# International System of units and prefixes

## Exercises

1. Write the following quantities using SI prefixes:
2. Convert into
   1. electron volts
   2. mass equivalent in (hint: use )
3. The Kinetic energy of a moving object is given by: .

Find the energy of a mosquito with a mass of flying at .

Express your answer in

* 1. Joules
  2. using the appropriate SI prefixes

1. In the mosquito example above:
   1. Convert the mass of the mosquito to atomic mass units (u)
   2. Use the relationship to determine the energy that would be released if the mosquito’s mass was totally converted into energy. Express your answer in and in Joules.
2. A proton has a mass of .

Express the mass of a proton in atomic mass units and determine its energy equivalence in .

## Answers