

EVERYDAY PHYSICAL SCIENCE

ATOMIC NUMBERS OF ELEMENTS

The atomic number of an element is the number of protons in an atom's center. For example, hydrogen has 1 proton, and its atomic number is 1. Use the periodic table on page 59 for this activity.

1. Write the chemical symbols for the elements with atomic numbers of

5 _____ 10 _____ 15 _____

20 _____ 25 _____ 30 _____

2. Write the atomic numbers for five elements whose symbols begin with the letter C.

3. What is your age? _____

Which element has that atomic number?

4. Write the symbols for the elements whose atomic numbers match these descriptions:

a. number of states in the U.S.

b. number of planets in the solar system

c. number of moons of Earth

d. number of years in a decade

e. number of centimeters in a meter

f. number of ounces in a pound

g. number of quarts in a gallon

h. number of sides in a pentagon

5. Add the atomic numbers of these elements:

U _____

C _____

Cl _____

Au _____

+ Al _____

Total _____

6. Identify the atomic numbers of these metals:

silver _____

gold _____

zinc _____

copper _____

lead _____

iron _____

chromium _____

ELEMENTS AND THEIR ATOMIC NUMBERS

• • • • •
EVERYDAY

physical science

Chemical elements are identified by their atomic numbers. For example, hydrogen (H) is element 1, oxygen (O) is element 8, and uranium (U) is element 92.

Write the symbols for the elements below above their atomic numbers to spell out some statements. Use the periodic table of elements on page 59 to help you.

<i>Example:</i>	H	O	W
	1	8	74

90	53	16		53	16		9	92	7				
6	8	8	19		92	16		20	7	66			
2		8	74	7	16		90	85		5 92 16 39			
4	99		20	26									
90	85		15	57	39	68		3	19	99	74	85	68
50	8	74	9	57	19	99		27	23	68			
1	53	16		27	85								

Use the periodic table to create your own words and sentences. See if a class member can decode your creations. What is the longest word you can create using the atomic numbers?