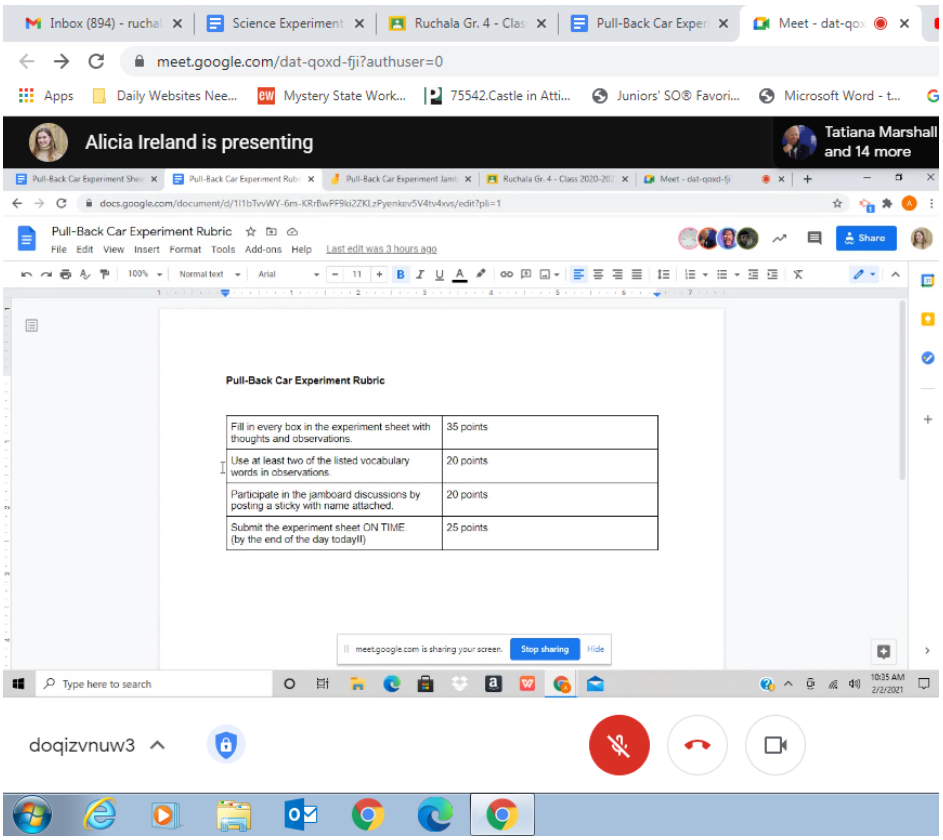
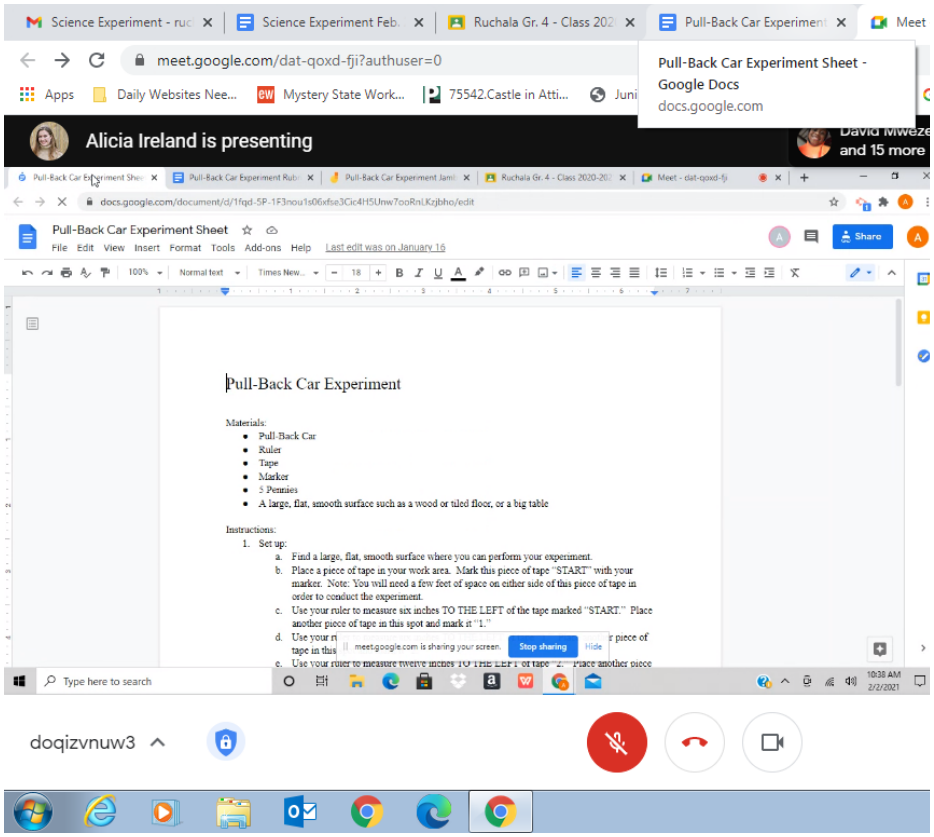
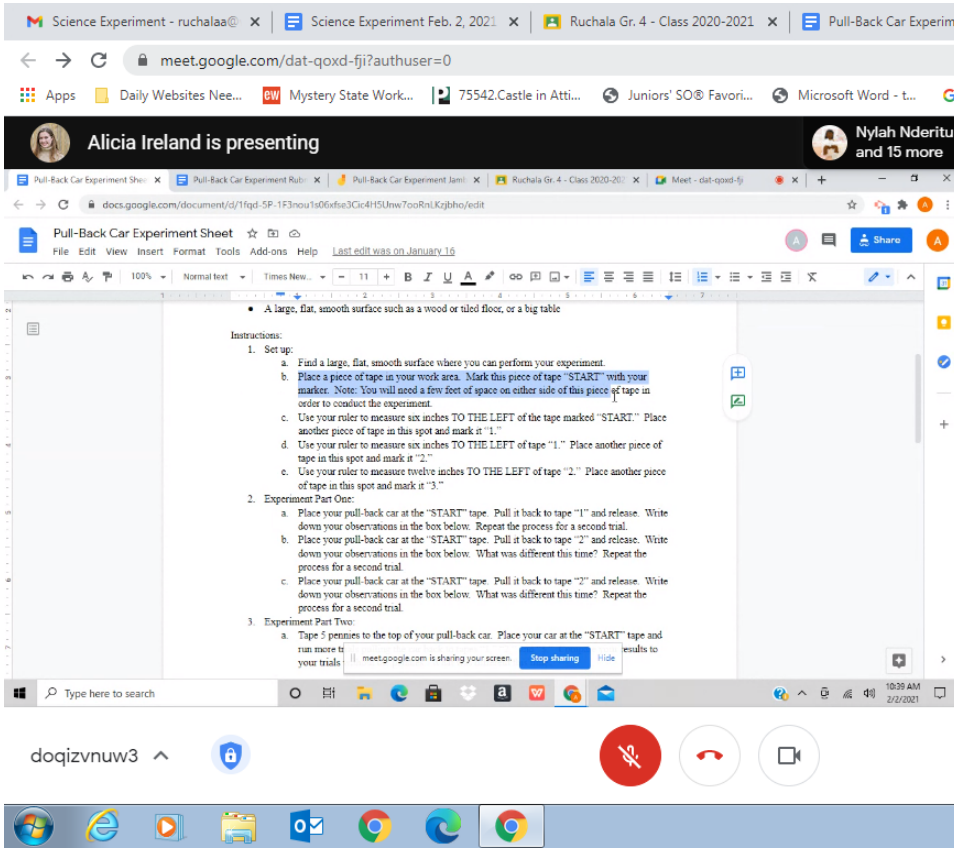
Energy Science Experiment: Feb. 2, 2021
Pull-back Car (Potential and Kinetic Energy)



