Heat

When the team are on the ice it is very important that they keep warm. The team will keep warm by wearing special clothing, have a look at the expedition website to see the types of clothes the women will be wearing.
(http://www.kasperskycommonwealthexpedition.com/about-the-expedition/clothing.cfm)

Does the material used to make the clothes have any effect on how warm the team will be?

Equipment

- 4 cups (cups can be made from anything (paper, plastic, metal) as long as all the cups are the same)
- lid for each cup (maybe tin foil or cardboard on the top of the cup)
- 4 thermometers
- 3 different types of material
- hot water

Experiment

1. Make a lid for each cup and push a thermometer through the lid.
2. Wrap 3 of the cups each in a different material.
3. Pour very hot water into each cup **taking care not to burn yourself**.
4. Take the temperature in each cup.
5. Take the temperature every 30 seconds and draw a graph of the results for each material.

Why should the materials be of the same thickness?

Why have you left one cup uncovered?

Why does the temperature fall?

Where does the heat go?

Do they all lose heat equally?