Can Crush Lab- Watch the <u>following video</u> to complete the assignment.

Directions- Answer questions 1-7 and complete the reasoning section of CER on the next page.

- 1. Prediction- What would you do to get the can to crush?
- 2. What is happening to the water in the can before you flip it?
- 3. What would you say about the kinetic energy of the gas water molecules inside of the pop can before the flip?
- 4. What happens to the kinetic energy of the gas water molecules inside of the pop can after the flip and why?
- 5. When the water gas molecules cool down what happens to the pressure inside of the can?
- 6. Why/How is there so much water in the can after the crush?
- 7. Draw a picture (or multiple pictures to show what happened).

Answer the Reasoning section of the CER on the next page

<u>Claim-</u> The claim is a statement that provides the researcher's answer to the question investigated.

When putting the hot can upside down into cold water, the can will crush.

<u>Evidence-</u> Evidence is the scientific data selected to support the claim. Scientific data is data (information) that can be gathered through first-hand (empirical) investigations, observations, and/or archived data.

I watched it on the video.

<u>Reasoning-</u> Reasoning is the argument used to determine why the selected data should count as evidence. A strong argument should include:

- personal prior knowledge
- how the investigation was a fair test
- scientific concepts, principles or theories
- ideas, evidence, and arguments of others
- Why.

Your Reasoning- Why does the can crush? Give your answer with words, or you can use pictures with words to help explain what took place. Be sure to use the following words (in **bold**) with your answer: **boil**, **gas**, **pressure**, **volume**, **temperature**, **heat energy**