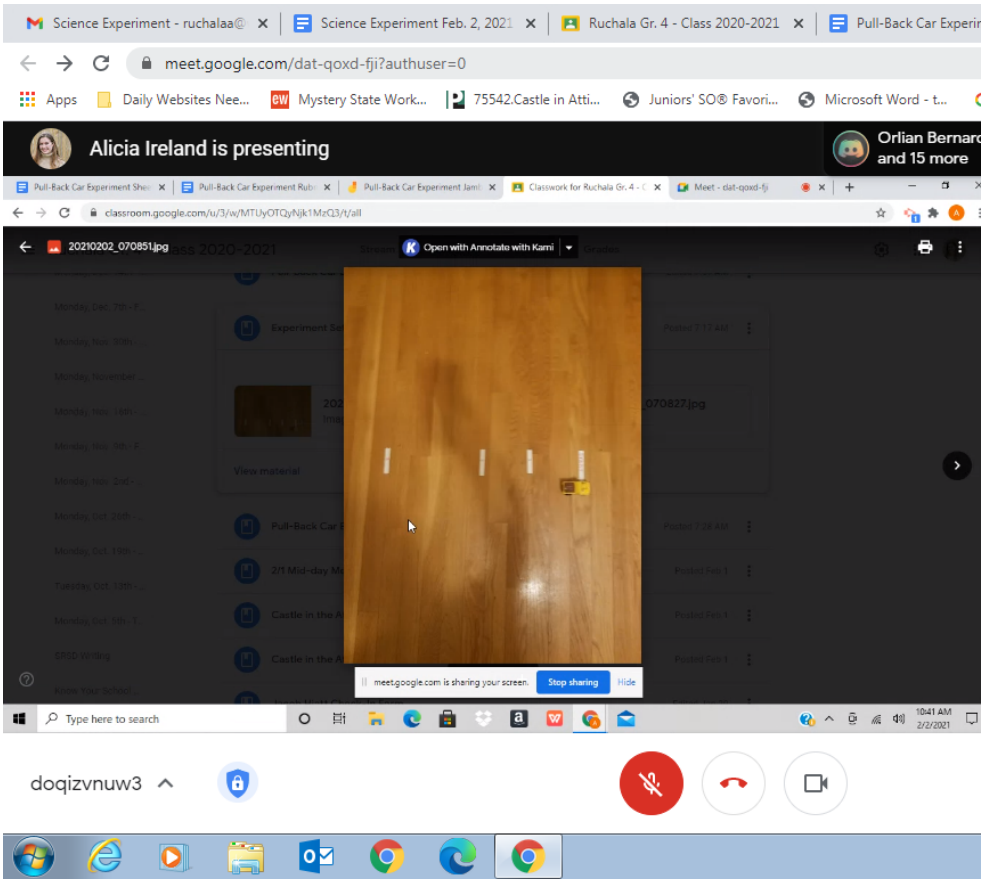
Overview of Pull Back Car Experiment - Rubric



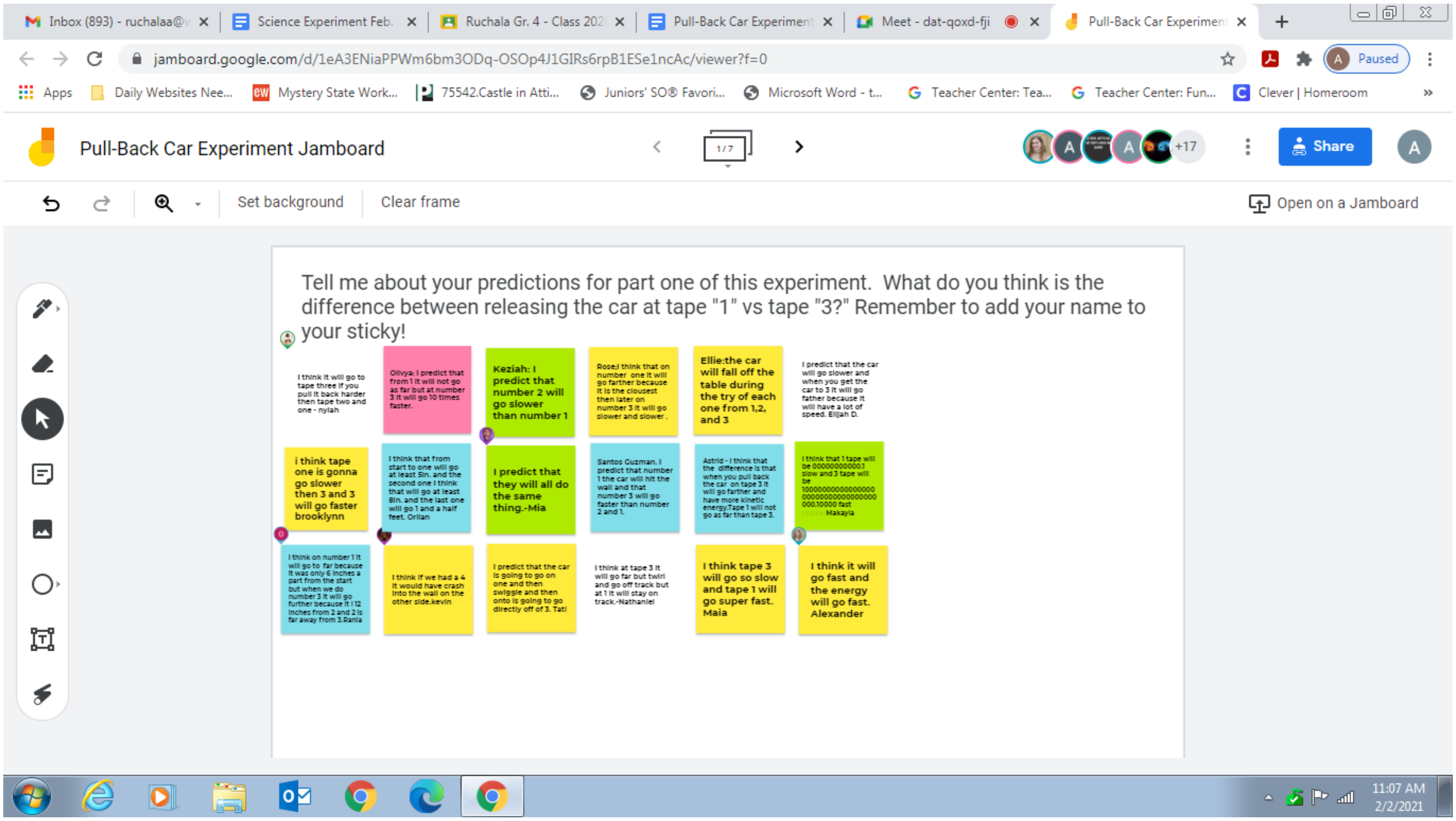
Review of Directions - Pull Back Car Experiment



