

## Building Physical Intuition - Pushing Blocks

This exercise is designed for you to develop your ability to record and communicate observations you make in an effective manner.

Students should work in pairs.

Equipment: Each pair of students will need a wooden block and a writing instrument with an eraser for pushing the block.

Each group member should record all observations in ink on separate notebook paper. You will hand in this paper at the end of the activity.

1. Place the block on the table with its largest face down.

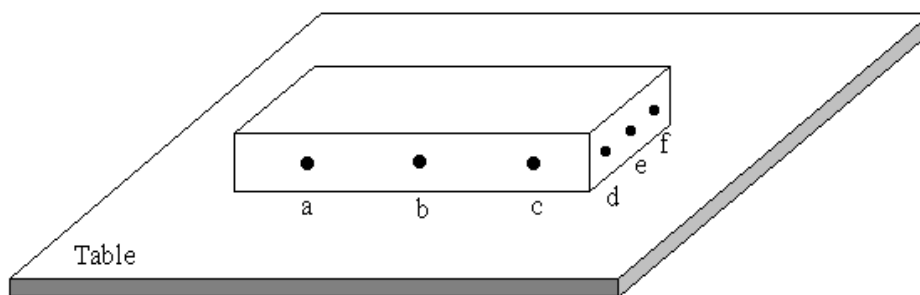


fig. 1

Place the eraser of your pencil at the position labeled "a" with the pencil parallel to the table and gently push. Observe the motion of the block. Record your observation using a complete sentence.

Repeat for each position ("b" through "f") on the block.

2. Now place the block on the table as shown in figure 2.

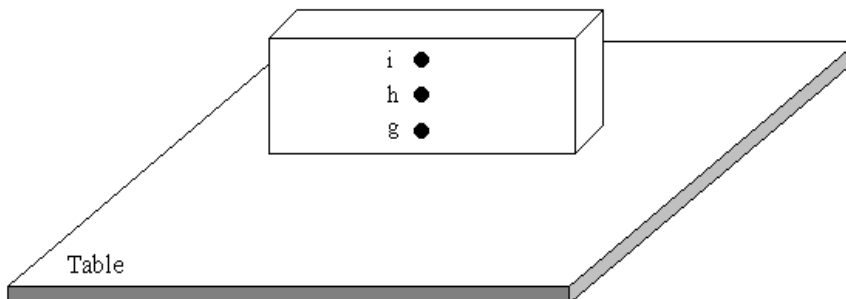


fig. 2

For each point, "g", "h" and "i", place the eraser of your pencil at the position with the pencil parallel to the table and gently push. Observe the motion of the block. Record your observation using a complete sentence.

Repeat the process with a harder push. Does the motion of the block depend on how gently (slowly) or how hard (quickly) you push it? Describe any differences.