



a WOW Lab  
**BLUEPRINT**

# Indoor Rockets

## Introduction

Launching a paper rocket across the classroom illustrates many concepts of classical physics and math. In this activity, students can construct the launch-pad, design and test a variety of rockets, and measure the angle of launch.

*Indoor Rockets* can be approached from either a physics or math perspective. It teaches students about key concepts such as the parabolic path of a projectile, the effect of air resistance on different shapes of wings and all three of Newton's laws of motion. This activity serves as a starting point for the discussion of friction, trigonometry, terminal velocity, pressure and accuracy. It will also teach simpler concepts such as speed, velocity, free fall and the scientific method.

This activity is not only less expensive than a store-bought stomp-rocket kit, but also allows students to participate in the design process. *Indoor Rockets* can be done in conjunction with *Outdoor Rockets*.