### Unit Framing

**Essential Question**

**Anchor Phenomena**
Table Salt

**Storyline**

### Task Overview

**Learning Objective**

3-Dimensional Content Language Objective

**Rubric Strand**

**Supporting Question(s)**
What are the different types of way to organize a set of elements?

**Enduring Understanding(s)**

**Key Concepts**

### Task Standards Alignment

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<th><strong>PEs</strong></th>
<th>HS-PS1-1 Matter and its Interactions</th>
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<tr>
<td><strong>SEPs</strong></td>
<td>Developing and Using Models</td>
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<td><strong>DCIs</strong></td>
<td>PS1A. Structure of Matter</td>
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### Task Logistics

**Time**

~1 day

**Materials**

- 10.1.3 Task Cards
- 10.1.3 Output Sheet
- 10.1.3 Element Cards

**Safety**

None

### Task 5E Instructional Plan

**Teacher Background**
The periodic table is organized by the individual element’s properties. There is different grouping methods that the periodic table has: groups, periods, blocks and metals/nonmetals/metalloids.

**Teacher Feedback**
As we refine the curriculum, we depend on an ongoing, collaborative dialog with you. Please take the time to share your thoughts on this task by filling out this survey.

**Day 1 Prep:**
- Check the link of the video
- Print out the 10.1.3 Element Cards and group by Card Set A, Card Set B, and Card Set C. Each group will get one copy of each set.
- Each student will have one copy of the 10.1.3 Output Sheet
Day 1
1.  5 min - Warm-up
2.  5 min - Engage: Watch the video about Mendeleev. Have the students write down the properties of Exo-aluminum and gallium. Stop the video and ask if Mendeleev's prediction was correct. At the end of the movie, ask what made Mendeleev the genius of the periodic table?
3.  30 min - Explore and Explain: Students are to go through the first 3 10.1.3 Task Cards. After each task card, the students are to get a new set of cards (A, B, and C consecutively). Make sure students complete the 10.1.3 Output Sheet as they get each set of cards.
4.  10 min - Elaborate and Evaluate: Students are to keep 10.1.3 Element Cards and to go through the last 2 10.1.3 Output Sheet. Make sure the students complete the 10.1.3 Output Sheet after every task card.
5.  5min - Exit Ticket: How has your model for the periodic table changed over time? How is that similar or different from what Mendeleev went through?

Day 1 Follow-Up:
   - Optional: A follow up activity could be asking students to test the different properites of metals and nonmetals.

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<tr>
<th>Accommodations for ELL or SpEd</th>
<th>Accomodations Folder</th>
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<tr>
<td><strong>Teaching Shared Resources</strong></td>
<td>Share resources that support this task by completing this survey. Viewed shared resources here. Provide feedback on the task by completing this survey.</td>
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References using APA formatting