

## Walking TinkerToy

### Purpose:

Demonstrate the conversion of energy from potential to kinetic and how angles, distances, speed, mass and friction relate.

### Materials:

TinkerToys (plastic)

2x 1/4" - 28 x 1 1/4" allen-head bolt

4x 1/2" - #20 nut

4x 1/4" flat washer

2x 1/4" - #28 nut

### Steps:

Build according to diagram below. Note the dimensions are in centimeters and the brass strips were replaced with electrical tape.

(Reference: Coleman, M, Ruina, A. An Uncontrolled Toy That Can Walk But Cannot Stand Still (Tinkertoy Walker) Physical Review Letters April 1998, Vol 80, Issue 16 pp. 3658 – 3661)

