Joe balances a stationary coin on the tip of his finger 20 cm from the top of the table. How much work is Joe doing?

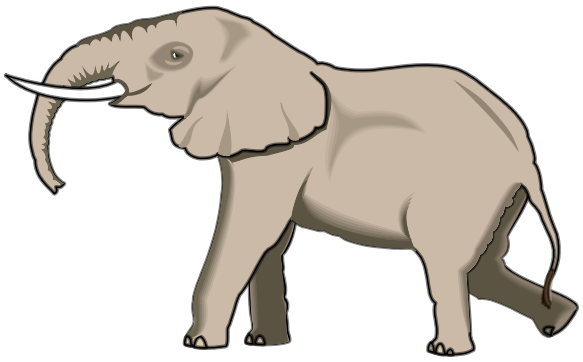
None, because no movement

Dec 12 - 3:41 PM

How much work does the elephant do while moving a circus wagon 20 meters with a pulling force of 200N?

200N · 20m

4000J



Dec 12 - 3:43 PM

A 900N mountain climber sclaes a 110 m cliff. how much work is done by the mountain climber.

900N . 110m
99000 J

Dec 12 - 3:45 PM

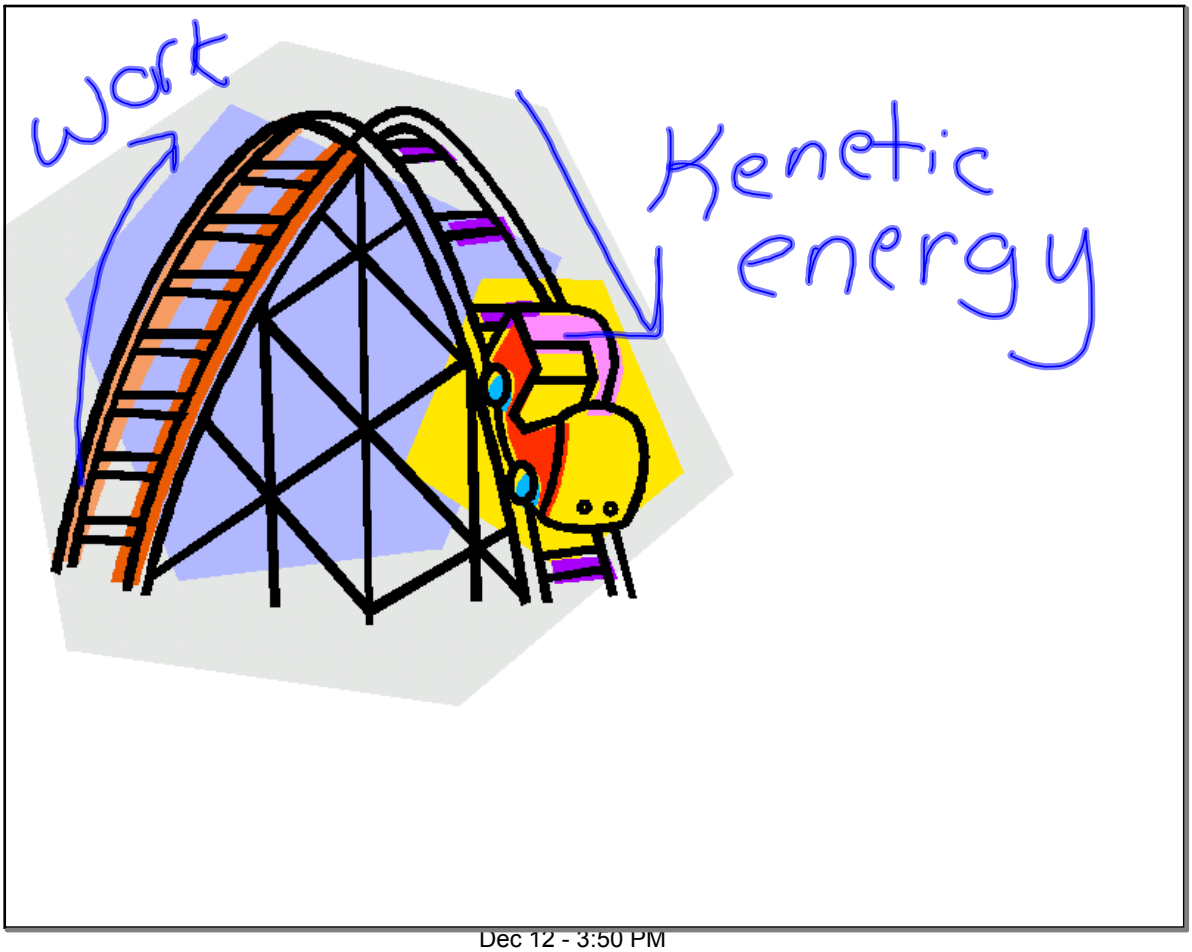
What is energy?

