Simple Machines

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Information	Program Description
Ages 5-10	Simple Machines is a curriculum designed to introduce students to the basics of several types of simple machines. Each session includes an explanation of the simple machine being discussed, as well as an experimental activity to illustrate how these simple machines operate.
Curriculum Format	Each lesson can be presented in 45-60 minutes. Teaching Guide with complete instructions is provided. Teaching Kit with materials needed to present lessons is provided. User may need to provide standard classroom supplies (pencils, scissors, glue). If a lesson requires perishable items (e.g. milk), user is responsible for these purchases.

Lesson	Overview
One: Introduction to Simple Machines	Learn the basics of the term “work” through use of a DVD, “All About Simple Machines” and various facts. The second half of the lesson asks students to create their own simple machine, a paper fan.
Two: Inclined Planes and Friction	Students will learn more about both friction and inclined planes, by creating their own inclined plane and doing a friction demonstration.
Three: Screws and Wedges	Students will begin this lesson by observing and then drawing the components of a screw. This lesson continues with students practicing their skills with a screw and screwdriver. The second part of the lesson involves experimenting with wedges through a number of demonstrations.
Four: Wheels and Axles Four: Gears	Students learn about wheels and axles by comparing wheel sizes and building a rubber band car. Students learn that gears transfer movement from one part of a machine to another and that they can change the speed and direction of movement.
Five: Levers	Students will learn the basics of levers and their fulcrums through a Leave it to Levers! Experiment, as well as the creation of a first and second class lever.
Six: Pulleys	Learn more about pulleys by creating both a simple pulley system and a multiple pulley system.