## Kinetic energy

Any object of mass m moving with speed v has kinetic energy K:

$$K = \frac{mv^2}{2}$$

Unit of energy is Joule (J)
$$1J = 1 \frac{kg \cdot m^2}{s^2}$$

## **Homework 14**

## Problem.

A 10 kg stone is in free fall. What is its' kinetic energy 1, 2, 3, 4, 5 seconds after it started falling from rest? Make a plot of energy versus time.

