Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Air Masses in a Box**

Air masses are large masses of air in the lower troposphere that take on the properties of the land/water below them.

In this simulation you will get to feel how an air mass works. In front of you are three boxes. Each has a small cup of water inside of it with a different temperature of water. Below is a drawing of the set up.

Stick your hand into each of the boxes. On the line below the correct drawing, write if the air feels “hot”, “cold”, or “like the air in the room”. Also write down the time in the “temperature of air at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” box.

|  |  |  |  |
| --- | --- | --- | --- |
| ***Drawing*** |  |  |  |
| ***Water Temperature*** |  |  |  |
| ***Temperature of Air at 8:00 am*** |  |  |  |
| ***Temperature of Air at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** |  |  |  |

*Answer the following questions back at your seat:*

1. How is the air in the box similar to an air mass?
2. What would happen if we took the lid off of the boxes? What would happen to the air? Explain this for **each** box. Think carefully about temperature and pressure!