

## Milltown Integration Plan, Version 2

Please use this template to plan strategies for expanding interdisciplinary practices into your classes through a culminating project taking place in the second half of the school year.

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**Teacher(s): Amy Hellerich, Amanda Peterson**

**Grade(s): 3rd**

**Subject Area(s): Science**

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### Interdisciplinary Project Plan - MP3 / MP4

Using the table below, plan and describe an opportunity for a larger-scale interdisciplinary project to take place in your classes.

<b>Grade:</b>	3rd
<b>Subject(s):</b>	Science
<b>When will this project take place? (include month &amp; unit)</b>	April- Animals Through Time
<b>Describe the project, what is the main idea?</b>	Students will be tasked with helping a museum reconstruct dinosaur skeletons using different dry pasta shapes
<b>What are the learning objectives?</b>	SWBAT use the provided materials to reconstruct a specific dinosaur. SWBAT brainstorm their models, create and modify the model using materials, and reflect on their designs.
<b>How will it foster Equality, Diversity and Inclusion?</b>	Dinosaur extension activities- Famous archaeologists and paleontologists of different ethnicities and genders and showcase their accomplishments.
<b>What will students be challenged to produce?</b>	Students will learn about the different bones and skeleton structures within a dinosaur, then brainstorm what pasta types they will use to recreate their skeleton under the constraints of the real-world challenge, they will modify their designs, and reflect on their creations when done.

<p><b>List common practices that will be incorporated and how:</b> (problem-based learning, project-based learning, visual brainstorming, redesign/reflection, experimentation, empathy, real-world connections)</p>	<p>asking questions (or defining problems), developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, engaging in argument from evidence, and communicating information effectively</p> <p>Problem-based learning - students are placed in a real-world scenario that requires them to use their knowledge to construct their dinosaur skeletons under the constraints for the challenge.</p> <p>Brainstorming - students will sketch and plan out their designs through visual methods based on the constraints of the challenge</p> <p>Empathy - students will be challenged to help animals and others through the nature of this challenge.</p> <p>Reflection / redesign - students will complete a reflection component as they consider what worked well with their designs, and what could be improved</p>
<p><b>What grade level standards will be met during this project?</b></p>	<p>3-LS4-1 3-LS4-4</p>
<p><b>What interdisciplinary standards will be met?</b></p> <p><a href="#">Look at NJSLS 8.1 Computer Science &amp; 8.2 Design Thinking</a></p> <p>And see international standards by <a href="#">ISTE</a> and <a href="#">ITEEA</a></p>	<p><b>NJSLS 8.2 Design Thinking</b></p> <p>8.2.5.ED.1: Explain the functions of a system and its subsystems.</p> <p>8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.</p> <p>8.2.5.ED.4: Explain factors that influence the development and function of products and systems</p> <p>8.2.5.ED.6: Evaluate and test alternative solutions to a problem using the constraints and trade-offs identified in the design process.</p> <p>8.2.5.ITH.2: Evaluate how well a new tool has met its intended purpose and identify any shortcomings it might have.</p> <p>8.2.5.NT.4: Identify how improvement in the understanding of materials science impacts technologies.</p> <p>8.2.5.NT.3: Redesign an existing product for a different purpose in a collaborative team.</p>

	<p><b>ISTE Standards for Students:</b></p> <ul style="list-style-type: none"><li><b>1.4.a</b></li><li>1.4.b</li><li>1.4.c</li><li>1.4.d</li><li>1.7.b</li></ul>
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[Fossil STEM Activities](#)