## The atomic mass unit

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- 1. Convert the following masses into atomic mass units
  - (a) 1 kg
  - (b) 300 g
  - (c)  $1.6 \times 10^{-28} \,\mathrm{kg}$
- 2. Calculate the masses, in kg, of
  - (a) the electron
  - (b) a hydrogen atom
  - (c) a carbon-12 atom
- 3. Calculate the energy equivalence of the following, in joules
  - (a) 5 kg
  - (b) 12 g
  - (c)  $2.5 \times 10^{-27} \,\mathrm{kg}$
- 4. Convert the masses in question 3 into atomic mass units.
- 5. Convert the answers in question 4 into MeV.





