

Exothermic and Endothermic Processes

Energy is either absorbed or released during chemical and physical changes. During an **endothermic** change, energy is absorbed from the surroundings. During an **exothermic** change, energy is released to the surroundings. Two different physical changes are described below. Read each description and decide if the change is exothermic or endothermic.

1. A plastic bottle of water is placed in a freezer. After several hours, the water has frozen solid.
2. A chef places a stick of solid butter in a saucepan, and heats the saucepan over low heat on a stove. After several minutes, the stick of butter has melted.

ANSWERS

1. Exothermic. The liquid water releases energy as it changes into ice.
2. Endothermic. The solid butter absorbs energy as it changes into liquid.