| | MONDAY | TUESDAY (A) A4 13:30-15:00 | WEDNESDAY (B) | THURSDAY (A) A4 13:30-15:00 | FRIDAY (B) |
|---|-----------------------|---|----------------------------|--|----------------------|
| | Mr. Pienia | Objective(s): SWBAT * Investigate properties of water such as cohesion through a mini-lab * Discover condensation as well as compare and contrast with evaporation * Investigate changes of state as it relates to the arrangement of particles of matter and energy transfer | Mr. Pienia | Dbjective(s): SWBAT * Make connections between pressure changes and phase changes * Compare and contrast weather maps used to identify global patterns of atmospheric movement * Recognize signs and symbols for fronts and atmospheric pressure on a weather map * Describe the effects of fronts on local weather, and the fronts' direction of motion | Mr. Pienia |
| P | B- azek or on A | Engage: "Magical water" demo as small groups. Students will receive 2 halfway full cups of water and pour water from one to the other to top it off. They will then discover the property of cohesion. | B- azek or on A | Engage: "Cloud in a bottle" demo to tie together pressure changes and phase changes of condensation and evaporation. *Have the students either write or record something about the demo to hold them accountable for their participation and learning | B- zek or on A |
| L | day ly teach days. | Explore: Condensation lab where each table small-group will work together. Students will have roles and will make connections to the short evaporation lab they completed together on Friday. Explain: "Thinking about temperature" in the classroom. Students will make predictions about how temperature varies throughout the classroom based | day nly teach -days. | Explore: Students will first read a brief article about "Weather's central actor: water" Then students will answer four brief questions with their table groups. Phet simulation on pressure Explain: Students will watch a video on the effects of adiabatic cooling in Wyoming. | day hly teached |
| A | es classes | on what they have learned the past 2 weeks Elaborate: Phage changes simulation with some follow along questions for students to answer as a class (PearDeck). | es classes | Followed by direct instruction on adiabatic cooling (still figuring out how to present this in a meaningful way). Elaborate: Understanding weather maps, symbols, and how to interpret them. Expanding upon hurricanes and how we can relate what we just learned about adiabatic cooling to these weather systems. | es classes |

| N | Evaluate: -Peardeck wrap-up Summary: Students will discover properties of water and dive into phase changes with lots of "hands on" activities during this class. Cohesion, condensation, and phase changes will be explored while also leaving room to elaborate on what we know about temperature and how it connects with heat transfer. This will give the teacher an understanding about where students are standing in how they think about this concept after learning about it two weeks ago. Assessment(s): -Thinking about temperature -Follow along questions for simulation | Evaluate -4 question post reading/engage assessment Summary Students will expand upon their learning and understanding from the past two class days to visualize how changing the pressure affects temperature. This will also showcase phase changes in action. Adiabatic cooling will be explored with the lesson ultimately elaborating with how to read weather maps. Assessment(s): -4 question post reading/engage assessment -Exit ticket annotated weather map? | |
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| Resources: | Resource Requirements: - plastic cups -water -jumbo paperclips -chromebook/computer -thinking about temperature copies | Resource Requirements: - plastic bottle -matches -water | |