

Name _____

Physics

Newton's Laws and Friction!



Newton's Second Law _____

Formula for Friction: _____

Static Friction is _____

When is static Friction the greatest? _____

Kinetic Friction is _____

What is the coefficient of friction _____

What happens to the coefficient of kinetic friction as the surfaces get rougher? _____

Practice Problems

1. What is the frictional force on a 10kg rubber block on concrete just before it begins to slide?

2. What is the frictional force on a 10kg rubber block on concrete when it moves at a constant acceleration?

3. A 24kg crate initially at rest on a horizontal floor requires a 75N horizontal force to set it in motion. Find the coefficient of static friction between the crate and the floor

4. What is the net force on a 5 Kg crate that experiences 30 N of frictional force and has an applied force of 70 N?

b) What is the acceleration of the crate?

