

Regents Physics
Ms. Berke

Name/date _____
Lab Partners _____

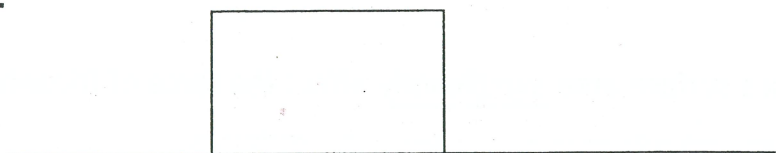
Lab: Investigating Friction

Period: _____

Procedure:

- Using a spring scale pull the block horizontally at constant speed while reading the spring scale.
- The reading on the spring scale is F_a .

Draw the FBD:



Problem 1: How does the weight (F_{wt}) affect the force of friction (F_f) and the coefficient of friction (μ) ?

DATA

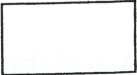
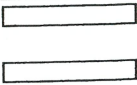
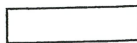
CALCULATIONS

$F_{wt} = F_n$	$F_a = F_f$	$\mu = F_f/F_N$

Problem 2: Does surface material affect the force of friction?
 Note: place a 1 kg mass on top of the block for each case.

SURFACE (describe the surface)	$F_a = F_f$

Problem 3: Does surface area significantly affect the force of friction?

SURFACE AREA	$F_a = F_f$
	
	
	

CONCLUSIONS:

1.

2.

3.

SOURCES OF ERROR: