

Periodic Table

Lesson Overview

In this lesson, students will use text materials to examine the properties of the elements in the periodic table.

Standards Addressed

- SC 2005 7-5.3 Use the periodic table to identify the basic organization of elements (including metals, nonmetals, and families.)
- SC 2014 7.P.2A.2 Obtain and use information about elements (including chemical symbol, atomic number, atomic mass, and group or family) to describe the organization of the periodic table.

Disciplinary Literacy Best Practices

Highlighting
Partner Talk
Wait Time
Paraphrasing

Lesson Plan

Time Required – One 60-minute Class Period

Disciplinary Vocabulary : period, group, family, symbols, atomic mass, atomic number, vertical, horizontal

Materials Needed:

- Anchor Chart for an Element
- Post-it Notes
- Highlighters
- Article on Periodic Table (EdHelper)
- Copies of Periodic Table

Engage

- As students enter the room, they will be given a post-it note with either atomic number, atomic mass, element's name, or symbol on it. Student pairs will confer to determine where they should place their post-it note on the element anchor chart. Student pairs will place their post-it note on the correct section of the anchor chart.
- What is the role of each part of the square that names each element in the periodic table?

Explore

- Students will read an article on the periodic table and highlight important facts.
- Focus Questions for Reading: What are the parts of the periodic table? How are the elements arranged in the periodic table? How is the periodic table divided?

Explain

- After reading, students and teacher will dialogue to review the parts of the periodic table and how the elements are arranged in the periodic table. The teacher will model highlighting important facts and phrases through self-talk.
- Sample questions: Where is the element Sodium on the periodic table? What is its atomic number? How is it different from the element that comes after it in the periodic table? What does it mean when we say that an element's atomic mass increases by one?
- Students will work with elbow partners to answer multiple choice questions about the Edhelper reading.

Teacher Reflections and Biographical Information

The anchor chart provided a visual support for students to review as needed.

Lesson Author: Nan Van Faussien, 7th grade science teacher at Carver-Edisto Middle School in Orangeburg School District 4 in Orangeburg, SC.