

Keeping Warm Investigation

A group of children wanted to design a container to keep a jacket potato warm. They needed to test which material would be the best insulator.

They decided to wrap warm jacket potatoes in different materials to see which kept the potato the warmest for the longest time.

9. Which variable will be kept the same?

10. Which variable will change?

11. What safety issue would the children need to consider?

12. Why did the group decide to test a potato with nothing wrapped round it?

Here are the results of the investigation:

	Oven temperature	Temperature after 20 minutes	Potato temperature after 40 minutes	
Potato wrapped in nothing	200°C	85°C	54°C	55°C
Potato wrapped in tin foil	200°C	91°C	82°C	71°C
Potato wrapped in newspaper	200°C	92°C	84°C	76°C
Potato wrapped in cotton wool	200°C	96°C	92°C	88°C

POP quiz. Properties of materials and their changes _ PART TWO

Name:

13. Look at the table and decide:

a) What should the title of the last column be?

b) Which result looks like an anomaly?

c) What would your prediction be for the potato wrapped in cotton wool after 80 minutes?

14. Which material would you use to wrap the jacket potato and why?