

Periodic Table, Elements and Atoms Web Quest

Go to http://www.bbc.co.uk/bitesize/ks3/science/chemical_material_behaviour/atoms_elements/activity/

1. About how many atoms can be found on the tip of a needle?
2. How many different type of atoms are there?
3. Elements in the same column of the periodic table have what in common?
4. What is true about all nonmetals when placed in water?
5. Why can metals be used in circuits and wires?
6. Describe three properties of metals and nonmetals as listed in this activity:

Metals	Non Metals
1.	1.
2.	2.
3.	3.

7. Pure substances found on the periodic table are called.

Go to http://www.pbslearningmedia.org/asset/lsp07_int_theatom/

8. The building blocks of matter which all things are made of are called what?
9. If an atom is neutral what **TWO** particles will be in the same number?
10. Which subatomic particle is the **MOST** responsible for the properties of an element?

Fill in this chart as you complete the tutorial activity:

	PROTON	ELECTRON	NEUTRON
CHARGE			
MASS			
LOCATION			
IMPORTANCE			

Go to <https://phet.colorado.edu/en/simulation/build-an-atom>

Click play on Build An Atom. Make at least THREE models of atoms. Draw your pictures below.

ATOM			
DRAWING			

11. Which atom had the largest mass? How did you know?

Go to: <http://education.jlab.org/atomtour/index.html>

12. What are atoms?

SELECT "CONTINUE"

13. Fill in the following table with name of particle, charge, location (where is it located in the atom) and mass.

Atoms are made out of three basic particles:			
Name of particle	Charge	Location	Mass (click on fun facts)

Go to: <http://education.jlab.org/beamsactivity/6thgrade/tableofelements/tableofelementsc.pdf>

14. What 4 things are shown on a periodic table square for an individual element?

15. Draw & fill in a square for the element Oxygen.

6 ← _____

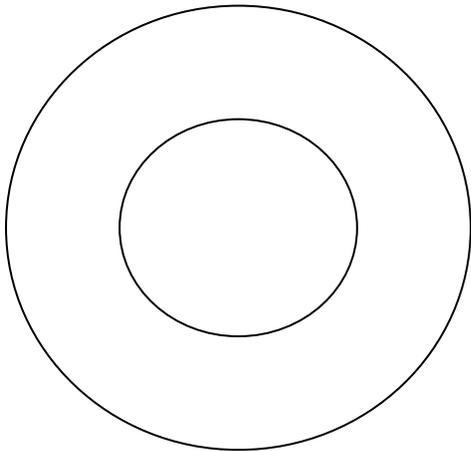
C ← _____

CARBON ← _____

12 ← _____

16. Use the information above AND the following website to answer the following question and to draw a model of an atom of **Oxygen**. (hit 'next' to navigate around this site)

http://www.classzone.com/books/earth_science/terc/content/investigations/es0501/es0501page03.cfm?chapter_no=investigation



17. Why do we use models to represent atoms?

18. Go to the following website. Click on the element and fill in the table.

<http://education.jlab.org/itselemental/index.html>

Fill in the information for each element listed:

Element	Atomic #	Mass #	Neutron #	Proton #	Electron #
Oxygen					
Gold					
Hydrogen					
Carbon					
Nitrogen					
Sodium					
Chlorine					

19. Go to the following website http://education.jlab.org/qa/atom_02.html

and answer the question: What is the difference between an atom and an element?

20. Go to the following website <http://www.citycollegiate.com/isotopesofhydrogen.htm> and answer the question: What is an isotope?

21. Draw a diagram of the example of Hydrogen's isotopes given.

Go to: <http://education.jlab.org/itselemental/index.html>

(Scroll to bottom of the page to find games).

Go to the flashcards and go through 25 elements and record the number you got right and wrong.

22. Number right _____ Number wrong _____ .