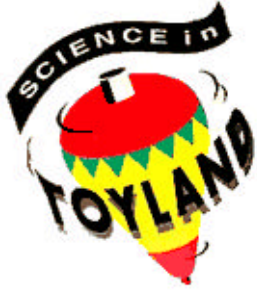
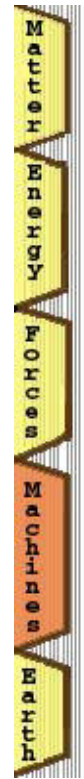


Toy Lab

Teacher information: This lab is best completed after units on machines, energy, and forces.



Your assignment is to identify the simple machines used in a simple mechanical toy. Mechanical in this sense means that it does something or has some moving parts. There has to be some type of simple machines involved in order to transfer any energy or have any motion.



In any toy there are always forces. Always gravity and an equal and opposite force. Some force got the toy moving. In any moving toy it exerts a force against something else and always causes friction. Your assignment is to find these forces and explain them.

Be able to identify Newtons Laws of Motion. Which laws are used and where? Inertia, $F = MA$, Action/Reaction

There is also energy conversions involved. Elastic, Chemical, Mechanical, Sound, Heat, Light. Identify which are Kinetic and Potential and how they are converted.



Here are some other principles that your toy may use.
 Boyles Law, Charles Law, Bernoullies principle, (air pressure), chemical reaction, 3-D, Friction, Temperature, Phase Changes, (solid, liquid, gas), Magnetism...



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Updated August 7, 2000 by: [Glen Westbrook](#)

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