Toasting a Mole!
Three cheers…no, wait…6.02×10^{23} cheers to the mole!

Introduction:
We're not talking roasting a rodent. We're drinking to Avogadro's
number worth of molecules or 6.02×10^{23} molecules!
Pour out and drink one mole's worth of **water** molecules.

Equipment:
        Source of water
        Clear plastic cups
        Massing scale

To do an notice:
- Place the plastic cup on the scale and tare the mass of the cup.
- Pour in 18 grams of water into the cup.
- Toast to the Mole!
- And…..Drink-up!

What's going on?
18 grams is the weight of 1 mole of water. Water's molecular weight is based on the
atomic weight of each of its atomic components. Water's formula is H_2O or two
Hydrogen atoms for each Oxygen atom. A mole or 6.02×10^{23} atoms of Hydrogen weighs
1.0 grams and one mole of Oxygen atoms weighs 16.0 grams.
Since water is H_2O than:

2 moles of Hydrogen x 1.0 grams	=	2.0 grams
1 mole of Oxygen x 16.0 grams	=	16.0 grams
Total	=	18.0 grams

Cheers! Salute to the universal solvent, sans solute!

Optional:
Since water's density is 1gram per milliliter*, then 18 grams of water is the same as 18
milliliters of water. So instead of massing 18 grams, you can pour out 18 ml…it's the
same thing. However, be careful! You don't want to drink water from any Chemistry
Lab graduated cylinders.

*at 4° C