

HUDSONVILLE MIDDLE SCHOOL COURSE FRAMEWORK



COURSE/SUBJECT

Discovery Science 2nd year



UNIT PACING Names of units and approximate pacing	UNIT LEARNING TARGETS By the end of the unit, students will be able to...	STANDARD Which standards (i.e. common core, MMC, etc.) does this address?
Introduction to Year 2, Marshmallow Challenge	Students will be able to identify the process used in Discovery Science. Students will be able to identify habits of good scientists and engineers.	GLCE Inquiry Process NGSS 6. Constructing explanations (for science) and designing solutions (for engineering)
Plant Life, Soil Analysis	Students will be able to create a diagram showing photosynthesis.	GLCE Chemical Properties NGSS 2. Developing and using models 4. Analyzing and interpreting data
Bacteria Building	Students will be able to identify the differences of uni and multi cellular organisms.	GLCE Growth and Development Cell Functions NGSS 4. Analyzing and interpreting data
Microscope Week	Students will be able to identify the differences of uni and multi cellular organisms.	GLCE Cell Functions NGSS 8. Obtaining, evaluating, and communicating information

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Textbook Tower	Students will be able to develop a tower that holds large quantities of mass, yet weighs the as light as possible.	GLCE Inquiry Process NGSS 2. Developing and using models 4. Analyzing and interpreting data CC.LS. 7 - Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
Renewable Energy	Students will be able to describe how sunlight is converted into energy through solar power.	GLCE Solar Energy Effects Energy Transfer NGSS 6. Constructing explanations (for science) and designing solutions (for engineering) CCSS
Mousetrap Car	Students will be able to design a car that uses the energy of a mousetrap to move and travel at least 5m.	GLCE Inquiry Process NGSS 2. Developing and using models CC.LS. 3 - Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

<p style="text-align: center;">UNIT PACING</p> <p style="text-align: center;">Names of units and approximate pacing</p>	<p style="text-align: center;">UNIT LEARNING TARGETS</p> <p style="text-align: center;">By the end of the unit, students will be able to...</p>	<p style="text-align: center;">STANDARD</p> <p style="text-align: center;">Which standards (i.e. common core, MMC, etc.) does this address?</p>
<p>Egg Bungee Jump</p>	<p>Students will be able to calculate the amount of rubber bands they will need to allow their egg to travel from 2m above the ground and bounce back up to 1m.</p>	<p>GLCE Inquiry Process NGSS 2. Developing and using models 4. Analyzing and interpreting data CC.LS. 7 - Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</p>
<p>Diet Coke and Mentos Reactions</p>	<p>Students will be able to create the diet coke / mento ratio that yields the highest cola geyser.</p>	<p>GLCE Inquiry Process NGSS 4. Analyzing and interpreting data CC.LS. 7 - Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</p>
<p>Catapults</p>	<p>Students will be able to identify the angle that yields the farthest shot of the catapult projectile.</p>	<p>GLCE Inquiry Process NGSS 2. Developing and using models 6. Constructing explanations (for science) and designing solutions (for engineering) CC.LS. 3 - Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</p>