

UPGRADE to the Bundle

Crash Course - PHYSICS 46 Episode Series Bundle

- ✓ Classroom Ready - Just Print and Go!
- ✓ Active Engagement - Keep Students' Attention
- ✓ Direct Video Link Included

WATCH VIDEO



ALL 46 Episodes with Answer
Keys and Direct Video Link

CLICK HERE



Crash Course Physics #6: Friction

Name: _____ Date: _____

You can access the video here → https://youtu.be/fo_gmp5fzao?si=Y0gkjLazngqHkRI

1. The two types of friction are _____ friction and _____ friction.
2. _____ friction resists motion between two surfaces that are sliding past each other.
3. _____ friction prevents objects from starting to move.
4. The _____ force is the support force that acts perpendicular to a surface.
5. The roughness between materials is described by the _____ of friction.
6. The equation for kinetic friction is _____ $\times$ _____.
7. The normal force on a flat surface is equal in magnitude and opposite in direction to the object's _____.
8. Static friction resists motion until the applied force exceeds the _____ static friction.
9. On a ramp, the gravitational force must be broken into _____ along and _____ into the ramp.
10. The component of gravitational force pointing into the ramp is calculated using _____.
11. The component of gravitational force pointing down the ramp is calculated using _____.
12. To analyze forces acting on an object, we start by drawing a _____.
13. If the net force along a ramp is greater than zero, the object will _____.
14. When deciding on axes on a ramp, the x-axis is often chosen to point _____ the ramp.
15. The coefficient of static friction is written as _____, and the coefficient of kinetic friction is written as _____.

Crash Course Physics #6: Friction KEY

1. The two types of friction are **kinetic** friction and **static** friction.
2. **Kinetic** friction resists motion between two surfaces that are sliding past each other.
3. **Static** friction prevents objects from starting to move.
4. The **normal** force is the support force that acts perpendicular to a surface.
5. The roughness between materials is described by the **coefficient** of friction.
6. The equation for kinetic friction is $\mu_k \times F_n$.
7. The normal force on a flat surface is equal in magnitude and opposite in direction to the object's **weight**.
8. Static friction resists motion until the applied force exceeds the **maximum** static friction.
9. On a ramp, the gravitational force must be broken into **components** along and **into** the ramp.
10. The component of gravitational force pointing into the ramp is calculated using **cosine**.
11. The component of gravitational force pointing down the ramp is calculated using **sine**.
12. To analyze forces acting on an object, we start by drawing a **free body diagram**.
13. If the net force along a ramp is greater than zero, the object will **slide**.
14. When deciding on axes on a ramp, the x-axis is often chosen to point **down** the ramp.
15. The coefficient of static friction is written as μ_s , and the coefficient of kinetic friction is written as μ_k .

15 Questions

Answer Key Included

Save 85% per worksheet!