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## Calculating Moles and Particles



DIRECTIONS: Describe the following terms.
Avogadro's number -
mole -
representative particle -

DIRECTIONS: Determine the kind of representative particle; then calculate the number of particles present in the given amount.
$\qquad$ 1. $4.51 \times 10-2$ mol methane
$\qquad$ 2. 2.00 mol iron(III) nitrate
$\qquad$ 3.

DIRECTIONS: Calculate the number of moles for the number of representative particles present.
$\qquad$
4. 12 billion molecules CO 2
$\qquad$ 5. 6.02 x 1022 atoms Zn
$\qquad$ 6. $2.23 \times 1023$ formula units $\mathrm{Al}_{2} \mathrm{O} 3$

## "Worry does not empty tomorrow of its sorrow. It empties today of its strength."

- Corrie Ten Boom

