Repeat the process from STEP 1, stretching the band back a little further each time, until you reach a point at which the block travels a distance of at least 50 cm before stopping. Use a sticky note to mark how far back the rubber band must be stretched to achieve this 50 cm travel distance.

This is how far back you will stretch the band in EVERY step from now on. Do not remove this marker until you have completed the whole activity.

STEP 2: Each member of your team should now take a turn launching the block (stretching the rubber band back to the same marked point each time) and measure how far the block travels.


Enter these measured values on the top row of the table below, and calculate the average distance traveled by the block across the table.

| Surface | Distance traveled (cm) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trial 1 | Trial 2 | Trial 3 | Trial 4 | Average |  |
| Table Top |  |  |  |  |  |  |
| Sandpaper |  |  |  |  |  |  |
| Sticky Notes |  |  |  |  |  |  |

STEP 3: Now slide a sheet of sandpaper under the launcher, so that the back edge of the sheet lines up with your launching mark.

Place a second sheet of sandpaper in front of the first and slide its edge about 2 mm under the first
 sheets of sandpaper to the table.

