

**BrainPOP - Periodic Table**

Name \_\_\_\_\_

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

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.

**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

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

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