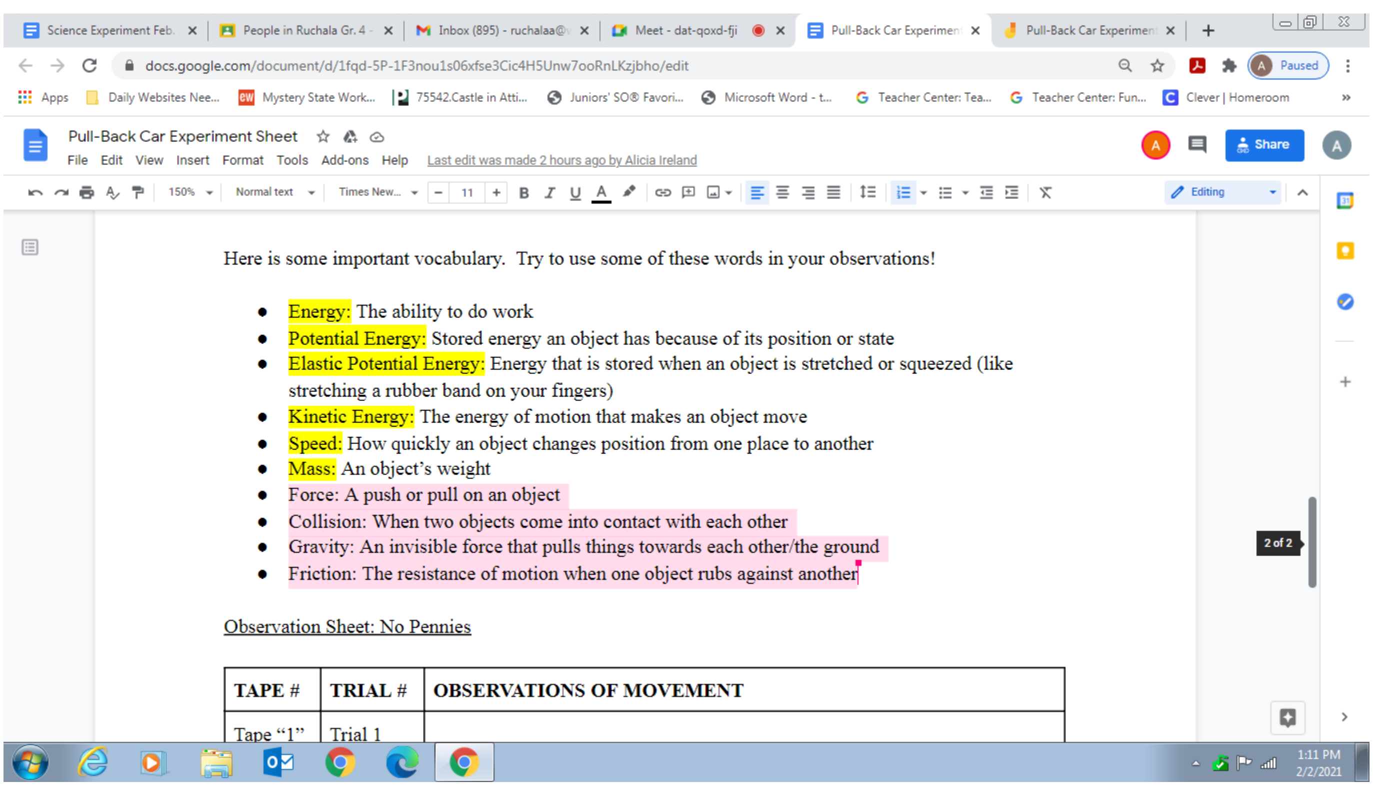
Explicit Directions -Step 1 (Set Up)



Explanation & model of how to set up tape & work area - Part 1 (Set Up)



Pull-Back Car Experiment Predictions - [Pull Back Car Experiment - Jamboard]



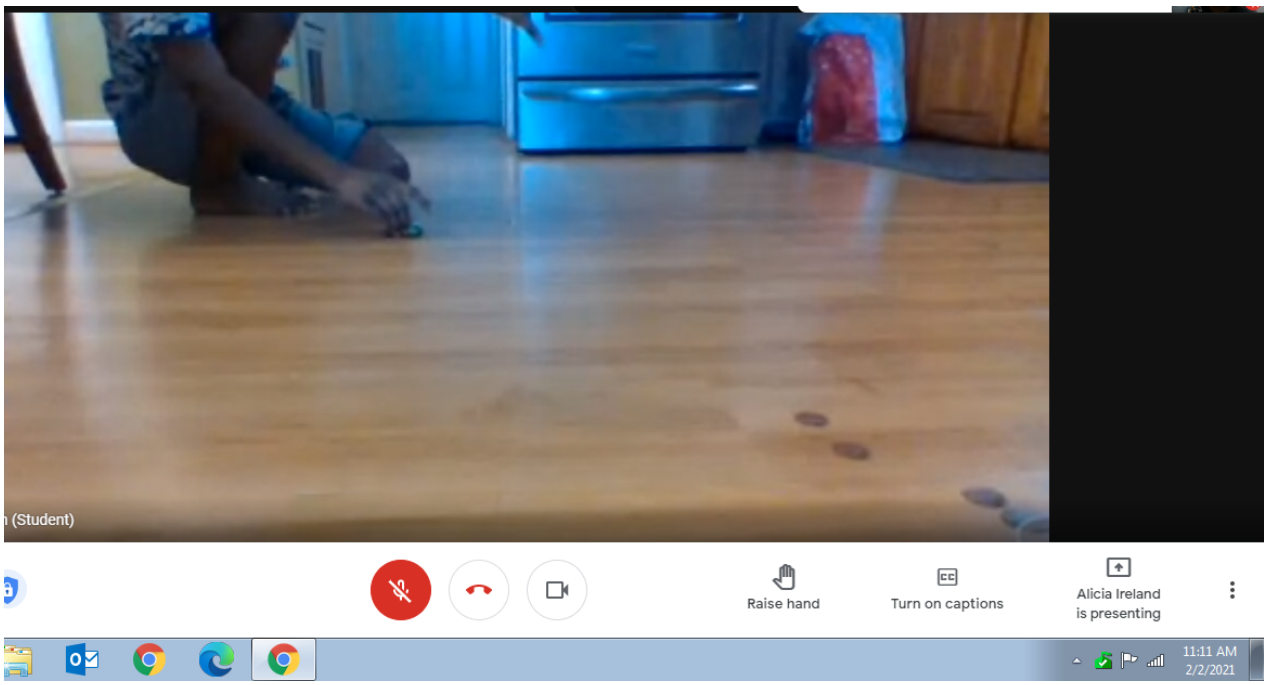
Here is some important vocabulary. Try to use some of these words in your observations!

