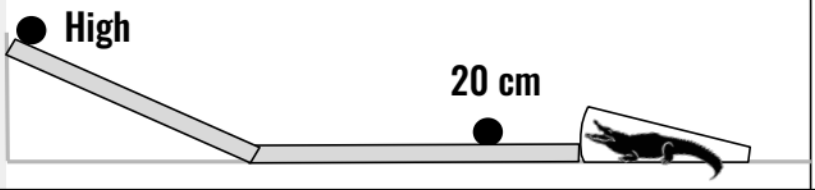
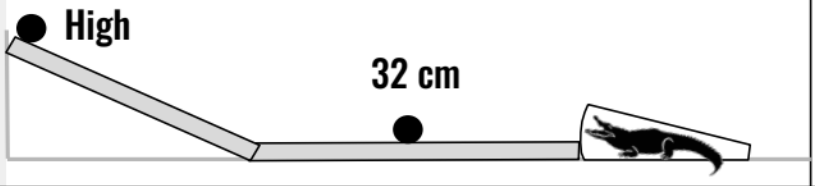
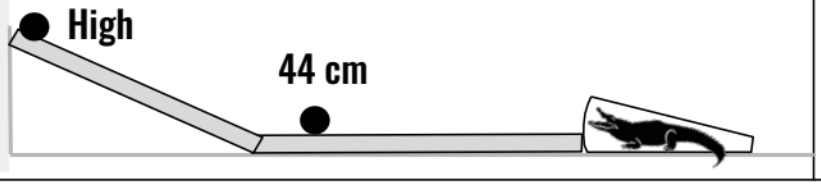
mystery science

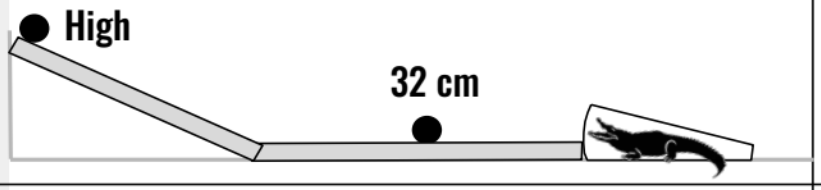
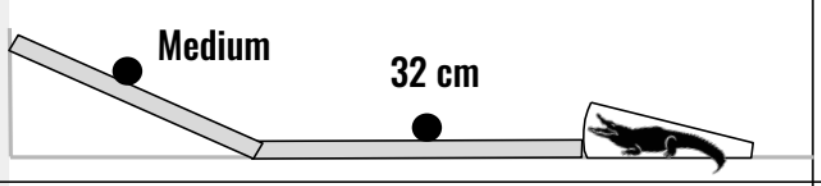
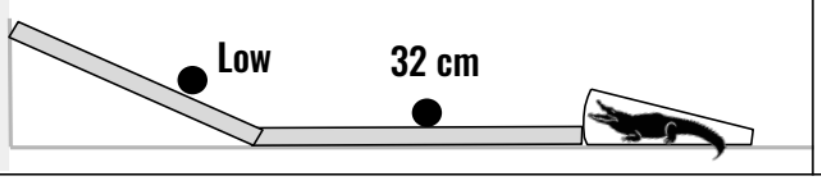
What makes roller coasters go so fast?

Name:_____

Distance and Height Experiments!

Always release the Hill Marble at the "High" mark:	Change the distance of the Bumper Marble from the alligator:	Did the Hill Marble get eaten? (It's ok if the Bumper Marble got eaten.)			
		Trial 1	Trial 2	Trial 3	Trial 4
		eaten safe	eaten safe	eaten safe	eaten safe
		eaten safe	eaten safe	eaten safe	eaten safe
		eaten safe	eaten safe	eaten safe	eaten safe

DISTANCE RESULTS: Moving the Bumper Marble farther away from the alligator **(always / sometimes / never)** kept the Hill Marble from getting eaten. Currently, the Bumper Coaster ride has **(too much / just enough / too little)** energy.

Change the height where you release the Hill Marble:	Always place the Bumper Marble 32 cm from the alligator:	Did the Hill Marble get eaten? (It's ok if the Bumper Marble got eaten.)			
		Trial 1	Trial 2	Trial 3	Trial 4
		eaten safe	eaten safe	eaten safe	eaten safe
		eaten safe	eaten safe	eaten safe	eaten safe
		eaten safe	eaten safe	eaten safe	eaten safe

HEIGHT RESULTS: Moving the Hill Marble lower on the hill **(always / sometimes / never)** kept it from getting eaten. Currently, the Bumper Coaster ride has **(too much / just enough / too little)** energy.