Sun water
food
Sleep
coffee light

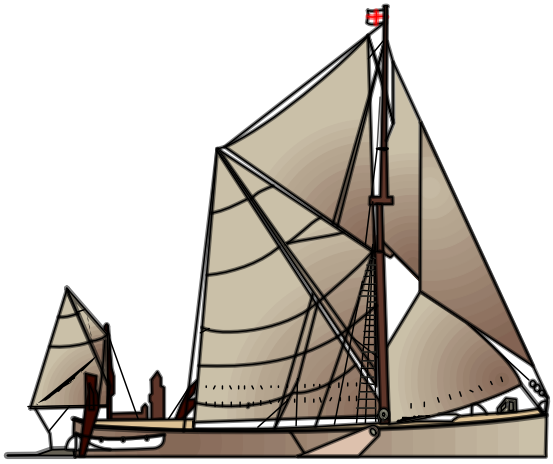
Dec 12 - 3:46 PM

Kinetic energy-the energy of motion for example, as a roller coster car crashes downhill, its kinetic energy increases, the amount og kinetic energy possessed by an object is never greater than the amount of work done on that object

Dec 12 - 3:47 PM



Dec 12 - 3:50 PM



KE when moving

Dec 12 - 3:36 PM

Formula for kinetic energy (KE)

$$E_K = \frac{1}{2} m \cdot v^2$$

mass (kg) velocity (m/s)

What are their units?

Dec 12 - 3:54 PM

A 3 kg ball is rolling 2 m/s. How much kinetic energy does it have?

What is 3 kg?
A. Mass
B. Energy
C. Distance
D. Velocity
E. Force
F. Time

Dec 12 - 3:58 PM

A 3 kg ball is rolling 2 m/s. How much kinetic energy does it have?

m = 3 kg
v = 2 m/s

What is the equation for Ek?
A. Ek = (1/2)mv2
B. Ek = mv2
C. Ek = mgh
D. Ek = ma

Dec 12 - 4:23 PM

A 3 kg ball is rolling 2 m/s. How much kinetic energy does it have?

m = 3 kg
v = 2 m/s
Equation: Ek = (1/2)mv2

What does v2 mean?
A. v x v
B. 2 x v
C. v x 2
D. v + 2

Dec 12 - 4:23 PM

A 3 kg ball is rolling 2 m/s. How much kinetic energy does it have?

m = 3 kg
v = 2 m/s
Equation: Ek = (1/2)mv2

Which of the following is correct?
A. Ek = (1/2) x (3 kg) x (2 m/s)2
B. Ek = (1/2) x (2 m/s) x (3 kg)2
C. Ek = (1/2) x (3 kg) x (2 m/s)
D. Ek = 2 x (3 kg) x (2 m/s)

Dec 12 - 4:23 PM

A 3 kg ball is rolling 2 m/s. How much kinetic energy does it have?

m = 3 kg
v = 2 m/s
Equation: Ek = (1/2)mv2
Ek = (1/2) x (3 kg) x (2 m/s)2

What does (2 m/s)2 equal?
A. 4
B. 2
C. 1
D. 8

Dec 12 - 4:27 PM

A 3 kg ball is rolling 2 m/s. How much kinetic energy does it have?

m = 3 kg
v = 2 m/s
Equation: Ek = (1/2)mv2
Ek = (1/2) x (3 kg) x (2 m/s)2
Ek = (1/2) x (3 kg) x (4 m2/s2)

So, Ek = ?
A. 6
B. 8
C. 4
D. 9
E. 10

Dec 12 - 4:27 PM

A 3 kg ball is rolling 2 m/s. How much kinetic energy does it have?

m = 3 kg
v = 2 m/s
Equation: Ek = (1/2)mv2
Ek = (1/2) x (3 kg) x (2 m/s)2
Ek = (1/2) x (3 kg) x (4 m2/s2)
Ek = 6

What are the units for Ek?
A. Ek = 6 J
B. Ek = 6 N
C. Ek = 6 m
D. Ek = 6 w

Dec 12 - 4:29 PM

What is the kinetic energy of a 45 kg object moving at 13 m/sec?

$E_K = \frac{1}{2} m v^2$

$E_K = \frac{1}{2}(45 \cdot (13^2))$

$\frac{1}{2}(45 \cdot 169)$

$\frac{1}{2}(7605)$

3802.5 J

Dec 12 - 4:31 PM

A 6 kg rock is thrown with a velocity of 10 m/sec.
What is the kinetic energy of the rock?

$\frac{1}{2} m v^2$

$\frac{1}{2}[6 \cdot (10^2)]$

$\frac{1}{2}[6 \cdot 100]$

$\frac{1}{2}(600)$

$300 J$

Dec 12 - 4:31 PM