

# HOME/SCHOOL CONNECTION

## Investigation 3: Water Vapor

### Invisible water

1. Moisten your forearm with a damp washcloth.
2. Either blow gently on the wet spot or fan your arm with a stiff sheet of paper.
  - How does the wet spot on your arm feel? What happens to the water on your arm?
  - How does sweating help keep your body cool?

**Note:** It takes heat to evaporate water into water vapor.

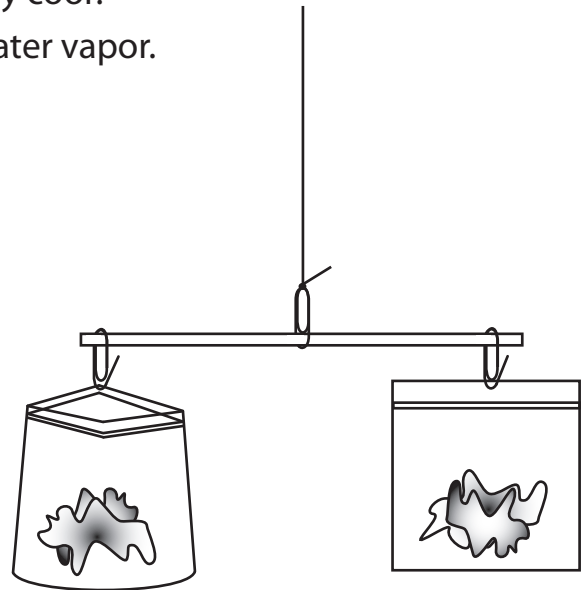
### Into thin air

How fast does water evaporate in your home?

Set up an evaporation system and find out.

You will need

- 1 Plastic straw
- 3 Paper clips, regular size
- 1 Piece of string about a meter long
- 2 Plastic zip bags
- 2 Paper towels



1. Slide three paper clips on the straw. Open the clips on the ends to make hooks.
2. The middle paper clip is the pivot point. Tie the string here.
3. Moisten the paper towels. Put one in each bag. Seal one bag and leave the other open.
4. Hang the bags on the two hooks. Slide things around until they balance.
5. Hang the whole system where it can be monitored closely. Observe.

### Think about humidity

Where did the water go? The amount of water vapor in the air is called **humidity**. When air contains as much water vapor as it can possibly hold, the humidity is 100%. Warm air can usually hold more water vapor than cool air.

- Watch a weather report or check on the Web. What is the local humidity?
- How could the humidity of the air change the rate of evaporation?