

Can Air Crush a Soda Can?

(Reinforcement Activity)

Materials

- Aluminum soda can
- Tub of cold water
- Hot plate or other heat source
- Tongs
- Oven mitt

Steps

1. Have students watch as you heat approximately one inch of water in the bottom of a soda can (holding the can with a set of tongs). After the water has boiled for about 30 seconds, remove the can from the heat, immediately inverting it into a tub of cold water. The students will see that the can is immediately crushed.
2. Gather ideas. Help the students connect what they learned in this section to what they have just observed.
3. Ask the students to think about what crushed the can. Remind them to think about non-obvious causes and relational causality. How are each involved here?
4. Ask the students to reflect on the following question: “We said that air pressure behaved passively, but that it was noticeable in certain instances. What is going on here that makes it so noticeable?”

