

C2.2 Cooling without electricity – Tracking down technology

1. Some possible guesses:
 - “Cool air is pumped into the refrigerator.”
 - “Coolant flows in the interior.”
 - “All inner surfaces are cooled evenly.”
2. The following areas feel particularly cold (depending on the design):
 - Surface on the rear wall
 - Bottom surface above the vegetable drawer

NOTE: The following areas feel less cold: Side surfaces, inner surfaces of the door.
3. The warm coolant releases its heat to the surroundings via the cooling fins.
4. The refrigerator cools the interior and simultaneously heats the exterior.
5. Heat from the refrigerator is released to the surroundings via the coolant.
6. Item c of the coolant circuit.
7. Electricity is needed for the compressor. The pump runs with electricity.
8. The refrigerator should always be closed tightly or else warm ambient air could flow into the refrigerator and prevent it from reaching the cooling temperature. It would run constantly and use up a lot of electricity.
9. Ice formation on the cooling surface prevents the heat exchange between the air in the refrigerator and the cooling surface. By the way, the ice comes from the humidity.
10. Cooler bag, air conditioner, heat pump, etc.