

Performance Assessment Stations

Performance Station: Heat

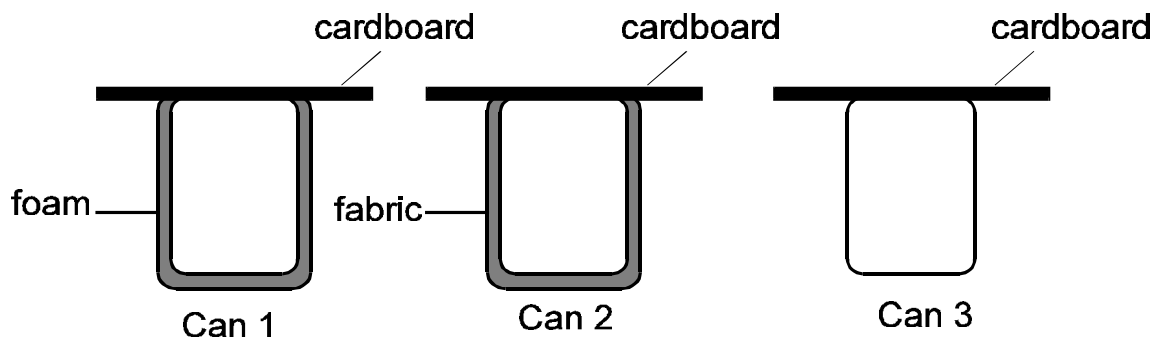
Factors of Scientific Literacy: B12; C10; C11; D1; E3; E7; E10

Learning Objective: To measure the temperature of substances

Note to Teachers: The fabric should be cotton or wool.

Materials

- 3 metal cans
- hot water
- thermometer
- cardboard
- masking tape
- foam rubber
- fabric



Procedure

1. Wrap Can 1 in foam.
2. Wrap Can 2 in fabric.
3. Leave Can 3 bare.
4. Fill each can with hot water.
5. Measure the temperature and record the results.
6. Cover the cans with cardboard.
7. Predict which container will keep the water the warmest.

	Temperature		
	Initial	After 5 min.	After 10 min.
Can 1			
Can 2			
Can 3			

Explain why you think this.

8. Measure the temperature of the water after 5 minutes. Record your results on the table.

9. Measure the temperature of the water after 10 minutes. Record your results on the table.

10. Which container kept the water the warmest?

Were you right?

Yes

No

Explain why that can kept the water the warmest.

11. If you did this experiment with cold water, which can would keep the water cold the longest?
