

COOL IT

Description:

Teams will construct a container (using provided materials) that will prevent an ice cube from melting.

Number of Participants: 2

Approximate Time: 45 minutes

The Competition:

1. Each team will be provided a uniformly formed ice cube, a small plastic bag with fastener (sandwich type without the Ziploc top), and assorted materials (e.g., Styrofoam cup, Styrofoam chips, metal cans, plastic cups, foam, newsprint, fabric scraps, various types of insulating materials). CAUTION: Do not use commercial grade fiberglass because of the dangers of inhalation and abrasion to skin and eyes.
2. Each team will build a container from the assortment of materials. Place the ice cube in the plastic bag and tie tightly to prevent the loss of water should the ice cube melt. Place the bag containing the ice cube into the insulated container. After one half hour remove the bag and its contents from the container. Carefully remove the ice cube from the bag and pour the accumulated water into a metric measuring device (e.g., cup, graduated vial or cylinder).

Scoring:

1. The team with the least amount of water from the melted ice cube will be the winner. The judge will do the measuring for each team.
2. As an alternative, the ice cube in the bag may be massed before and after the time limit. Using this system, the resultant water from melting will be poured off before the final massing to determine the cube that lost the smallest mass.