- Energy: The ability to do work
- Potential Energy: Stored energy an object has because of its position or state
- Elastic Potential Energy: Energy that is stored when an object is stretched or squeezed (like stretching a rubber band on your fingers)
- Kinetic Energy: The energy of motion that makes an object move
- Speed: How quickly an object changes position from one place to another
- Mass: An object's weight
- Force: A push or pull on an object
- Collision: When two objects come into contact with each other
- Gravity: An invisible force that pulls things towards each other/the ground
- Friction: The resistance of motion when one object rubs against another

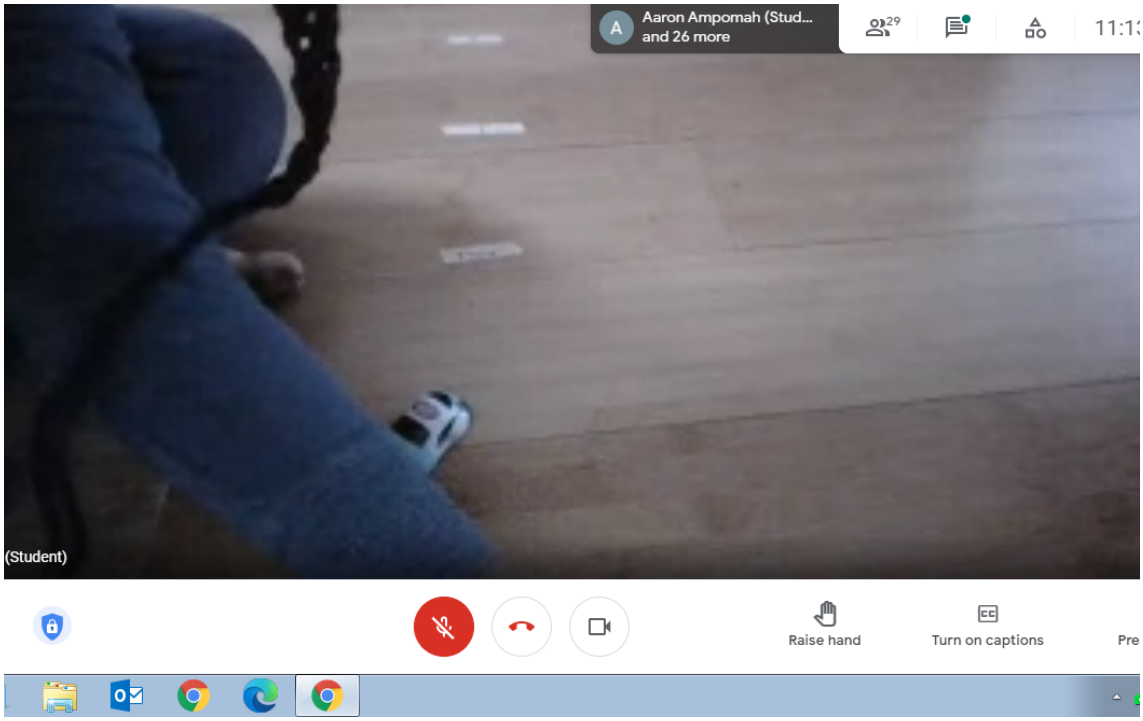
Observation Sheet: No Pennies

TAPE #	TRIAL #	OBSERVATIONS OF MOVEMENT
Tape "1"	Trial 1	

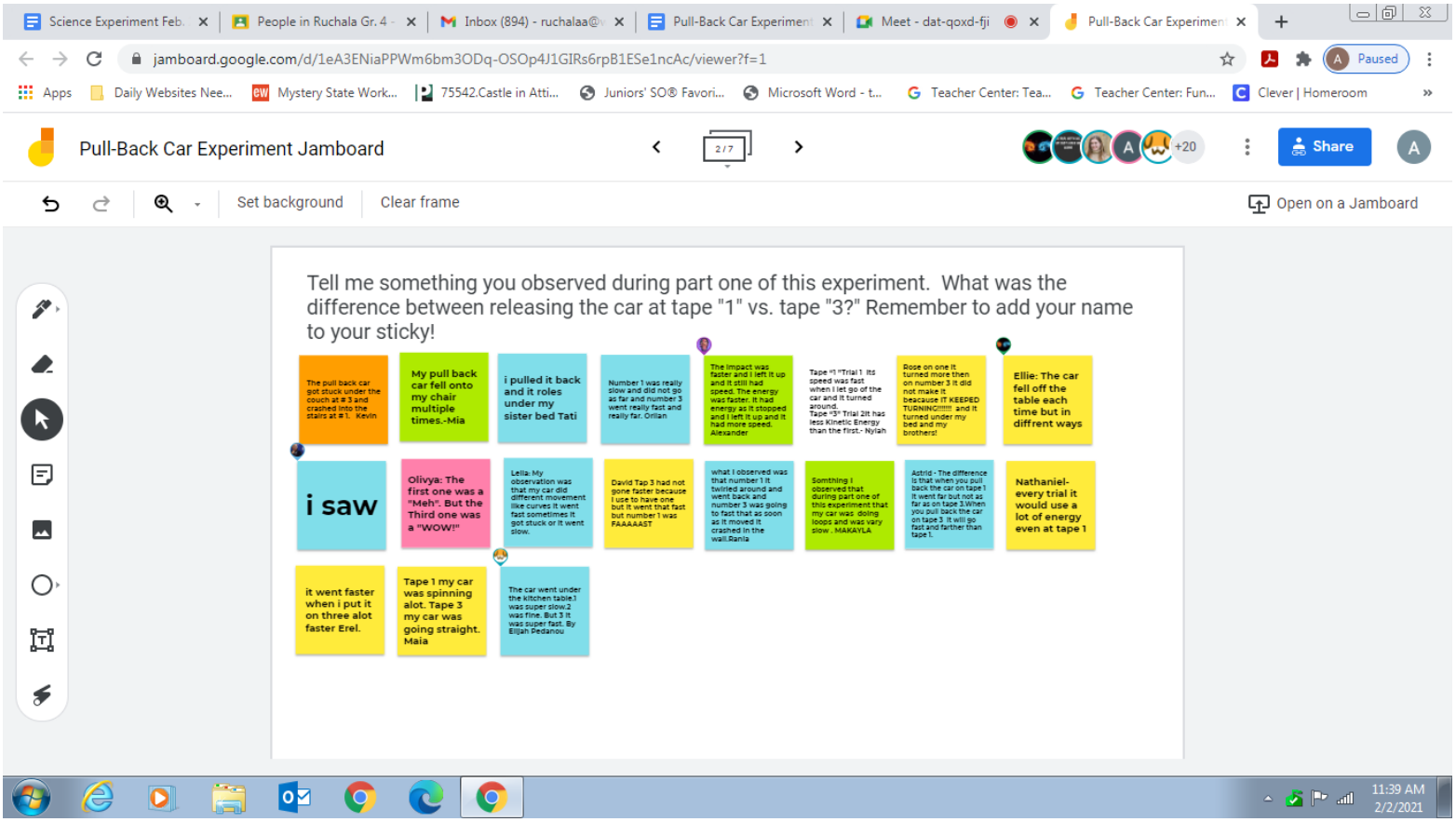
Review of Energy Vocabulary (highlighted in yellow) - Need to include at least 2 of these vocabulary words in written observations



