Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period: \_\_\_\_\_\_\_\_\_\_\_\_\_

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



The box weighs 425N

100N, 5m, 4 sec

3 m

2 sec

1. Work done lifting box \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Power to lift box \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Potential energy of the box after lifting it \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

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

6. Potential energy of the box after sliding it \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

X

Y

Z

7. What letter represents the highest Kinetic Energy? \_\_\_\_\_\_\_

8. What letter represents the lowest Kinetic Energy? \_\_\_\_\_\_\_

9. What letter represents the highest Potential Energy? \_\_\_\_\_\_\_

10. What letter represents the lowest Potential Energy? \_\_\_\_\_\_\_