

Emerson Middle School Integrated Lesson Form

Title: Week 19: January 13-17

Lesson Description: Structure of Matter

<p>Educator</p>	<p>Name: Elena Mackey A+ School: EMS Grade level/subject area: 7th Grade Science</p>
<p>Curriculum & Arts</p>	<p>Overarching Concept: Structure and Properties of Matter Essential Question(s) and/or Focus Question(s):</p> <ul style="list-style-type: none"> ● What are the parts of the atom? ● What is the electrical charge of each atomic part? ● What is the mass number and atomic number? ● How is the mass of an atom calculated? ● What is the difference between an atom, an element and a molecule? ● What is the difference between a homogeneous and heterogeneous mixture? <p>Disciplines Addressed: 21st Century skills:</p> <p> <input type="checkbox"/>_dance <input type="checkbox"/>_music <input checked="" type="checkbox"/>_x_visual arts <input checked="" type="checkbox"/>_x_creativity <input type="checkbox"/>_drama <input checked="" type="checkbox"/>_x_reading <input checked="" type="checkbox"/>_x_writing <input checked="" 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 Curricular connections/instructional objectives: (state standards, etc.) MS PS 1-1, 1-2</p>
<p>Enriched Assessment</p>	<p>Ways to assess/evaluate students' understanding during and at the conclusion of the lesson</p> <p>Formative:</p> <p>Students will complete daily bellworks. Students will work together to create and present a concept map of key terms related to our study. Students will research various mixtures and be able to show written differentiation between homogeneous and heterogeneous mixtures. Students will complete worksheets to reinforce key concepts</p> <p>Summative:</p> <p>Students will complete daily exit slips.</p>

Collaboration	<p>How will collaboration be used: (between students, fellow teachers, or anyone with potential expertise):</p> <p>Students will work in groups to present vocab concept map</p> <p>Students will work individually and in groups to complete the mixtures lab.</p> <p>I collaborated with my mentor teacher in my weekly plan.</p>								
Multiple Learning Pathways	<p>Multiple Intelligences addressed within lesson: (check all that apply)</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/>_X_bodily/kinesthetic</td> <td><input type="checkbox"/>_musical-rhythmic</td> </tr> <tr> <td><input checked="" type="checkbox"/>_x_interpersonal</td> <td><input checked="" type="checkbox"/>_x_naturalist</td> </tr> <tr> <td><input type="checkbox"/>_Intrapersonal</td> <td><input checked="" type="checkbox"/>_x_verbal-linguistic</td> </tr> <tr> <td><input checked="" type="checkbox"/>_x_logical-mathematical</td> <td><input checked="" type="checkbox"/>_x_visual spatial</td> </tr> </table>	<input checked="" type="checkbox"/> _X_bodily/kinesthetic	<input type="checkbox"/> _musical-rhythmic	<input checked="" type="checkbox"/> _x_interpersonal	<input checked="" type="checkbox"/> _x_naturalist	<input type="checkbox"/> _Intrapersonal	<input checked="" type="checkbox"/> _x_verbal-linguistic	<input checked="" type="checkbox"/> _x_logical-mathematical	<input checked="" type="checkbox"/> _x_visual spatial
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Infrastructure	<p>Classroom Infrastructure/Setup:</p> <p>Timeframe (example: length of unit, number and length of lesson(s): 1 week</p> <p>Space: Tables, individual and group work</p> <p>Material:</p> <p>Textbook, Google Classroom, Google Drive, granite, brass, cereal</p> <p>Youtube videos worksheets index cards, sandwich bags</p> <p>Monday</p> <p>Bellwork: (10 min)</p> <ul style="list-style-type: none"> ● Structure of an atom worksheet (P36-37) ● Structure of atoms P (104) Alone (10 min) ● 105 together (15 min) I find the paragraph. They give the answer. ● Trade and grade go over bellwork and Wks P 104 (15 min) ● Exit: One thing I want to know more about is... (5 Min) <p>Tuesday</p> <p>Bellwork 10 min</p> <p>Rumplestilskin cartoon</p> <p>https://www.youtube.com/watch?v=f6bwylLxtYA (5 min)</p> <p>Connect it SR 40-41 (5 min)</p> <p>What has to happen to the straw atom's particles for the straw to be turned into gold?</p> <p>Find the protons neutrons and electrons of a gold atom (5 min)</p> <p>Review atomic energy levels (10 min)</p> <p>Draw a gold atom use numbers instead of dots (5 min)</p> <p>Graphic organizer P 53) bottom 12 min)</p>								

	<p>Go over organizer (5 min)</p> <p>Exit: KWL One I already knew is _____ one thing I still want to know is _____. One thing I learned is _____. (5 min)</p> <p>Wednesday Bellwork: (10) (Wks P 38) Go over (10 min) Define Atom Substance, element, molecule, compound 15 min</p> <ul style="list-style-type: none"> A. Lay out cards B. Take a picture, C. Upload picture to Google Classroom (label by table number.)) D. Plan presentation write out what each person will say on a card (10 min) E. Explain why you chose that arrangement of cards (5 min) <p>Exit I would like to know more about.... (5 min)</p> <p>Thursday Bellwork: WKS P. 31 (10 min) Presentations (20 min) Mixture Video 3 min https://www.youtube.com/watch?v=7dLeJvJylUu Different types of mixtures https://www.youtube.com/watch?v=KORaKEYU9LU Wks 102 (15 min) Go over (10 min) Exit My favorite activity or topic this week was.... (5 min)</p> <p>Friday Bellwork P 101 bottom chart retype (10 min) Mixture lab (P 17) (30 min) A Look up what the material is made of B. Is the mixture homogeneous or heterogeneous C. Explain how you know Exit: Take 5 summarize (5 min) Find cereal instead of trail mix? Type up cards for the cereal and trail mix station. Buy sandwich bags</p>
Experiential Learning & Climate	Steps/Process: (You may share by using this form, video, photostory, powerpoint, etc.) Please attach rubric, checklist or other assessment tool, if applicable.

ISTE standards	Check all that apply: <input checked="" type="checkbox"/> Empowered learner <input checked="" type="checkbox"/> Knowledge constructor <input checked="" type="checkbox"/> Computational thinker communicator <input type="checkbox"/> Global collaborator <input checked="" type="checkbox"/> Digital citizen <input checked="" type="checkbox"/> Innovative designer <input checked="" type="checkbox"/> Creative