



## Thinking Abilities and General Knowledge Activity for 42 to 48 Months

### The Greenhouse Effect

*Along with finding out what "green house effect" means, children will gain experience in investigating and drawing conclusions based on object comparison.*

#### Materials:

- Zippered sandwich bag
- Sunny window
- Two identical thermometers (digital is easier to read)
- Poster board

#### What to do:

1. Discuss the word "greenhouse effect" and have the child share her experiences by asking questions. What kinds of things do you find in a greenhouse? Is it warm or cool inside the greenhouse?
2. Have the child look at the thermometers and record the temperatures on the poster board. Ask questions: Is the temperature "the same" or "different" on the thermometers?
3. Place one thermometer in a clear plastic bag. Put both thermometers side by side in a sunny window.
4. Have the child predict whether the temperature will be "higher" or "lower" in each of the bags after 10 minutes.
5. Check the results after 10 minutes and record the temperatures on the poster board. (The thermometer inside the bag should read a few degrees higher.)
6. Quiz the child again: Why is one temperature higher than the other? Discuss how the sunlight passes easily through the clear bag (representing the windows of the greenhouse). Once the light is inside the "bag," it is trapped and can't escape, so it turns into heat. The bag warms inside and causes the temperature to rise, making an ideal environment for plant growth.

