



Do It Yourself (DIY) Activity

Air Conditioner DIY

 Duration: **30-60 min**

 Difficulty: **Medium**

 Cost: **\$0 to \$20**

Build a cooling device to reduce the impact of a heat wave!

Material List

- 1** Styrofoam cooler
- 4** Frozen water bottles
- 1** Plastic 90-degree tube
- 1** Small household fan
- 1** Marker
- 1** Serrated steak knife Adult use only!
- 1** Roll of tape and streamers optional

Instructions

- 1** Place the angled tube on top of the cooler lid and trace it with a marker.
- 2** Then place the fan face down on the cooler lid and trace it as well.
- 3** Ask an adult to carefully cut out the circles you just traced.
- 4** Place all the frozen water bottles in the cooler and put on the lid.
- 5** Insert the 90-degree tube into its hole.
- 6** Lay the fan on top of the hole you cut for it, facing inside the cooler.
- 7** Tape short streamers around the edge of the tube opening (optional).
- 8** Plug in the fan. You should feel cool air coming out through the tube!

Note: Exact instructions may vary based on the size of your cooler, fan, and tube.

How It Works

Air that is blown into the cooler by the fan is cooled by the ice inside the cooler. That air is then forced upward and out through the tube as more air is pushed inside by the fan. The air that is blown out through the tube is cooler than the air that the fan blows inside.