Go Figure! Name:

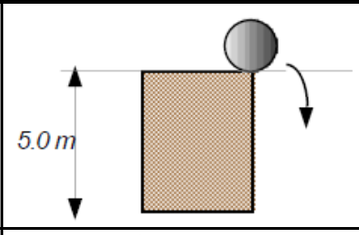
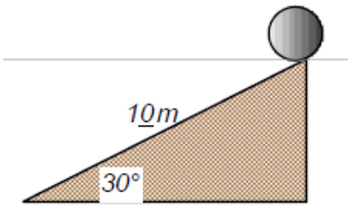
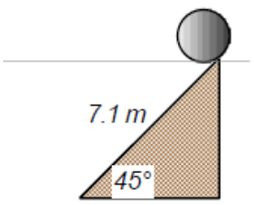
Activity - Work & Energy

Recall the Law of Conservation of Energy (state it in your own words):

Problem: A 1000 N ball is released from the top of the three ramps below. Use the laws of motion and the Law of Conservation of energy to rank them in order of the fastest speed at the bottom (ignore friction and air resistance). Use the chart below to organize your argument.

Predict the speed at bottom from fastest to slowest:

_____ _____ _____

			
G.P.E. (top)	$GPE = W \cdot h$		
K.E. (bottom)	$KE = \frac{1}{2}mv^2$		
Work (bottom top)	$W = F \cdot d = \Delta E$		
Speed (bottom)	$v = \sqrt{\frac{2KE}{m}}$		
Time	$v = v_o + at$		