



Figure 2 Step 10: Hold the block between your hands.

Step 11: Release the block by pulling both hands straight out to the sides. It may take some practice to release the block so that it falls straight down without turning.

- **9.** Perform this exercise with a partner. One partner will drop the wooden block from a measured height, and the other partner will measure the time it takes the block to fall to the floor. Perform this in a clear area away from other groups.
- **10.** One student should hold the wooden block straight out in front of him or her at shoulder height. Hold the block between your hands, as shown in **Figure 2.** Use the meterstick to measure the height of the wooden block above the floor. Record this distance in your data table.
- 11. Use the stopwatch to time the fall of the block. Make sure the area is clear, and inform nearby groups that you are about to begin. The student holding the block should release it by pulling both hands straight out to the sides. The student with the stopwatch should begin timing the instant the block is released and stop timing as soon as the block hits the floor. In your data table, record the time required for the block to fall.
- **12.** Repeat for two more trials, recording all data in your data table. Try to drop the block from exactly the same height each time.
- **13.** Switch roles, and repeat steps 10 through 12. Perform three trials. Record all data in your data table.