

PUZZLER

Chum salmon “climbing a ladder” in the McNeil River in Alaska. Why are fish ladders like this often built around dams? Do the ladders reduce the amount of work that the fish must do to get past the dam?
(Daniel J. Cox/Tony Stone Images)



chapter

7

Work and Kinetic Energy

Chapter Outline

- 7.1 Work Done by a Constant Force
- 7.2 The Scalar Product of Two Vectors
- 7.3 Work Done by a Varying Force
- 7.4 Kinetic Energy and the Work–Kinetic Energy Theorem
- 7.5 Power
- 7.6 (Optional) Energy and the Automobile
- 7.7 (Optional) Kinetic Energy at High Speeds