BrainPOP - Periodic Table Name _____

Watch the *Periodic Table* movie at http://www.BrainPop.com/ to complete this worksheet.

Word List:

92
118
atomic mass
atomic number
atoms
bond
chemical
color
different
electrons
giving up
groups
nucleus
orbitals
periods
properties
related
sharing
symbol
universe

1. The Periodic Table of Elements is a list of all the chemical elements that occur in the _____. It categorizes elements according to the properties of their _____, which are the smallest unit of an element.

2. Atoms are made up of a _____ composed of protons and neutrons and a number of electrons orbiting in shells or _____.

3. It is the number of protons, neutrons, and electrons in an element's atoms that determines its _____. The configuration of the three particles is the only thing that makes one element _____ from another.

4. The modern table organizes elements so it is easier to see how elements are _____ to each other. The elements are listed by the _____ _____, or the number of protons in the atom's nuclei. The table also lists the elements _____, name, and _____ _____.

5. Each shell can hold only a certain number of _____. The number of electrons in an atom's outer shell plays an important role in that atom's properties determining what other kinds of atoms it can _____ with. Atoms bond together in molecules by either _____ ___ or _____ electrons. _____ describe the number of electrons in the outer shell.

6. Because atoms with similar numbers of electrons in outer shells behave in similar ways, you can also read the table in vertical rows called _____. Elements in groups have similar _____ properties.

7. The periodic table is also organized by _____ into different categories. These categories are organized by properties of the elements.

8. Some periodic tables may show elements all the way up to number _____, but any element over Uranium number _____ is too unstable to occur in nature and must be made in a lab.

Try the quiz to help you answer these questions ...

What do you get when you chemically combine chlorine gas and sodium? A. Table salt B. Car wax C. A bad monster

Which of the following is a noble gas? A. Hydrogen B. Helium C. Carbon

How do you find the atomic number of an atom? A. # of Protons B. # of Neutrons C. # of Electrons

What are metallic elements generally known for? A. Liquid at room temp B. Conductivity C. Generosity

Where would you find the element copper? A. Steak knives B. Telephone wires C. Vacuum tubes

What is the smallest unit of a pure element? A. Atom B. Neutron C. Molecule

What do we call an atom in which the number of protons is not equal to the number of electrons? _____

How is the Periodic Table organized? A. Rows and aisles B. Periods and groups C. Lines and boxes

When was the first modern Periodic Table developed? A. 1066 B. 1492 C. 1871

What is a molecule? A. Particles that are fragile B. Atoms that have bonded C. Synthetic car seat covers

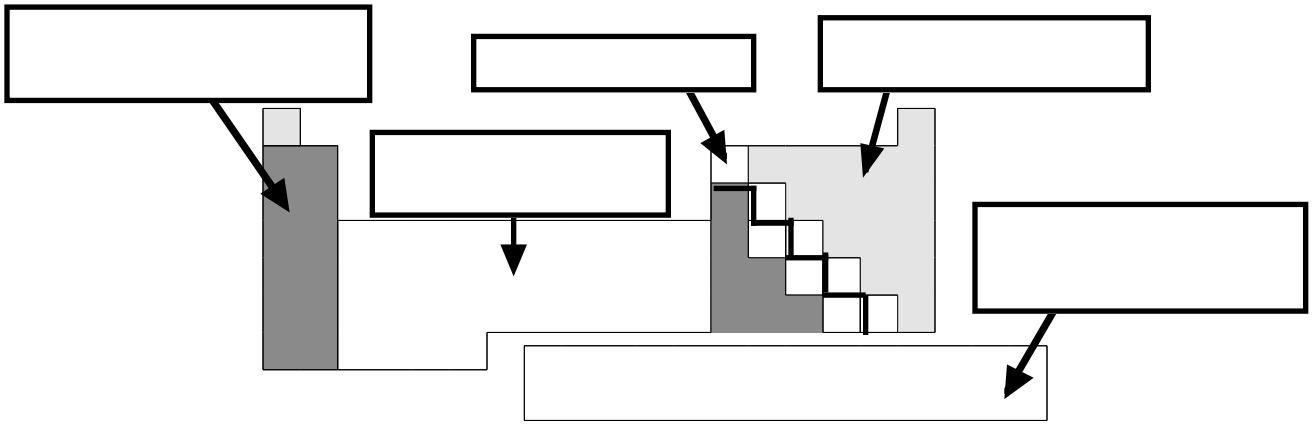
Who is credited with coming up with the modern Periodic Table? A. Einstein B. Bohr C. Mendeleyev

How are elements listed in the Periodic Table? A. Year discovered B. Atomic Number C. Physical beauty

Periodic Tables Online Name _____

Site: CHEMystery

Click the "Visit Site" link if needed and then find the Periodic Table of the Elements section (see the menu on the left side of the page) to help you label this diagram.



Site: Chemical Elements.com (Listed on the Periodic Table Sites page of the Kid Zone)

Use the menu on the left side of the page for links for the element groups to help you complete this section.

1. Where are metalloids found on the periodic table? _____
2. Which elements are metalloids? List their symbols. ____ ____ ____ ____ ____ ____ ____
3. What are two uses for metalloids? _____ _____
4. Where are noble gases found on the periodic table? _____
5. Which elements are classified as noble gases? List their symbols. ____ ____ ____ ____ ____ ____
6. Which elements are classified as nonmetals? List their symbols. ____ ____ ____ ____ ____ ____ ____
7. What does the term "halogen" mean? _____
8. Which elements are classified as halogens? List their symbols. ____ ____ ____ ____ ____
9. Where do you find the transition metals on the periodic table? _____
10. What is unique about the location of the valance electrons in the transition metals? _____

_____

Done? Try the *Element Games*! →

Go to the *JLab Games & Puzzles* site listed on the *Periodic Table Sites* page of the *Kid Zone*.

Element Games

Element Flash Cards - Learn the names and symbols of the elements!

Element Math Game - Calculate the number of protons, neutrons or electrons in an atom based on information from the Periodic Table of Elements!

Element Hangman - Discover which element the computer has picked by guessing the letters in its name!

Element Crossword Puzzles - Use the clues provided to solve each crossword puzzle!

Element Concentration - Challenge your memory and your knowledge of the elements!

Element Matching Game - Match an element's name to its symbol!