

SLED KITE

Objectives

The students will:
Construct and fly a simple sled kite.
Demonstrate how to make the kite fly at varying heights.

Standards and Skills

Science

Science as Inquiry
Unifying Concepts and Processes

Science Process Skills

Observing
Measuring
Predicting
Controlling Variables

Mathematics

Connections
Estimation
Measurement

Background



NASA
Paresev

The sled kite in this activity is a model of a type of airfoil called a parawing. Like any wing, the parawing depends on the movement of air over its shape to generate a lifting force. (Parasails, parafoils, and paragliders are similar lift-generating devices.)

The NASA Paraglider Research Vehicle (Paresev) was the first flight vehicle to use the Francis Regallo-designed parawing. The little glider was built and flown by NASA during the early 1960's to evaluate the parawing concept, and to determine its suitability to replace the parachute landing system on the Gemini spacecraft. Although the parawing was never used on a spacecraft, it revolutionized the sport of hang gliding. Hang gliders use a parawing to glide from cliffs or mountain tops.