

“Keeping it Hot” Project

You and a partner will be required to build a thermos. Your thermos will need to keep boiling water warm for 1 hour. There will be a prize for the group that creates a thermos that keeps the water the warmest.

The Checklist

- Research – Research different strategies that keep heat in.
- Blueprint – Draw out a plan of what your thermos will look like
- Materials – What will you need to make your thermos?
- Construction – Building the thermos.
- Testing – Testing the Thermos
- Reflection – What could have improved your thermos?

Your thermos must include the following:

- ✓ A capacity to hold 250ml
- ✓ A removable lid which allows a liquid to be poured inside
- ✓ All the steps from the checklist completed (If you show up with your created thermos, but none of the previous work completed, you will not be participating)

Your thermos can use a variety of materials, however, the following materials are **not** permitted to be used in your project.

- ◆ Containers that have been made to insulate heat (Travel Mugs, manufactured thermoses, etc)
- ◆ Electronic technology that create heat.
- ◆ Chemical items that produce heat.

Group Members: _____

“Keeping it Hot” Project Research

On this page, you will be writing down your researching the different characteristics of effective thermoses as well as the type of materials you should use and avoid. You will want to keep this information handy when you start creating your blueprint for the thermos.

Characteristics of Effective Thermoses

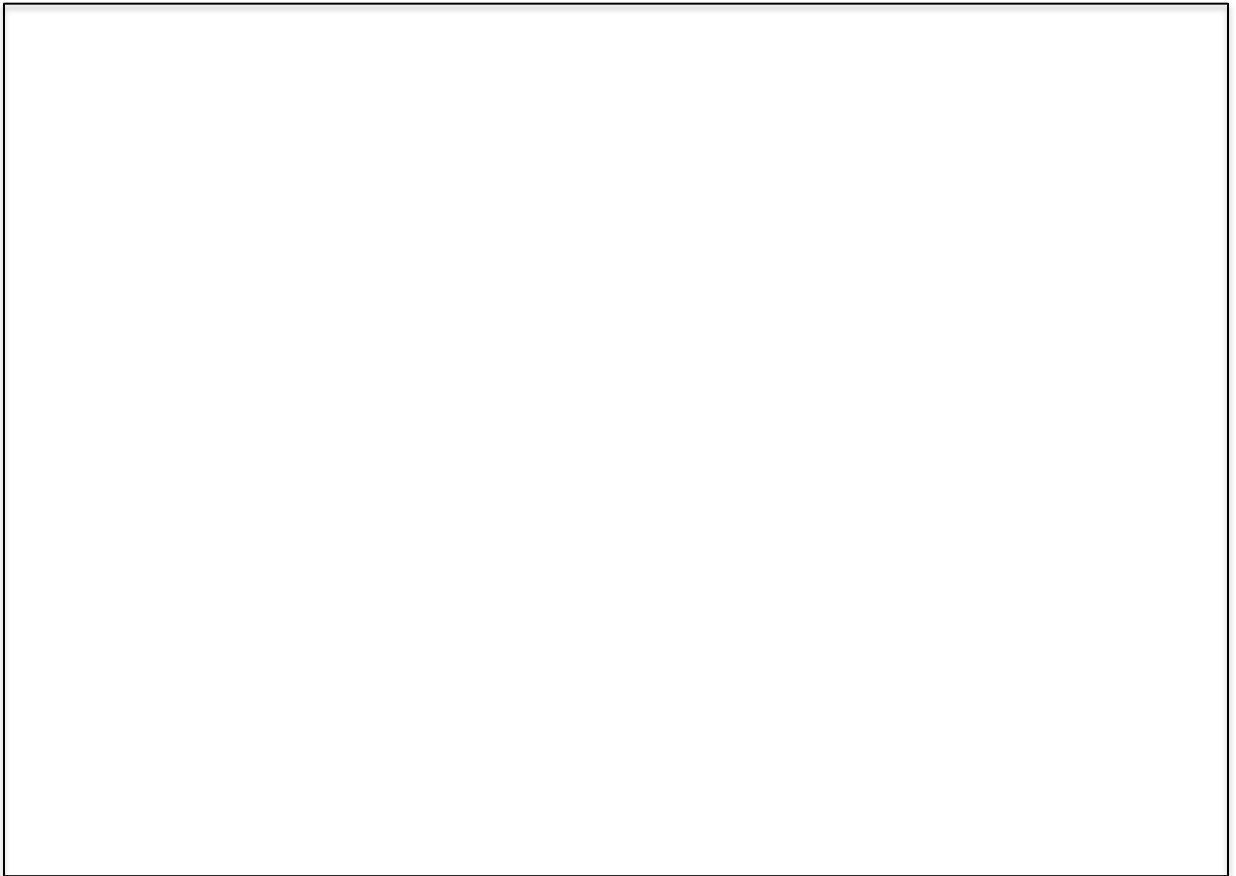
Materials found in Manufactured Thermoses.

Materials you want to avoid using.

Group Members: _____

“Keeping it Hot” Project The Blueprint.

In the space provided below, please draw out and label the blueprint of what your thermos will look like.



Identify what materials are being used where by using the numbers that correspond to the materials below.

Materials Used

- | | |
|----|----|
| 1. | 5. |
| 2. | 6. |
| 3. | 7. |
| 4. | 8. |