

LESSON 9: WRAP UP

TASK	Design a sleeve that will prevent a bottle of warm water from cooling.
BACKGROUND	<p>Types of clothing:</p> <ul style="list-style-type: none"> ▪ What clothes might you wear in a cold place? ▪ What would you wear in a very hot place? ▪ What would be good to wear if it was very wet? <p>THINK... How might you keep:</p> <ul style="list-style-type: none"> ▪ Cool on a hot day? ▪ Warm on a cold day? ▪ Dry on a wet day? ▪ Hydrated when it is very dry and hot? <p>What is the most comfortable temperature in our classroom to work in? Does this vary according to season?</p> <p>Do we know where the thermostat is situated and how it works?</p> <p>THINK... How does the amount of clothing we wear affect our ability to work in the classroom?</p> <p>How would you cope on a windy day?</p> <p>There is a saying in New Zealand: There is no such thing as bad weather, only bad clothing. What do you think this means?</p> <p>If we can keep heat in we can save energy. This is very important if we are going to look after our world and save energy. So...</p> <ul style="list-style-type: none"> ▪ How can we make an insulation sleeve that will keep a bottle of water warm? ▪ Look at the following materials: foil, glue, cloth and paper.

PROCESS

The Experiment

Plan in your groups:

- What material you will use.
- How you will wrap the bottle.

The Test

- Take the temperature of the water in the bottle.
- Leave the insulated bottle for 10 minutes. Record the temperature.
- Take the temperature at 10-minute intervals for 1 hour.
- Share your results.

CONTINUED ON NEW SHEET...

LESSON SUCCESS

- Which material made the best sleeve?
- Which material would keep you most warm in very cold weather?

DEVELOPMENT

- Discuss if water that needs to be hot should be insulated.
- Investigate what needs insulating in school/home.
- Invite the premises manager to talk to the children.