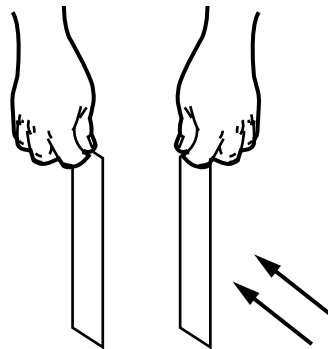


## Using Pressure Differences to Move Objects

What do you think will happen when high-speed air is blown between two strips of paper? To find out, hold two strips of paper facing one another, about 10 centimeters apart, as shown below.



Blow gently between the strips of paper and observe what happens. Then repeat the process, but blow forcefully between the paper strips.

1. What happens when gentle, low-speed air is blown between the strips of paper?
2. What happens when high-speed air is blown between the strips of paper?
3. Based on your observations, try to infer how the speed of the air affects the air pressure acting on the inside and outside faces of the strips of paper.

### ANSWERS

3. Do not assess student responses to this question. Accept any plausible explanation. The paper strips move toward each other because the air pressure within the high-speed air moving between the paper strips is lower than the slower- or non-moving air surrounding the strips. The pressure difference pushes the paper strips together.

1. The gentle, low-speed air causes little or no movement in the paper strips.
2. The high-speed air causes the paper strips to move toward each other.