

Station L – Rotational Inertia

Study how the distribution of mass affects motion.

Part A: Symmetrical distribution of mass

1. Load the two discs with 4 balls in the pattern shown:

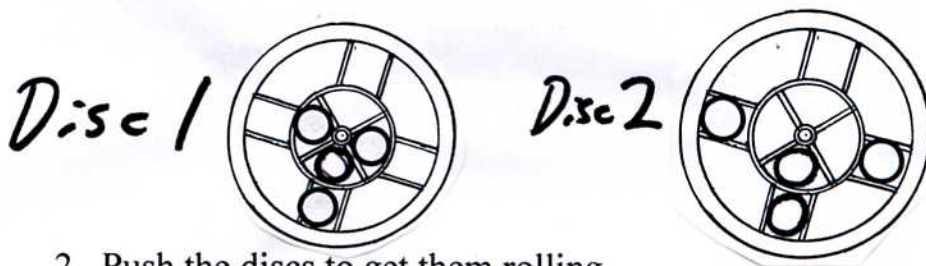


2. Place the discs at the starting line, release them (without pushing them), and measure the time it takes for each disc to get to the finish line ($d = 1$ m)
3. Calculate the speed of each disc

	Distance	Time (s)	Speed (m/s)
Disc 1	1 m		
Disc 2	1 m		

Part B: Asymmetrical Distribution of mass

1. Load the two discs with 4 balls in the pattern shown:



2. Push the discs to get them rolling.
3. Describe the motion of each disk:

Disc 1: _____

Disc 2: _____