

## Unit 5, Video 9: The Mole and Using Avogadro's Number

1. True or False: It is common to report scientific data in units of atoms because the numbers are rather small.
2. What is the value for Avogadro's number?
3. True or False: Avogadro's number can be used for conversions involving atoms, particles, and molecules.
4. True or False: When making conversions, the unit you start with should go on the top of the next fraction so that it will cancel out.
5. Show the work necessary to answer the following question. Be sure to include units

How many moles are in  $1.2 \times 10^{21}$  atoms?

6. For the work you showed in question 5, write out exactly what should be put into your calculator to ensure that the correct answer is determined.
7. When converting from moles to atoms, what unit should be on the bottom of the fraction?