

Heat Movers

Machines that use circulating **fluids** to move heat from one location to another are categorized as heat movers. Since this requires the input of energy, you can force heat to move from a region of **lower** temperature to a region of **higher** temperature.

This is the reverse of what happens naturally, when there isn't the input of energy into a system.

For example, the refrigerator moves excess heat from inside the refrigerator, to the outside in order to keep food **cold**. This is why if you were to put your hand to the side or underneath most refrigerators, you would feel **heat**.

In order for the refrigerator to work properly, the door of the refrigerator must be kept **closed**, so that there is a difference in temperature between the environment inside the refrigerator and the environment outside the refrigerator.

For this reason, it is impossible to cool a warm room by leaving the door of the refrigerator **open**.

Other examples of heat movers are **air conditioners**, **heat pumps** and **freezers**.