

RESPONSE SHEET—ENERGY TRANSFER

Julie said,

When you put a bottle of juice in a cooler full of ice, the juice gets cold. That's because the cold transfers to the juice and slows down the kinetic energy of the juice particles.

Comment on Julie's ideas and give your explanation for why the juice gets cold.

No, there is no such thing as cold. Heat from the juice transfers to the ice in

the cooler. First the particles of the bottle in contact with the ice transfer

energy to the ice particles. Then the particles of juice collide with the bottle

particles, and energy transfers from the warm juice to the bottle particles. The

kinetic energy of the juice particles decreases, and the juice gets cold.
