Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

Solve the following problems. ***Show your work.*** Include a ***label.***



7 m

60 sec

723 N, 15 m, 120 sec

The box weighs 1230 N

1. Work done sliding box across floor \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Power to slide the box across the floor \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Work done lifting box \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Power to lift box \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

![MCj01210850000[1]]()

![MCj01414210000[1]]()![MCj01393310000[1]]()5. Three divers with the **same mass** are pictured to the left. The potential energy for all three is given. Determine the kinetic energy for each diver.

PE = 4,500 J

KE = \_\_\_\_\_\_\_\_\_\_\_

(hint: he hasn’t jumped yet!)

PE = 1,000 J

KE = \_\_\_\_\_\_\_\_\_\_\_\_

PE = 2,700 J

KE = \_\_\_\_\_\_\_\_\_\_\_\_