Periodic Table - Bingo

Introduction

This bingo game compliments the grade five and six science curricula. Playing the game helps students become more familiar with the Periodic Table.

The game can be played in a variety of ways. It is vital that each student has a copy of the periodic table.

- 1. The teacher can call out the entire name of the element and the students must find the symbol. For example: "Find the symbol for Iodine."
 - or aluminum, sodium, chlorine, hydrogen, nitrogen, etc.
- 2. The teacher can call out the atomic numbers.* For example: 16, 11, 9, 2, 10, 6, 79, 30, 80

Note: If the teacher calls out atomic number 16 the students should find the element is sulfur, S, not oxygen, O. The atomic mass of oxygen is 16.00, but its atomic number is 8. In the periodic table, **atomic numbers are given as integer values** whereas the atomic mass is given to two decimal places.

*This is important because the atomic number is equal to the number of protons that an atom has. The number of protons defines the element.

- 3. The teacher can ask questions about elements. Find the symbol of the element...
 - a) added to toothpaste to help fight cavities.
 - b) of a gas that we breathe in and need for respiration.
 - c) of a noble gas (or inert gas) that is lighter than air and commonly used to fill balloons
 - d) of a precious metal that is valuable, yellow in color, and is used for jewelry.
 - e) that occurs in all living organisms.
 - f) that bonds with chlorine in table salt.
 - g) that has the smallest atomic mass in the periodic table.
 - h) that is provided in milk and we need it to keep our bones strong.
 - i) that is a silver colored metal used on the inside of pennies.
 - j) that is a metal used on the outer surface of a penny.
 - k) that is a semi-metal (or metalloid) commonly used in microchips in computers.
 - l) that is a metal, a liquid at room temperature and pressure, was commonly used in thermometers, and is toxic.
 - m) that diamond is composed of.
 - n) that graphite is composed of.
 - o) that is a non-metal and is the main component of air.
 - p) that is the main constituent in steel.
 - q) that is used as an indicator for starch.
 - r) in which each atom has seventeen protons.

Bingo Game Board

(This needs to be in the Student Lab Notebook to be used to review elements in a week or two)

> Students write element symbols from the following list anywhere on the game board.

Na, O, Cl, Al, Au, Ag, Cu, Fe, H, He, C, Ca, K, Ar, Ne, N, F, Zn, Hg, I

- ➤ When a student claims to have "Bingo", the student reads off the element symbols and the teacher reviews the Bingo check list to see if the questions, atomic numbers or element names were used.
- > Students re-use Bingo game board for review of the elements

Reference: Adapted from Teaching Materials from the Stewart Resources Centre, Stephanie Olson.