How can you build a solar house?

<u>C48-49</u>

Plan: To make a model of a solar house, I will use these materials:

Predict: When I place both models in the sunny spot for an hour, I think:

A. the temperature inside both models will stay the same as room temperature.

B. the temperature inside the non-solar house model will be higher than in the solar house model.

C. the temperature inside the solar house model will be higher than in the nonsolar house model.

D. the temperature inside both models will be higher than room temperature, but the same as each other.

E. (Write your prediction here if it is not listed in A-D.)

Measure and Record: (include degrees Celsius or degrees Fahrenheit labels)

| Time | Non-solar House | Solar House | Room |
|----------------|-----------------|-------------|-------------|
| | Temperature | Temperature | Temperature |
| Start time | | | |
| One hour later | | | |

Draw Conclusions:

On the back of this paper, draw or describe what you think happened to the radiant waves of energy when they reached the solar house and when they reached the non-solar house. You may need to do a bit of research using an encyclopedia or online source such as OneKey or Wikipedia, with a parent's permission and supervision! Be sure to label or use subject nouns telling which drawing or description goes with each model.

Apply What You Know: (answer in complete sentences on the back of this paper)

1. Using what you have learned about insulation, what are some ways to keep heat in your solar house longer?

2. What does this experiment tell you about ways to keep your family's home warmer in winter?