

Practice Activity: The Case of the Imploding Oil Tank Car

Materials:

Video: Railroad Tank Car Implosion
Empty Soda Can

Tongs
Water in a Clear Dish

Graduated Cylinder
Hot Plate

Procedure: (Always Record ANY Evidences)

Part A: Video:

1. Watch the Video: Railroad Tank Car Implosion.
2. Write down any evidence
3. Re-watch video if necessary

Part B: Soda Can Implosion

1. Measure 10 to 15 mL of water and pour it into the empty soda can.
2. Heat the soda can up on a hot plate until steam is visible.
3. Prepare a clear dish with cold tap water.
4. Use a pair of tongs and invert the soda can onto the cold water

Statements of Understanding

(You have to answer these questions, but the answers are not your final product. You need to use these answers to formulate the content in your paragraph.)

1. What scientific phenomena are we investigating?
2. How are the phenomena in the video related to the soda can?
3. How can you use particle perspective to explain the phenomena base on the evidence you collected?
4. What claims are you making from your explanations?

(Use the Claim-Evidence-Reasoning Template to construct the Statements of Understanding after you answer the questions above)