

Lesson Plan

Teacher: Ms. Miller
Unit: Thermal Energy

<p>Science Standards:</p> <p>Next Generation Science Standards Practices</p> <p>3. Carrying out investigations, 4. Analyzing and interpreting data, 5. Using mathematics, 6. Constructing explanations (for science), 8. Obtaining, Evaluating, and Communicating Information</p> <p>NGSS Disciplinary Core Ideas</p> <p>PS1: Matter and its interactions, PS2: Motion and stability, PS3: Energy</p> <p>NGSS Cross Cutting Concepts</p> <p>1. Patterns, 2. Cause and effect, 5. Energy and matter, 7. Stability and change</p>
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Learning Target Aim : I can investigate the effect of a warm object touching a cold object.

Time	Activity	Describe the task. What are students doing?	Teacher Notes:
5 min	Warm up	<ul style="list-style-type: none"> Students will answer the following question. <ol style="list-style-type: none"> Review-What is a hypothesis? 	The Teacher will circulate around the room, take attendance and ensure that the Warm Up is being worked on.
10 min	Learning Task	Students will be given the lab experiment investigation handout and will be guided on how to conduct the lab experiment investigation with a focus on the Hypothesis, Data Table, and Conclusion.	The Teacher will guide the students on how to conduct the lab experiment investigation with a focus on the Hypothesis, Data Table, and Conclusion.
20 min	Application Task	<ul style="list-style-type: none"> Students will conduct the lab experiment investigation with their table partners with a focus on the Hypothesis, Data Table, and Conclusion 	The Teacher will inform the students to start their lab experiment investigation and will circulate around the classroom to each group to facilitate.
10 min	Summary	<ul style="list-style-type: none"> (5 minutes) Students, specifically the designated reporters, will share their group work. (5 minutes) Exit Ticket-Revisit the Learning Target (Aim) 	The Teacher will listen as students share.

Modifications:

-Students will be given the opportunity to have a help tool (the success criteria on a green sheet of paper) to remind them of how to be successful in today's learning.

-Students will be constantly encouraged as they work to use the discussion protocol (respect everyone's ideas, use accountable talk, support your ideas with evidence, work together as a team) to collaborate with their work.

-Students will be given the opportunity during the Summary portion at the end of the period to ask questions or make comments regarding what the group reporters shared out.

-Student Choice- Students will be given the opportunity to choose their group job (task manager, timekeeper, reporter, material manager)

Grouping:

Students are grouped based off of their performance on the most recent science assessment.

Assessment: The students' lab experiment work and their exit ticket.

Reflection (What worked? What did not work? How can this lesson be improved?)