

Emerson Middle School Integrated Lesson Form

Title: Cell organelles

Lesson Description: Students will investigate the cell organelles with an emphasis on structure and function inside the cell.

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| Educator | Name: Heather Reames A+ School: EMS Grade level/subject area: Science 6 |
| Curriculum & Arts | <p>Overarching Concept: Living things from bacteria to humans have common characteristics, organizational structures and needs. What is the importance of structure and function in living things?</p> <p>Essential Question(s) and/or Focus Question(s):</p> <p>What is the importance of structure and function in living things? What are the organelles and what does each do for the cell? Can I identify the types of cells and structures associated with each type? (Prokaryote vs. Eukaryote and Plant vs. Animal)</p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="423 1150 1063 1339"> <p>Disciplines Addressed:</p> <p> <input type="checkbox"/> dance <input checked="" type="checkbox"/> music <input checked="" type="checkbox"/> visual arts <input type="checkbox"/> drama <input checked="" type="checkbox"/> reading <input checked="" type="checkbox"/> writing <input checked="" type="checkbox"/> language arts <input checked="" type="checkbox"/> science <input type="checkbox"/> other: <input checked="" type="checkbox"/> math <input type="checkbox"/> social studies </p> </div> <div data-bbox="1125 1150 1427 1339"> <p>21st Century skills:</p> <p> <input checked="" type="checkbox"/> creativity <input checked="" type="checkbox"/> problem solving <input checked="" type="checkbox"/> technology <input checked="" type="checkbox"/> collaboration </p> </div> </div> <p>Curricular connections/instructional objectives: (state standards, etc.)</p> |
| Enriched Assessment | <p>Ways to assess/evaluate students' understanding during and at the conclusion of the lesson (formative and summative):</p> <p>Common assessment and cell project</p> |

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| | Note any unexpected outcomes with students and how they affected next steps: | | | | | | | | |
| Collaboration | <p>How will collaboration be used: (between students, fellow teachers, or anyone with potential expertise):</p> <p>Students will work in lab groups for some of the activities.</p> | | | | | | | | |
| Multiple Learning Pathways | <p>Multiple Intelligences addressed within lesson: (check all that apply)</p> <table> <tr> <td><input type="checkbox"/>_x_bodily/kinesthetic</td><td><input type="checkbox"/>_x_musical-rhythmic</td></tr> <tr> <td><input type="checkbox"/>_x_interpersonal</td><td><input type="checkbox"/>_x_naturalist</td></tr> <tr> <td><input type="checkbox"/>_x_Intrapersonal</td><td><input type="checkbox"/>_x_verbal-linguistic</td></tr> <tr> <td><input type="checkbox"/>_x_logical-mathematical</td><td><input checked="" type="checkbox"/>_x_visual spatial</td></tr> </table> | <input type="checkbox"/> _x_bodily/kinesthetic | <input type="checkbox"/> _x_musical-rhythmic | <input type="checkbox"/> _x_interpersonal | <input type="checkbox"/> _x_naturalist | <input type="checkbox"/> _x_Intrapersonal | <input type="checkbox"/> _x_verbal-linguistic | <input type="checkbox"/> _x_logical-mathematical | <input checked="" type="checkbox"/> _x_visual spatial |
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| <input type="checkbox"/> _x_Intrapersonal | <input type="checkbox"/> _x_verbal-linguistic | | | | | | | | |
| <input type="checkbox"/> _x_logical-mathematical | <input checked="" type="checkbox"/> _x_visual spatial | | | | | | | | |
| Infrastructure | <p>Classroom Infrastructure/Setup:</p> <p>Timeframe (example: length of unit, number and length of lesson(s):</p> <p>8 school days</p> <p>Space:</p> <p>Classroom and ILS</p> <p>Material: Google Expeditions, I-Pads, Shiver App,</p> <p>Resources/books/websites/other information sources:</p> | | | | | | | | |

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| 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. Daily plans pasted below |
| ISTE standards | Check all that apply: <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Empowered learner <input type="checkbox"/> Knowledge constructor <input type="checkbox"/> Computational thinker <input type="checkbox"/> Global collaborator </div> <div> <input type="checkbox"/> Digital citizen <input checked="" type="checkbox"/> Innovative designer <input type="checkbox"/> Creative communicator </div> </div> |
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September 14 - Claim and Evidence form for living things are made of cells and a characteristic of living things - Amoeba sisters's video on Characteristics of Living Things <https://www.youtube.com/watch?v=cQPVXrV0GNA&vl=en>

and Characteristics of living things fill in the blank

September 15 Cell organelle Bellwork - Cell Introduction video - <https://www.youtube.com/watch?v=8llzKri08kk&t=3s>

Begin Cell organelle slide show

September 16 - Slide Show is due - How Big is it Activity to discuss the size of cells

September 17- ILS - Google Expedition - Inside a cell and types of cells - Students will review organelles and discuss structure and function in a virtual reality lesson

September 18 Organelle Sort and The cell is a school analogy - Color Shiver Cells and make a key

September 21 ILS - Use i-pads for shiver cell review - Chromebook assignment from the 3D Science book on cells - 3D pens for cell organelles

September 22 Start Cell projects - Students will choose which project they want to complete and gather materials and start.

September 23 last class day to work on cell projects

September 24-

September 25-

September 28 - Test Review

September 29 - CFA - District - Wide Test over Living Things Characteristics and Cell organelles