

Name _____

How Many Protons, Neutrons, and Electrons Are in Common Elements?

Go to:

http://www.classzone.com/books/earth_science/terc/content/investigations/es0501/es0501page01.cfm

Step 1: Common Elements

What are the common elements in the pictures?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Step 2: Zoom in on a Penny

What are the two elements that a penny is composed of?

Step 3: Atomic Models

List the three subatomic particles that make up atoms. Give the mass and charge of each one.

Particle	Mass	Charge
1.		
2.		
3.		

Step 4: Build Atoms Yourself

1. How many electrons can fall in the first shell? ____ second? _____
2. What is the element called when all particles are used in the atom? _____
3. What is this elements atomic mass: _____ atomic number? _____

Step 5: Build More Atoms

1. If the nucleus of an atom were the size of a basketball, where would the nearest electron shell be?
2. Which particle controls what element an atom is? _____
3. What do you get when you change the number of neutrons in the nucleus?

4. Try to cluster the electrons together or move them into another level. Describe the behavior of the model electrons.

Step 6: Reading the Periodic Table

To answer the questions below click on the link at the bottom of page 6 and click on the specific element

1. How much does a ton of oxygen approximately cost? _____
2. When was neon discovered? _____
3. Before 1925 was aluminum called? _____
4. What is the symbol for iron? _____
5. What is the term used to express the amount of gold present? _____