

## Objective

By the end of this lesson, the student will be able to identify and understand the basic structure and organization of the Periodic Table of Elements, as well as recognize the significance of key elements and their properties.

## Materials and Prep

- Paper and pencils for note-taking and drawing.
- Colored markers or crayons for visual activities.
- Access to the internet or books for research (if available).
- Knowledge of basic chemistry concepts (atoms, elements, compounds).

## Activities

### 1. Create Your Own Periodic Table:

Using paper and colored markers, the student will design their own Periodic Table, including at least 10 elements of their choice. They should include the element's name, symbol, atomic number, and one interesting fact about each element.

### 2. Element Scavenger Hunt:

The student will select five elements from the Periodic Table and research where they can find these elements in everyday life (e.g., oxygen in the air, iron in construction materials). They will then create a mini-presentation about their findings.

### 3. Element Flashcards:

The student will create flashcards for 10 elements, including their symbols and key properties. This will help them memorize important information about the elements.

### 4. Fun Facts Presentation:

The student will choose their favorite element and prepare a short presentation to share fun facts about it with the teacher. This can include its uses, history, and any interesting trivia.

## Talking Points

- "The Periodic Table is like a map of all the known elements in the universe. Each box represents an element, and it tells us a lot about what that element is."
- "Elements are the building blocks of everything around us. Everything you see is made of elements!"
- "The arrangement of elements in the Periodic Table isn't random; it's based on their atomic number, which is the number of protons in an atom's nucleus."
- "Do you know why some elements are metals and others are non-metals? It all depends on their properties, which are shown in the table."
- "Each element has a unique symbol, usually derived from its name in English or Latin. For example, gold is 'Au' from its Latin name 'Aurum'."
- "Some elements are essential for life, like carbon, hydrogen, nitrogen, oxygen, phosphorus, and sulfur. Can you think of where you find these elements in your body?"
- "The Periodic Table is constantly being updated as scientists discover new elements or learn more about existing ones. Isn't that exciting?"
- "Understanding the Periodic Table can help us understand chemical reactions, which is how

substances interact and change."

- "Why do you think it's important to learn about elements? They play a crucial role in technology, medicine, and our environment!"
- "Remember, chemistry is everywhere! From the food we eat to the air we breathe, it's all about elements!"