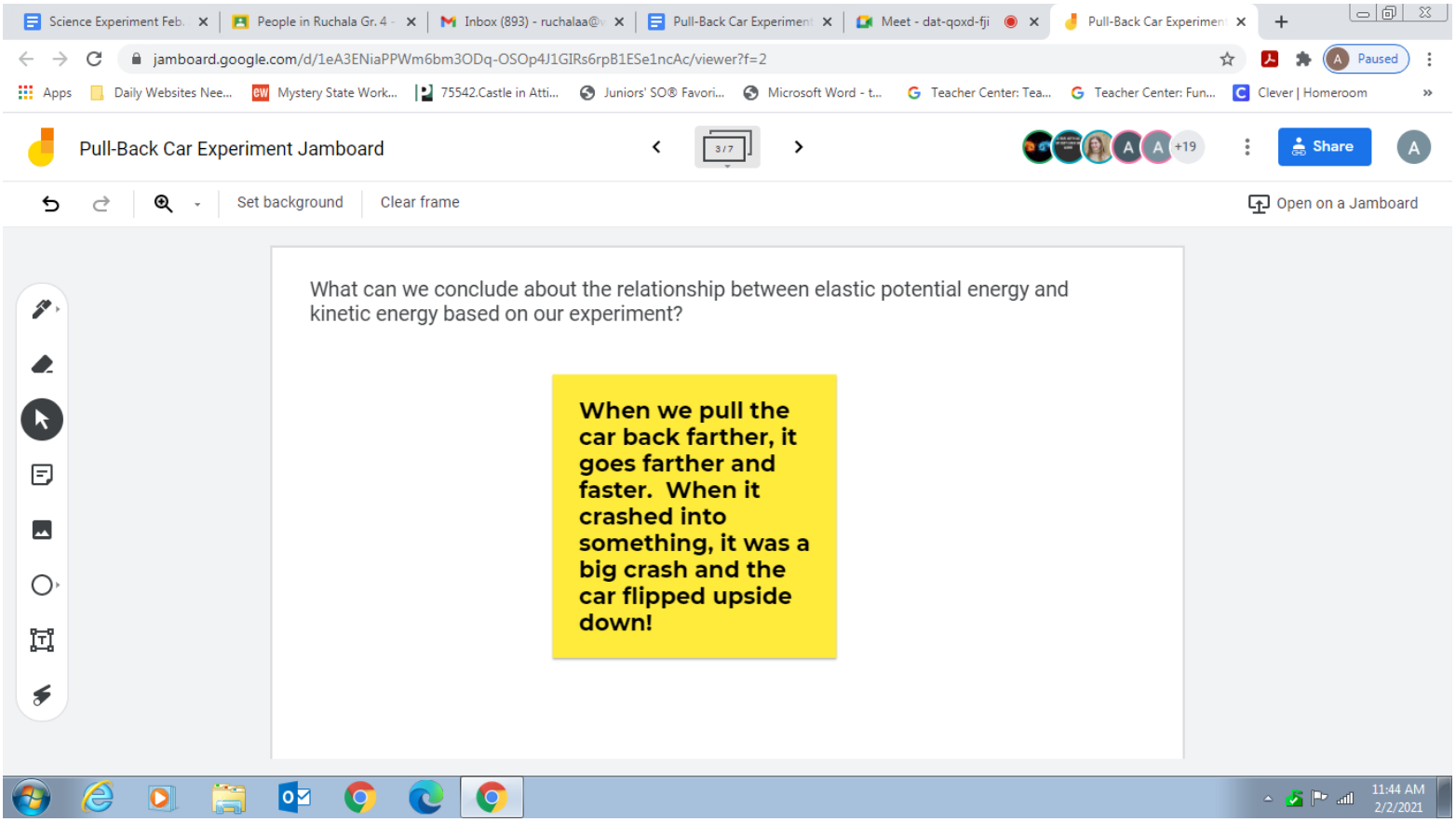
Tape # 1 - Trial 1 Observations of Movement



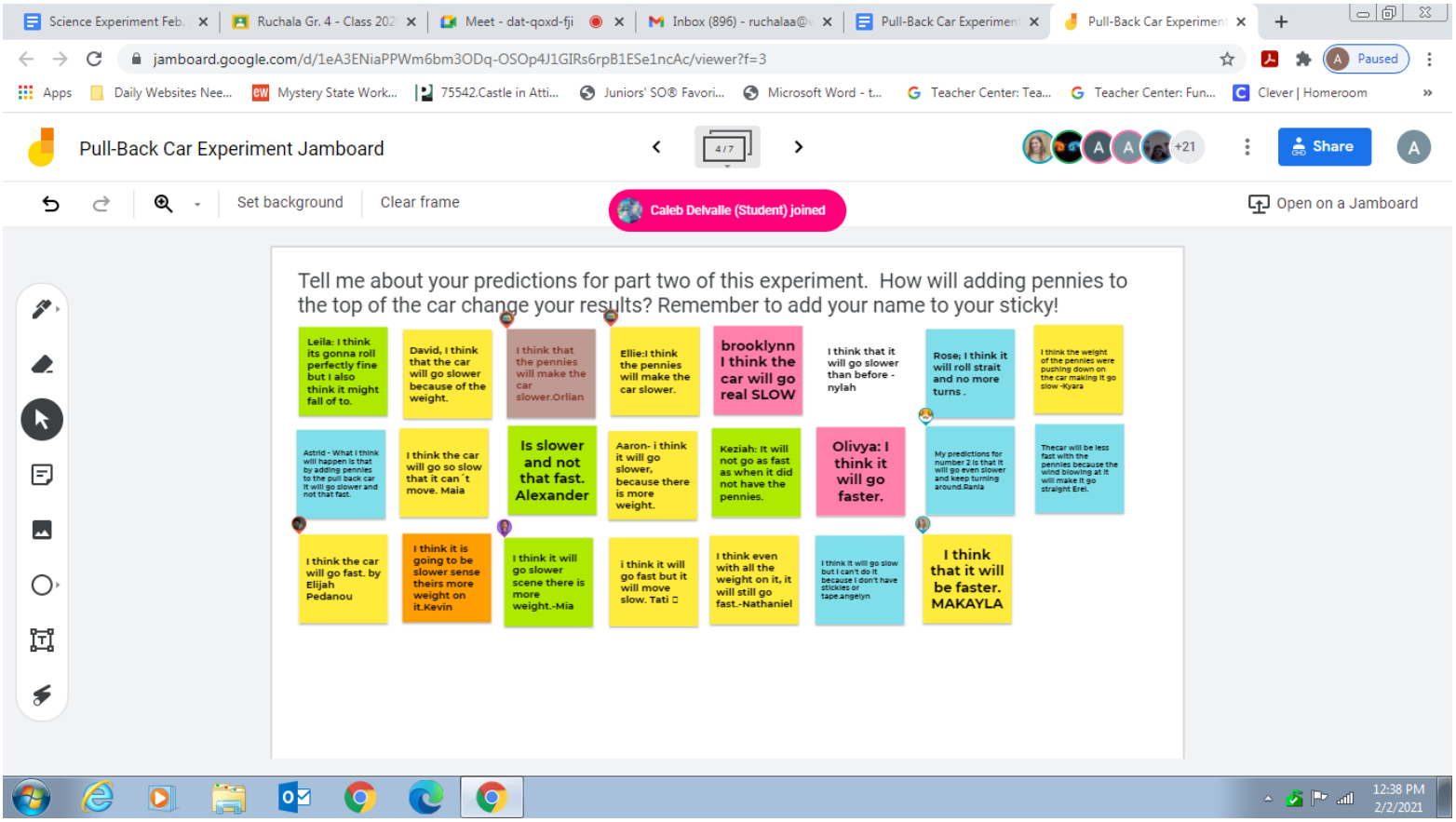
Tape # 1 - Trial 1 - Observations of Movement



