

Disk and Hoop Down a Ramp

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Time Taken: ~ 5-10 min

Objectives: (optional)

The students will:

- Understand conservation of energy (linear and rotational)
- Gain insight into the moment of inertia

Materials:

- Ramp
- Hoop
- Disk

Vocabulary: (optional)

- Moment of Inertia
- Rotational kinetic energy
- Kinetic energy
- Potential energy

Procedures:

- Set up ramp
- Ask students which they think will reach the bottom first, the hoop or the disk
- Let them both go

End of activity questions to ask: (optional)

- Ask why one got to the bottom first
- Can they prove it using moment of inertia and conservation of energy?