**BELLMORE-MERRICK CENTRAL HIGH SCHOOL DISTRICT**

*W. C. Mepham High School*

*Ms. Nigro*

*Regents Physics*

*Newton’s Laws Unit*

**Force of Friction Lab**



**Objective:** To determine the factors that affect friction.

**Materials:**

Wood block

1 kg mass

Newton scale

**Procedure:**

1. Slide the wood block across a surface at a constant speed and note the reading on the Newton scale. This reading is the force of friction between the block and the surface:

Force of friction (N):

1. Slide the wood block across the surface at a constant speed but **faster** than in step 1. Note the force of friction.

Force of friction at a higher speed (N):

1. Slide the wood block at the original speed but place a **1kg mass** on it. Note the force of friction.

Force of friction with 1 kg mass (N):

1. Slide the wood block at the original speed and without the mass but turn it **on its narrower side**.

Force of friction on the thinner side (N):

1. Slide the wood block at the original speed and without the mass but use the side with sand paper.

Force of friction with sand paper (N):

1. Which factors affect the force of friction between two sliding surfaces?