Module 09-Lesson 1
Work and Changes in Energy

Question 1: A car mechanic pushes a car with a force of 750 N, moving the car a distance of 4.2 m. How much work does she do on the car?

Question 2: A desk has a larger mass than a chair. Starting from rest, the desk and the chair are pushed across frictionless surfaces by equal forces for 10 s. Is the work done on the desk greater, the same, or less than the work done on the chair. Explain.

Problem: If the coefficient of kinetic friction between a box and the floor is 0.3, how much work it is done to slide the 40-kg box at constant speed across a 5.0-m long room?