us how many _____ there are in that element. For example, the first row has one energy level.

What's In the Box: Groups

21. Define: *groups-* _____

What's In the Box: Atomic Number

22. What does the atomic number represent?

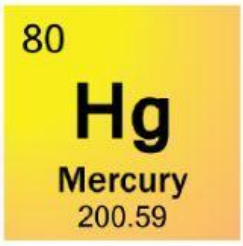
    _____

23. True or False (_____): Every element has their own special number of protons.
24. Label the atomic number on this element Boron:



What's In the Box: Symbol

25. Label the symbol on this element Mercury:



Name That Element Challenge

26. Use the periodic table to name the following elements using their symbols or their atomic number

a. Ge: _____
b. Li: _____
c. K: _____

LIVEWORKSHEETS

Name:

d. Cs: _____

e. Atomic Number-72: _____

f. Atomic Number-110: _____

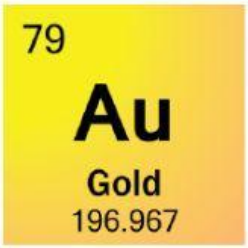
g. Atomic Number-79: _____

h. Atomic Number-10: _____

What's In the Box: Relative Mass

27. Define: *relative mass-* _____

28. Label the relative mass on this element Gold:



What's In the Box: Interactive

29. Which One of These Elements Doesn't Belong? Challenge: _____/10 *(MUST SCORE AT LEAST 8/10; TAKE A PICTURE OF YOUR SCORE AND POST ON CLASSROOM)*

LIVEWORKSHEETS