

.Emerson Middle School Integrated Lesson Form

Title: Week 21: January 27-31

Lesson Description: Properties of Matter

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| Educator | Name: Elena Mackey A+ School: EMS Grade level/subject area: 7th Grade Science |
| Curriculum & Arts | <p>Overarching Concept: Matter: It's Properties and Changes Essential Question(s) and/or Focus Question(s):</p> <ul style="list-style-type: none">● What is matter?● What are the states of matter?● What are the physical properties of each state?● How can a physical and chemical change be identified?● What are some examples of each type of change?● How can matter be classified?● What is mass, volume and density? <p>Disciplines Addressed: 21st Century skills:</p> <p><input type="checkbox"/>_dance <input type="checkbox"/>_music <input checked="" type="checkbox"/>_x_visual arts <input type="checkbox"/>_x_creativity <input type="checkbox"/>_drama <input checked="" type="checkbox"/>_x_reading <input checked="" type="checkbox"/>_x_writing <input type="checkbox"/>_x_problem solving <input checked="" type="checkbox"/>_X_language arts <input checked="" type="checkbox"/>_x_science <input type="checkbox"/>_other: <input checked="" type="checkbox"/>_x_technology <input checked="" type="checkbox"/>_x_math <input type="checkbox"/>_social studies <input checked="" type="checkbox"/>_x_collaboration</p> <p>Curricular connections/instructional objectives: (state standards, etc.) MS PS 1-1, 1-2</p> |
| Enriched Assessment | <p>Ways to assess/evaluate students' understanding during and at the conclusion of the lesson</p> <p>Formative: Students will complete daily bellworks. Students will complete worksheets and notes on the properties and changes of matter. Students will research and post examples of these properties in Google Classroom. Each class will record the appearance of a penny before and after it is placed in vinegar.</p> <p>Summative: Students will complete daily exit slips.</p> |

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| | Students will complete a project testing their knowledge of matter's chemical and physical properties. |
| Collaboration | How will collaboration be used: (between students, fellow teachers, or anyone with potential expertise): Students will work in pairs on a project comparing the physical and chemical change of matter Students will work in pairs on the properties of matter lab. |
| Multiple Learning Pathways | Multiple Intelligences addressed within lesson: (check all that apply) <input checked="" type="checkbox"/> _bodily/kinesthetic <input checked="" type="checkbox"/> _interpersonal <input type="checkbox"/> _Intrapersonal <input checked="" type="checkbox"/> _logical-mathematical <input type="checkbox"/> _musical-rhythmic <input checked="" type="checkbox"/> _x_naturalist <input checked="" type="checkbox"/> _x_verbal-linguistic <input checked="" type="checkbox"/> _x_visual spatial |
| Infrastructure | Classroom Infrastructure/Setup: Timeframe (example: length of unit, number and length of lesson(s)): 1 week Space: Tables, individual and group work Material: Textbook, Google Classroom, Google Drive, Youtube videos, worksheets, lab materials Monday Bellowork: (10 min) Use your notes to: A. Write three sentences, comparing solids, liquids and gases. B. Draw a picture of each state of matter, using dots to represent atoms. Finish Notes Outline (15 min) Vocab crossword (15 min) Add matter interactive link Exit: Explain the difference between a chemical change and a physical change. (5 min) Tuesday Video (4 min) http://studyjams.scholastic.com/studyjams/jams/science/matter/properties-of-matter.htm Bellwork (10 min) P 19 Go over (10 min) Foldable (20 min) A. Fold your paper hot dog style |

- B. Then fold your paper hamburger style twice
- C. Write out the words Mass, Volume, Weight and Density on the outside flaps
- D. On the top inside flap define each word.
- E. On the bottom inside flap draw a picture that will help you remember the word's definition.

Exit: KWL One I already knew is _____ one thing I still want to know is _____. One thing I learned is _____. (5 min)

Wednesday

Bellwork: P 25 (1-7) 10 (min)

Physical vs Chemical change (3 min)

<https://www.youtube.com/watch?v=M8tyjwB42X4>

Physical vs. chemical change P 44-47 (15 min)

Create a poster or a slideshow in pairs

In your project:

- Define the words “chemical property” and “physical property.”
- List the chemical properties.
- List the physical properties.
- Find three pictures of chemical changes and three pictures of physical changes.
- For each picture write a sentence explaining how you know it is a physical or chemical change.
- Write 1-2 sentences explaining how a chemical change is different than a physical change.

Exit I would like to know more about.... (5 min)

Thursday

Bellwork: (10 min)

Worksheet P 38

Go over (5 min)

Continue Project (15 min)

Begin lesson Outline (12 min)

Exit My favorite activity or topic this week was.... (5 min)

Friday

Bellwork (10 min)

What is a sign that a chemical change has happened? (P 56-57)

Properties of Matter Lab (30 min)

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| | <p>http://science-class.net/archive/science-class/Lessons/Chemistry/Properties/observing_properties.pdf</p> <p>Exit: Take 5 summarize (5 min)</p> <p>Possible labs for the week Identifying Mystery Powder http://science-class.net/archive/science-class/Lessons/Chemistry/Properties/Mystery_Powder_Lab.pdf</p> <p>Properties of Matter http://science-class.net/archive/science-class/Lessons/Chemistry/Properties/observing_properties.pdf</p> | | | | | | | | | | |
| <p>Experiential Learning & Climate</p> | <p>Steps/Process: (You may share by using this form, video, photostory, powerpoint, etc.) Please attach rubric, checklist or other assessment tool, if applicable.</p> | | | | | | | | | | |
| <p>ISTE standards</p> | <p>Check all that apply:</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> Empowered learner</td> <td><input checked="" type="checkbox"/> Digital citizen</td> </tr> <tr> <td><input checked="" type="checkbox"/> Knowledge constructor</td> <td><input checked="" type="checkbox"/> Innovative designer</td> </tr> <tr> <td><input checked="" type="checkbox"/> Computational thinker</td> <td><input checked="" type="checkbox"/> Creative</td> </tr> <tr> <td><input type="checkbox"/> communicator</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Global collaborator</td> <td></td> </tr> </table> | <input checked="" type="checkbox"/> Empowered learner | <input checked="" type="checkbox"/> Digital citizen | <input checked="" type="checkbox"/> Knowledge constructor | <input checked="" type="checkbox"/> Innovative designer | <input checked="" type="checkbox"/> Computational thinker | <input checked="" type="checkbox"/> Creative | <input type="checkbox"/> communicator | | <input type="checkbox"/> Global collaborator | |
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