

PUZZLER

Did you know that the CD inside this player spins at different speeds, depending on which song is playing? Why would such a strange characteristic be incorporated into the design of every CD player? (George Semple)



chapter

10

Rotation of a Rigid Object About a Fixed Axis

Chapter Outline

- 10.1** Angular Displacement, Velocity, and Acceleration
- 10.2** Rotational Kinematics: Rotational Motion with Constant Angular Acceleration
- 10.3** Angular and Linear Quantities
- 10.4** Rotational Energy
- 10.5** Calculation of Moments of Inertia
- 10.6** Torque
- 10.7** Relationship Between Torque and Angular Acceleration
- 10.8** Work, Power, and Energy in Rotational Motion