**Energy:**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Block: \_\_\_\_\_\_\_

Lesson 4 – Calculating Kinetic Energy



**Finding Kinetic Energy**

Ex. Ms. Morrin kicks a 0.5 kg soccer ball with a speed of 15 m/s. What kinetic energy does the ball have?



Ex. Ms. Morrin’s cat Zeus jumps from the back of a 2 m high couch. If Zeus weights 3.6 kg and reaches a speed of 5 m/s what kinetic energy does he have?



**Finding Other Variables**

Ex. A bird is flying 15 m off the ground at 5 m/s and has a kinetic energy of 37 J. How much does the bird weigh?



Ex. An athlete runs at 16 m/s and has 5 kJ of kinetic energy. How much does the person weigh?



Ex. A 2000 kg plane has a kinetic energy of 15,000,000 J. At what speed is it flying?



Ex. Ms. Morrin is driving along the highway in a 500 kg car and has a kinetic energy of 156250 J. If the speed limit is 80 km/h was she speeding?

