



You are going to test four different materials. Plan your investigation by answering the questions below:

Fill in the missing word in this sentence:

We are investigating which \_\_\_\_\_ keeps hot drinks hot for the longest amount of time.

What will you change?

- the type of material ☐
- the size of material ☐
- the size of the container ☐
- the amount of liquid ☐
- the starting temperature ☐
- the location of the container ☐

What will you keep the same?

- the type of material ☐
- the size of material ☐
- the size of the container ☐
- the amount of liquid ☐
- the starting temperature ☐
- the location of the container ☐

Which material do you think will keep the liquid the hottest for the longest amount of time?

Which material do you think will keep the liquid the hottest for the shortest amount of time?

Material	Starting temp.	Temp. after 5 mins	Temp. after 10 mins	Temp. after 15 mins	Temp. after 20 mins	Temp. after 25 mins	Temp. after 30 mins
	°C	°C	°C	°C	°C	°C	°C
	°C	°C	°C	°C	°C	°C	°C
	°C	°C	°C	°C	°C	°C	°C
	°C	°C	°C	°C	°C	°C	°C

The material that was the **best** at keeping the liquid the hottest for the longest amount of time was \_\_\_\_\_.

The material that was the **worst** at keeping the liquid the hottest for the longest amount of time was \_\_\_\_\_.

Why do you think these materials were the **best** and **worst** at keeping the liquid hot?