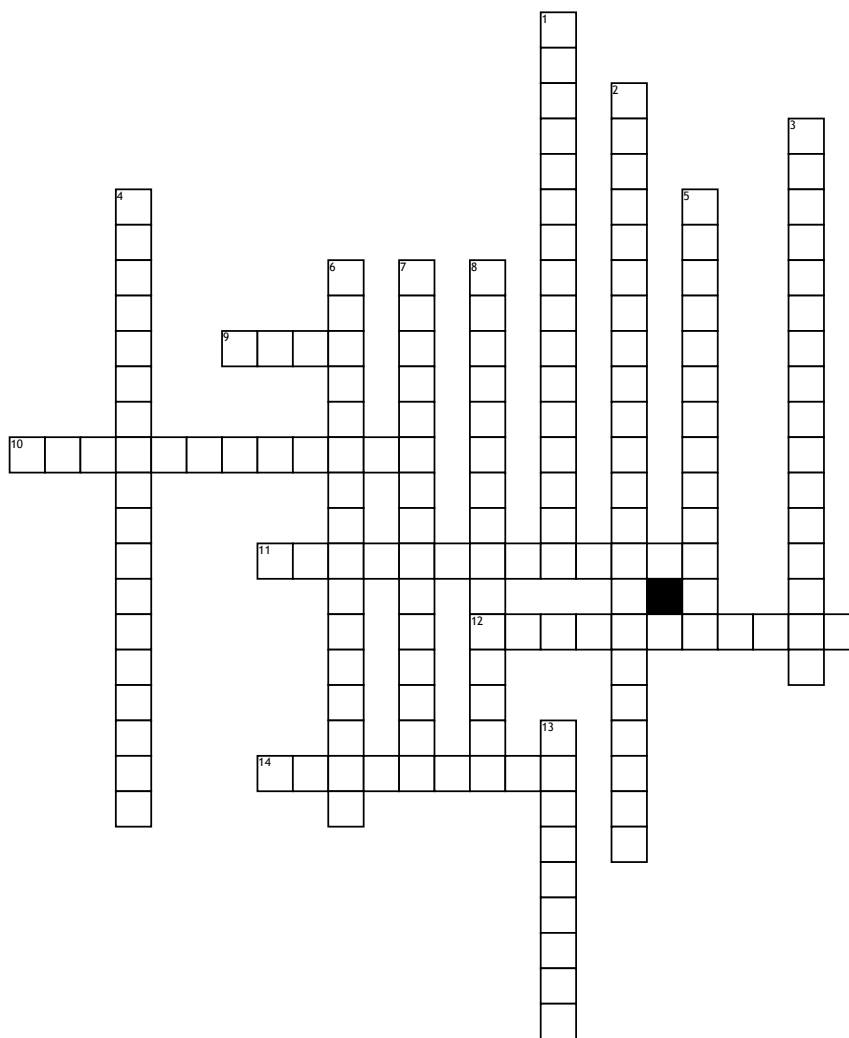


Name: _____ Date: _____ Period: _____

Introduction to the Mole



Across

9. the amount of a substance that contains 6.02×10^{23} representative particles of that substance
 10. the ratio of the actual yield to the theoretical yield for a chemical reaction expressed as a percentage
 11. a reagent present in a quantity that is more than sufficient to react
 12. the amount of product that forms when a reaction is carried out in the laboratory
 14. a conversion factor derived from the coefficients of a balanced chemical equation interpreted in terms of moles

Down

1. a chemical formula of a molecular compound that shows the kinds and numbers of atoms present in a molecule of a compound
 2. the smallest unit into which a substance can be broken down without a change in composition
 3. a formula with the lowest whole-number ratio of elements in a compound
 4. the percent by mass of each element in a compound
 5. the calculation of quantities of substances involved in chemical equations (numerical relationships)

6. the amount of product that could form during a reaction calculated from a balanced chemical equation
 7. the number of representative particles contained in one mole of a substance
 8. the reactant that determines the amount of product that can be formed by a reaction
 13. a term used to refer to the mass of a mole of any substance

Word Bank

molecular formula
 Avogadro's number
 mole ratio
 empirical formula

mole
 percent yield
 representative particle
 percent composition

limiting reagent
 excess reagent
 molar mass

theoretical yield
 stoichiometry
 actual yield