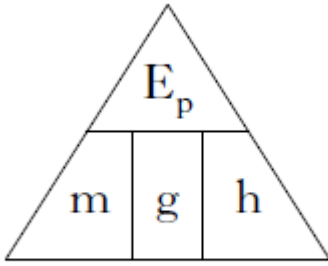


Total
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Energy Homework

Potential Energy = mass x gravity x height
(Remember Gravity is 9.8m/s^2)

1. A Kangaroo of mass 100kg jumps to a height of 2.5m. Calculate the potential energy it has at this point.



Answer:

Mass = _____

E_p = _____

Gravity = _____

= _____

Height = _____

= _____

___/6

2. A Car at the top of a 12.5m hill has a mass of 1675kg. Calculate the potential energy it has in this position.

Answer:

Mass = _____

E_p = _____

Gravity = _____

= _____

Height = _____

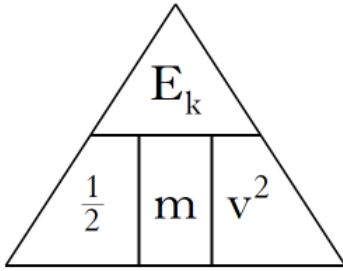
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Name: _____

Class: _____



Energy Homework

Kinetic Energy = $\frac{1}{2}$ x mass x velocity²

3. A Rocket which weighs 1000kg is launched at a speed of 50m/s . Calculate the kinetic energy it has when traveling.



Answer:

Mass = _____

Ek = _____

Velocity= _____

= _____

= _____

___/5

4. A Diver with a mass of 65kg jumps off a 10m diving board. If he is traveling at 22m/s calculate the kinetic energy he has.

Answer:

Mass = _____

Ek = _____

Velocity = _____

= _____

= _____

___/5



Name: _____

Class: _____