

	MONDAY (A) A3: 11:44 - 13:26 A4 13:30 - 15:00	TUESDAY (B)	WEDNESDAY (A) A3: 11:44 - 13:26 A4 13:30 - 15:00	THURSDAY (B)	FRIDAY (A) A3: 11:44 - 13:26 A4 13:30 - 15:00
	<p>Objective(s): SWBAT</p> <ul style="list-style-type: none"> * Expand upon their knowledge of conduction, convection, and radiation * Investigate and identify different examples of heat transfer in their daily lives * Work collaboratively to create visual posters we can use as a reference as well as validation for students 	<p>Mr. Pieniazek only teaches classes on A-days.</p> <p>B-day</p>	<p>Objective(s): SWBAT</p> <ul style="list-style-type: none"> * Work collaboratively to create visual posters we can use as a reference as well as validation for students * Identify the result of the Coriolis effect on Earth's wind patterns * Investigation the Coriolis effect on the northern and southern hemisphere 	<p>Mr. Pieniazek only teaches classes on A-days.</p> <p>B-day</p>	<p>Objective(s): SWBAT</p> <ul style="list-style-type: none"> * Recognize wind is produced by differential heating of Earth's surface * Describe how the uneven heating leads to wind and convection cells * Identify patterns of convection in the atmosphere and think critically about the differences on other planets
P	<p>Engage: A demo involving an aquarium, ice, a heater, and food coloring. This will serve as a model of convection in the real world. Students will make claims about what they think will happen.</p> <p>*Start of class reshuffling of the groups to promote community and time to get to know and work with other classmates. *</p>		<p>Engage: Modeling the Coriolis effect (apparent force) via a demo involving student groups each using a globe and dry erase marker. Ask students how the drawn lines compare to their reference line as well as how the north pole -> equator drawn line compares to the south pole -> equator drawn line</p>		<p>Engage: Short self-made instructional video on the Coriolis effect addressing burning questions and summarizing yesterday's lesson.</p> <p>Tea bag rocket demo to show students a real-world example we can visualize of a convection cell. Questions will be asked after small group discussion about what we saw, what we think, and how this may connect to what we are learning today and what we have learned.</p>
L	<p>Explore: Short 12 question Kahoot to serve as formative assessment for types of heat transfer. Students will then work together on a "Mystery</p>		<p>Explore: Students will receive time before the explore to finish their anchor posters on energy transfer.</p>		<p>Explore: Discovering how air moves from high -> low pressure. Drawing out two models together: a no-spin earth model and a model showing how the Coriolis</p>

<p style="text-align: center; font-size: 2em; font-weight: bold;">A</p>	<p>Pixel” activity about heat transfer to strengthen understanding and expand upon examples present in their daily lives.</p> <p>Explain: Students will work in their respective groups to create visual “anchor” posters including the type of energy transfer, short and simple definition, example in the real world, and symbol to represent the type of energy transfer.</p> <p>Elaborate: Tying together/expanding upon what students learned about concerning cyclones last week with the convection demo.</p>		<p>Students will learn more about the Coriolis Effect by completing the choice board starting with a brief background reading (2 options)</p> <p>Students will then watch one of the three videos about the Coriolis Effect.</p> <p>Explain: Students will work in their student groups to answer three of the questions on the choice board. They will use a notecard that the teacher can pick up to give feedback and serve as an exit ticket.</p> <p>Elaborate: Drawing back to the lesson on cyclones during week 1, bring heat transfer learned last week into the picture when hurricanes are concerned.</p>		<p>effect affects and causes global circulation as well as our winds. Building upon our understanding about convection to understand how Hadley and polar cells work.</p> <p>Explain: Short video summarizing the three kinds of global convection cells as well as a brief reading</p> <p>Elaborate: Exit ticket elaboration portion: How do global convection cells compare on Earth and Venus? What about the Coriolis effect? Students will also use Null school simulator to find evidence of the Hadley and polar cells in action today to report their findings.</p>
<p style="text-align: center; font-size: 2em; font-weight: bold;">N</p>	<p>Evaluate: 2-question exit ticket; one low order and one higher order question</p> <p>Summary: Heat transfer will be expanded upon through formative assessment via Kahoot, real world examples, a demo, and an anchoring poster that will be hung to serve as a reference throughout the rest of the unit.</p> <p>Assessment(s):</p> <ul style="list-style-type: none"> -Kahoot -Mystery Pixel -Anchor poster -Exit ticket 		<p>Evaluate: Choice board complete questions turned in before the end of class.</p> <p>Summary: Students will be introduced to the fundamentals of the apparent force known as the Coriolis effect. They will work in groups to complete a “choice board” activity. This new content will hopefully work to tie hurricanes and heat transfer together as well.</p> <p>Assessment(s):</p> <ul style="list-style-type: none"> -Choice board note card -Anchor poster 		<p>Evaluate: Exit ticket consisting of 2 multiple choice questions, 2 free response questions (1 using Null school and one elaborating on the Coriolis effect with Venus). Feedback on my instructional video will also be collected via a Google Form at this time and</p> <p>Summary: Students will learn about global convection and surface winds through an engaging demo involving fire, a follow-along map modeling air movement on an earth that spins and doesn’t spin, and comparing Earth to Venus in terms of the Coriolis effect and air movement</p> <p>Assessment(s):</p> <ul style="list-style-type: none"> -Model maps

					-Exit ticket
Resources:	<ul style="list-style-type: none"> -aquarium -water -red and blue food coloring -hot plate -ice -markers and large white paper posters -Chromebook/computer 		Resource Requirements: <ul style="list-style-type: none"> -mini globes -dry erase markers -notecards -Chromebook/computer 		Resource Requirements: <ul style="list-style-type: none"> -teabag -beaker -lighter -Chromebook/computer -printed copies of Earth with latitude lines -3 different colored writing utensils