

**Keep It Cool**

**Student Handout**

Name(s): \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

**Goal**

Keep an ice core frozen by avoiding 1) the transfer of thermal energy to the interior of your ice core container and 2) limiting the transformation of light energy to thermal energy.

**Challenge**

Design and construct an ice core container by using the materials listed below. There are no limits to the size of the device. However, it should be able to independently hold the ice core and easily remove it at the conclusion.

**Materials Available**

Sample Vial* with Ice Core (1)	Newspaper Sheet (1)	Aluminum Foil (1)
Plastic Baggie (1)	Black Paper Sheet (1)	Fleece* (1)
Napkin (3)	White Paper Sheet (1)	Foam* (1)
Packing Tape (0.3 meter)	Cardboard Piece(1)	

\*these objects must be returned without damage at the conclusion

**Design Diagram for Ice Core Container with Features Labeled**

**List of Features with the Purpose of Each Provided**

**Amount of Meltwater:**

**Amount Compared to Peers:**

**Resigned Ice Core Container with Features Labeled**

**List of Features with the Purpose of Each Provided**