

Name: _____

Canine Sports and Energy Packet

Please Define the below vocabulary terms and provide an example of each:

Energy:

Mass:

Velocity:

Joules:

Kinetic Energy:

Potential Energy:

Please answer the question below:

How do canine sports relate to potential and kinetic energy?

Use your creativity to illustrate this below with a drawing. Include vocabulary terms.

The equation to determine kinetic energy is _____.

M=

V=

Kinetic Energy is measured in _____.

Kinetic Energy Problems for Practice

1. The mass of Chico the Chihuahua is 3 kg, and he walks at a constant velocity of 0.3 m/sec. What is the kinetic energy for Chico the Chihuahua in joules?

2. The mass of Bernie the St. Bernard is 90 kg, and he walks at constant velocity of 0.6 m/sec. What is the kinetic energy for Bernie the St. Bernard in joules?

Group Research Project

Please Utilize the AKC Website to complete the following tasks below: www.akc.org

Choose One Dog Sport and Describe:

Choose Five Dog Breeds that you would like to participate in this sport. Explain why you chose this breed for this sport. Locate the mass of each dog using the AKC website (convert pounds to kilograms using an online converter). Create and solve Kinetic Energy equations for each dog breed you have chosen. Use **0.5 m/s** for velocity.

1.

Dog Breed:

Why I Chose:

Mass:

Kinetic Energy Equation:

Solution:

2.

Dog Breed:

Why I Chose:

Mass:

Kinetic Energy Equation:

Solution:

3.

Dog Breed:

Why I Chose:

Mass:

Kinetic Energy Equation:

Solution:

4.

Dog Breed:

Why I Chose:

Mass:

Kinetic Energy Equation:

Solution:

5.

Dog Breed:

Why I Chose:

Mass:

Kinetic Energy Equation:

Solution:

Create a Bar Graph to display the kinetic energy of each dog breed in your group's sport of choice. Be sure to label each axis correctly and title your graph.

Please answer the following questions:

1. What dog breed had the highest kinetic energy and why?
2. What dog breed had the lowest kinetic energy and why?

In Preparation for Student Class Presentation:

1. Discuss your chosen dog sport.
2. Discuss the five dog breeds you chose and why.
3. Show your completed bar graph to the class and explain.
4. Discuss which breed had the highest/lowest kinetic energy.
5. Explain how potential and kinetic energy relates to your chosen dog sport.
6. What is your favorite dog breed out of the five that you chose and why?