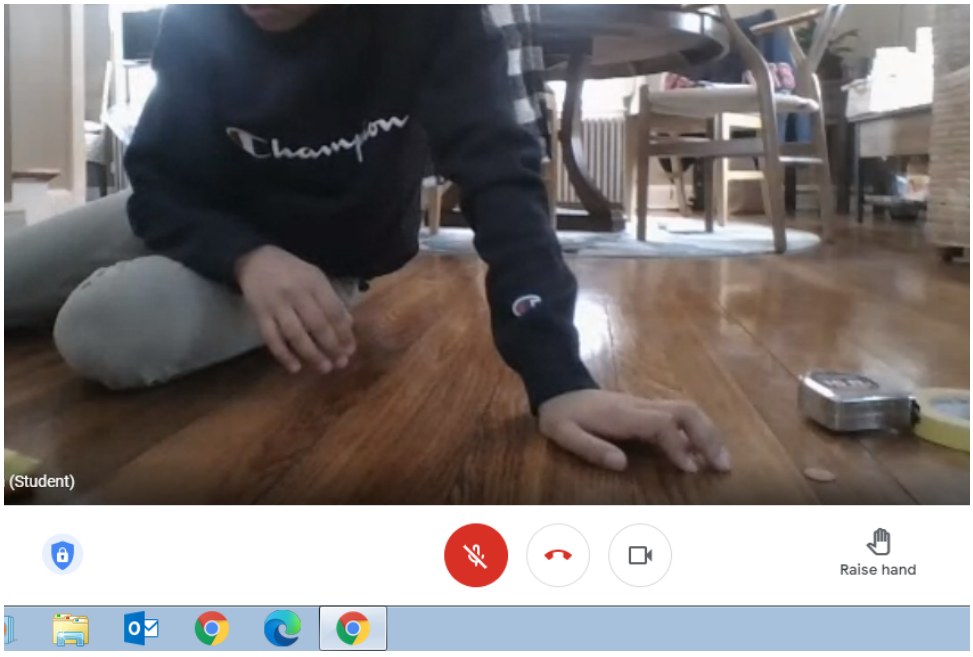
Observations between Tape # 1 vs. Tape # 3 - Jamboard



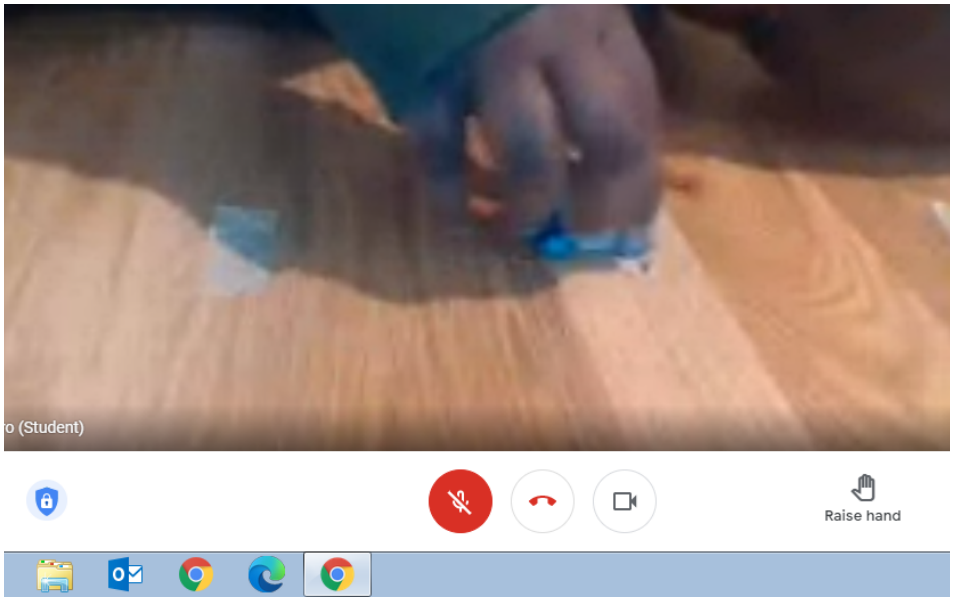
Classroom conclusion - Relationship between potential & kinetic energy



