

## 18.4: Avogadro's Number and Boltzmann's Constant

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Avogadro's number is best determined by electrolytic deposition. That is, you have to measure the quantity of electricity (current times time) that will deposit a mole of a monovalent element from an electrolytic solution on to an electrode. This quantity of electricity is generally called a *faraday*, and is about 96,484 coulombs, and is the product of the electronic charge and Avogadro's number.

Boltzmann's constant is given by  $k = R/N_A$ .

[It is likely that, in 2015, Avogadro's Number and Boltzmann's constant will be given defined values. See Section 6.1 of Chapter 6.]

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