FRICTION

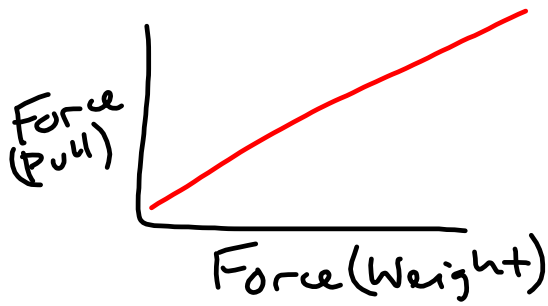
- Lab
  - Surfaces → cork, felt, plastic
  - Mass
  - Surface area
  - Velocity

- Determine if there is a dependance of each factor
  - Force v. weight
  - Force v. surface area
  - Force v. velocity

Felt weight	Plastic weight	Cork weight
YES	YES	YES
Felt S.A.	Plastic SA.	Cork S.A.
YES (?) m= .0052	YES (?) m=0.04	YES m= 0.59
Felt $\bar{v}$	Plastic $\bar{v}$	Cork $\bar{v}$
Not sure	Not sure	Not sure

* Make 1 graph with LabQuest to show static/kinetic

Friction



coefficient of friction

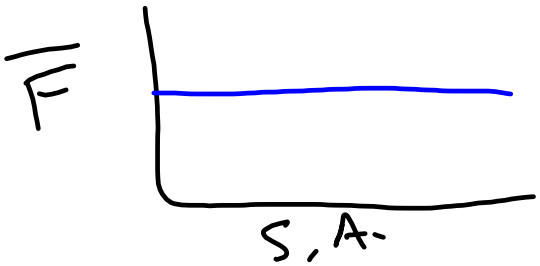
μ Greek lowercase mu

- Coefficients of friction
  - Static μ_s
  - Kinetic μ_k

- Equation

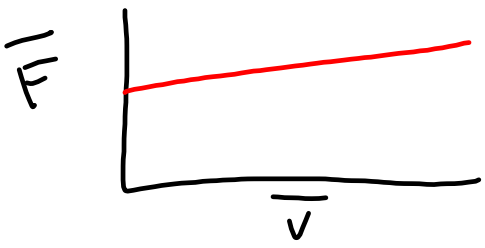
$$|\bar{F}_f| \leq \mu |\bar{F}_N|$$

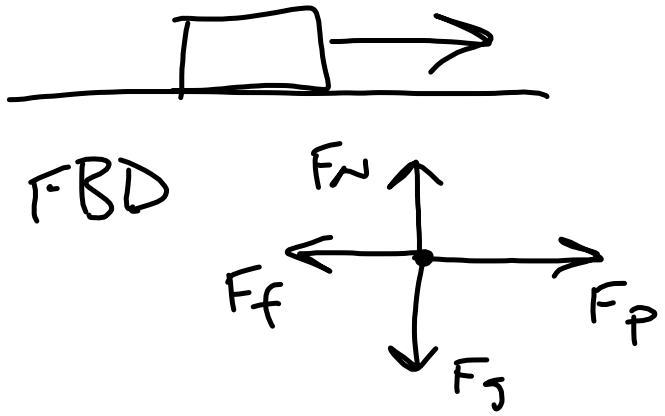
Surface Area



No relationship

Velocity




FBD
F_N
F_f
F_p
F_g

Unit 2 – Multiple Choice

1. E
2. B
3. D
4. A
5. C
6. C
7. A