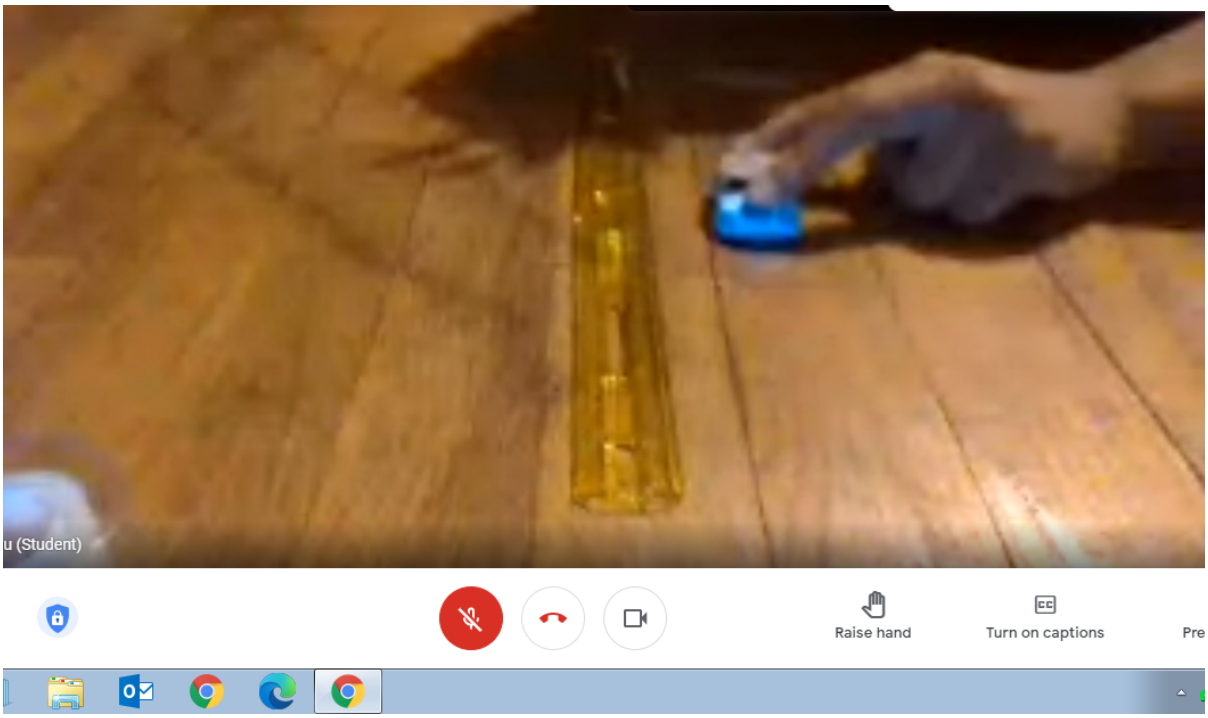
Part 2 - Predictions with Pennies



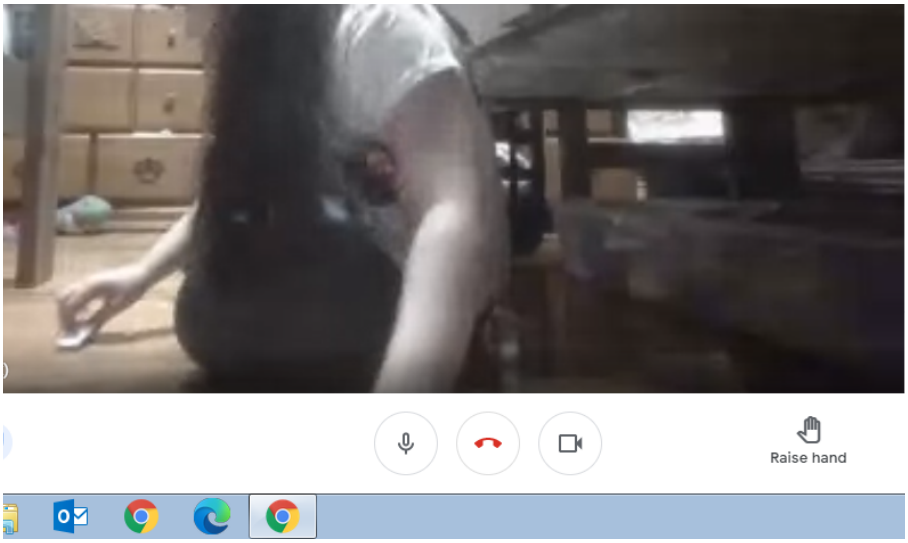
Trials & Observations with Pennies - Part 2



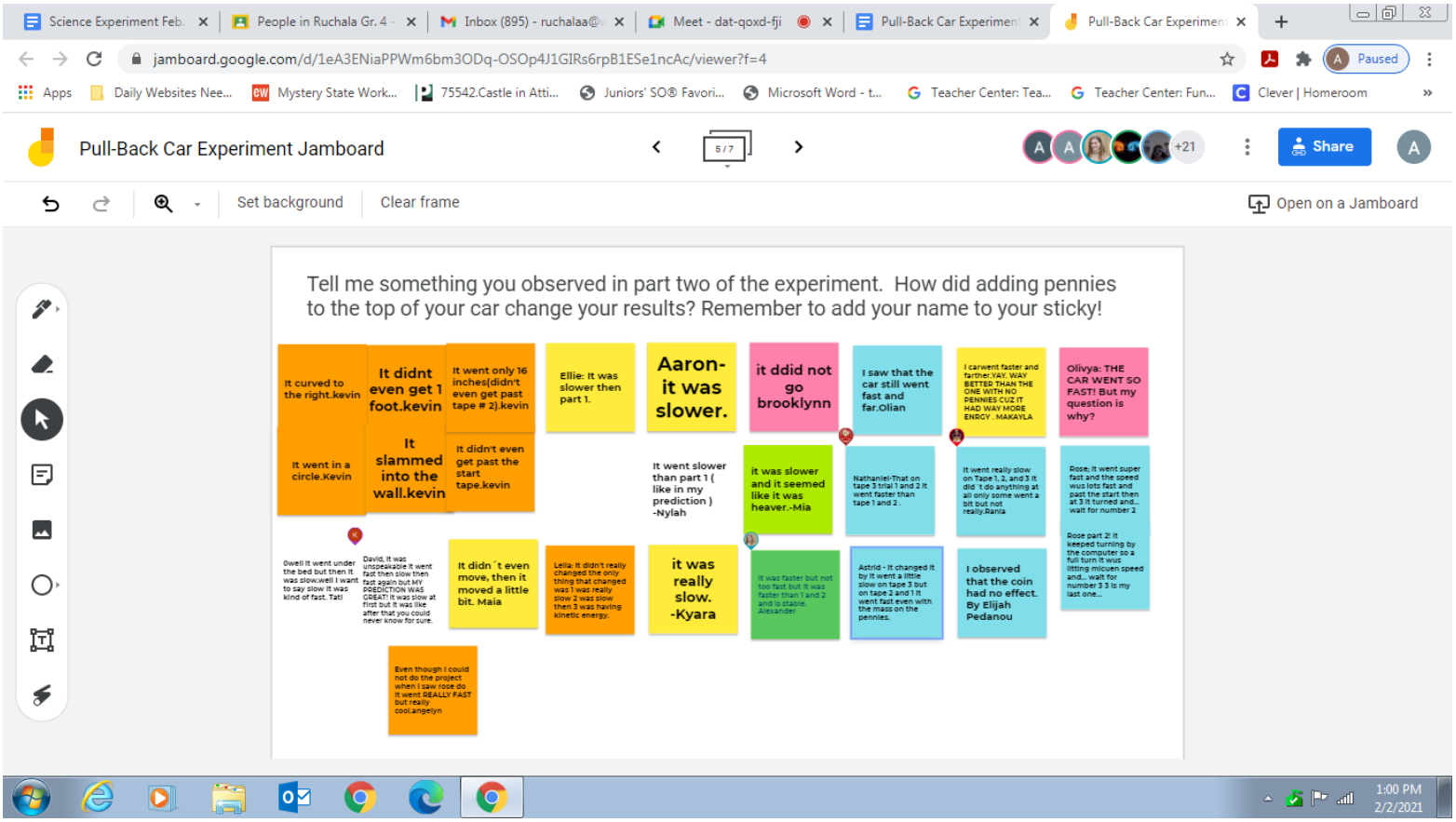
Trials & Observations with Pennies - Part 2



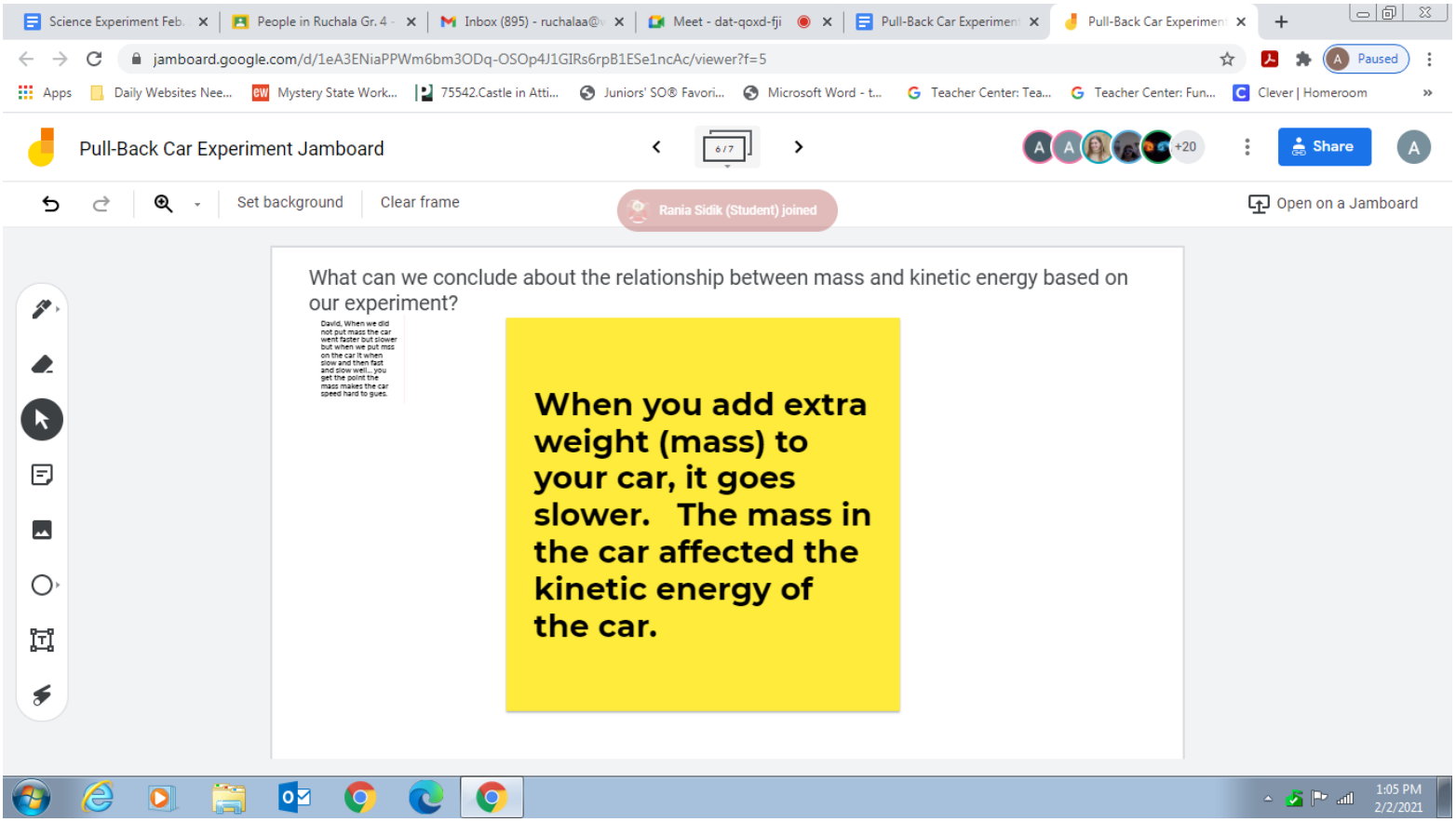
Trials & Observations with Pennies - Part 2



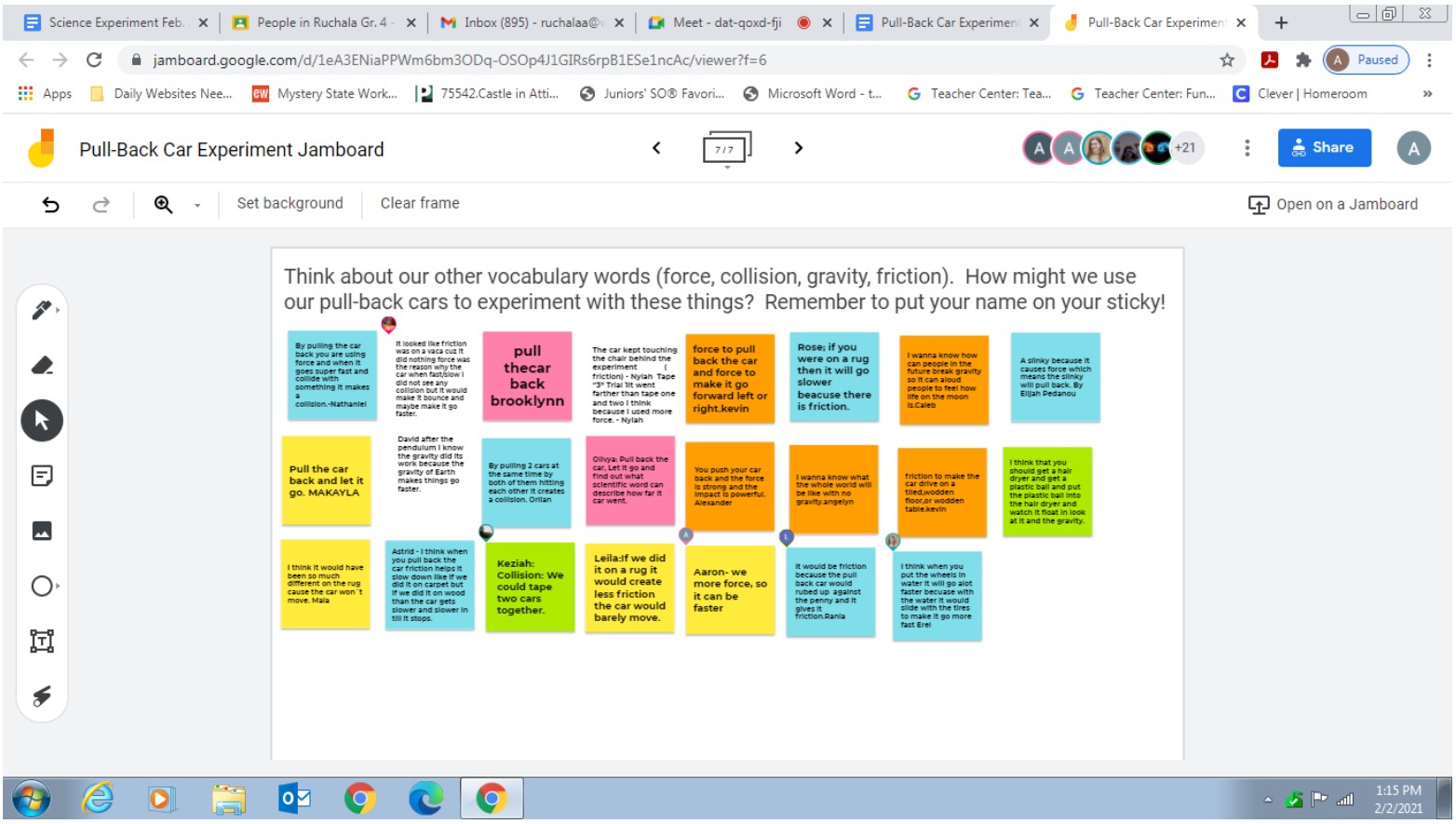
Trials & Observations with Pennies - Part 2



Part 2 Observations with Pennies



Classroom conclusions about the relationship between mass & kinetic energy



Integrating Energy Vocabulary with Future Experiments