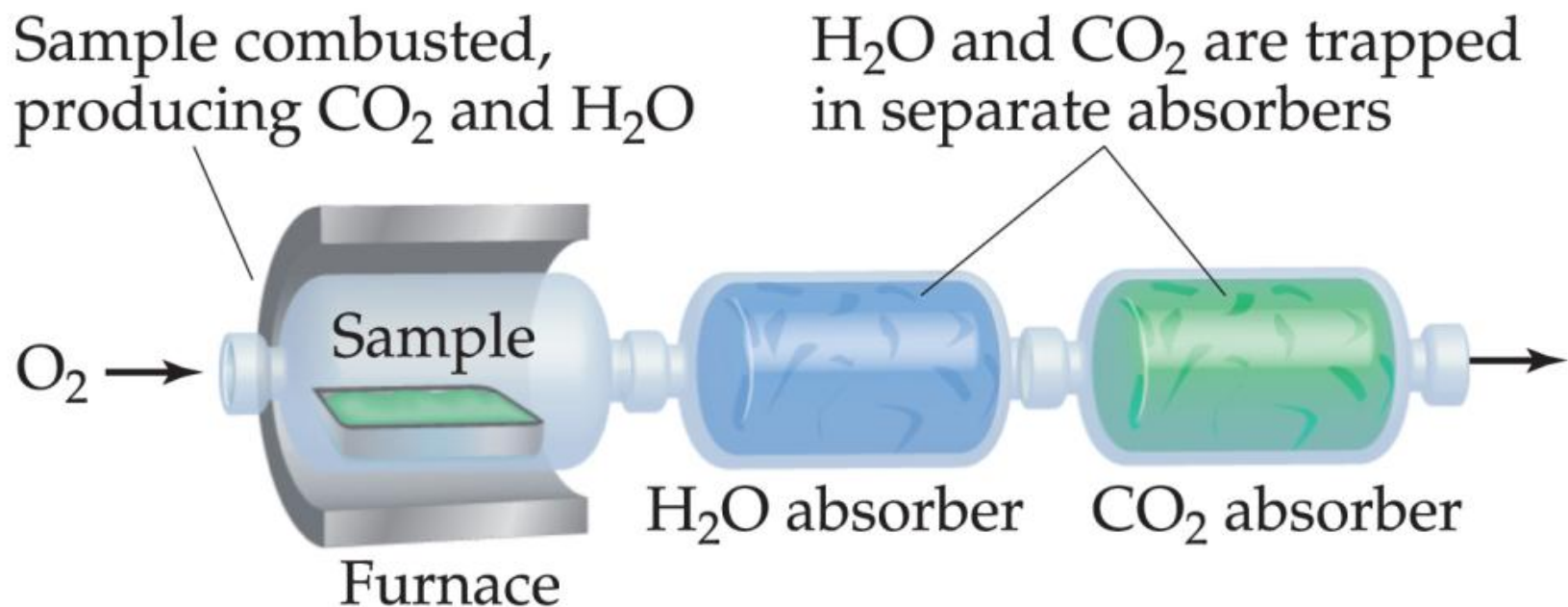


Outline for Today

Monday, Sept. 24

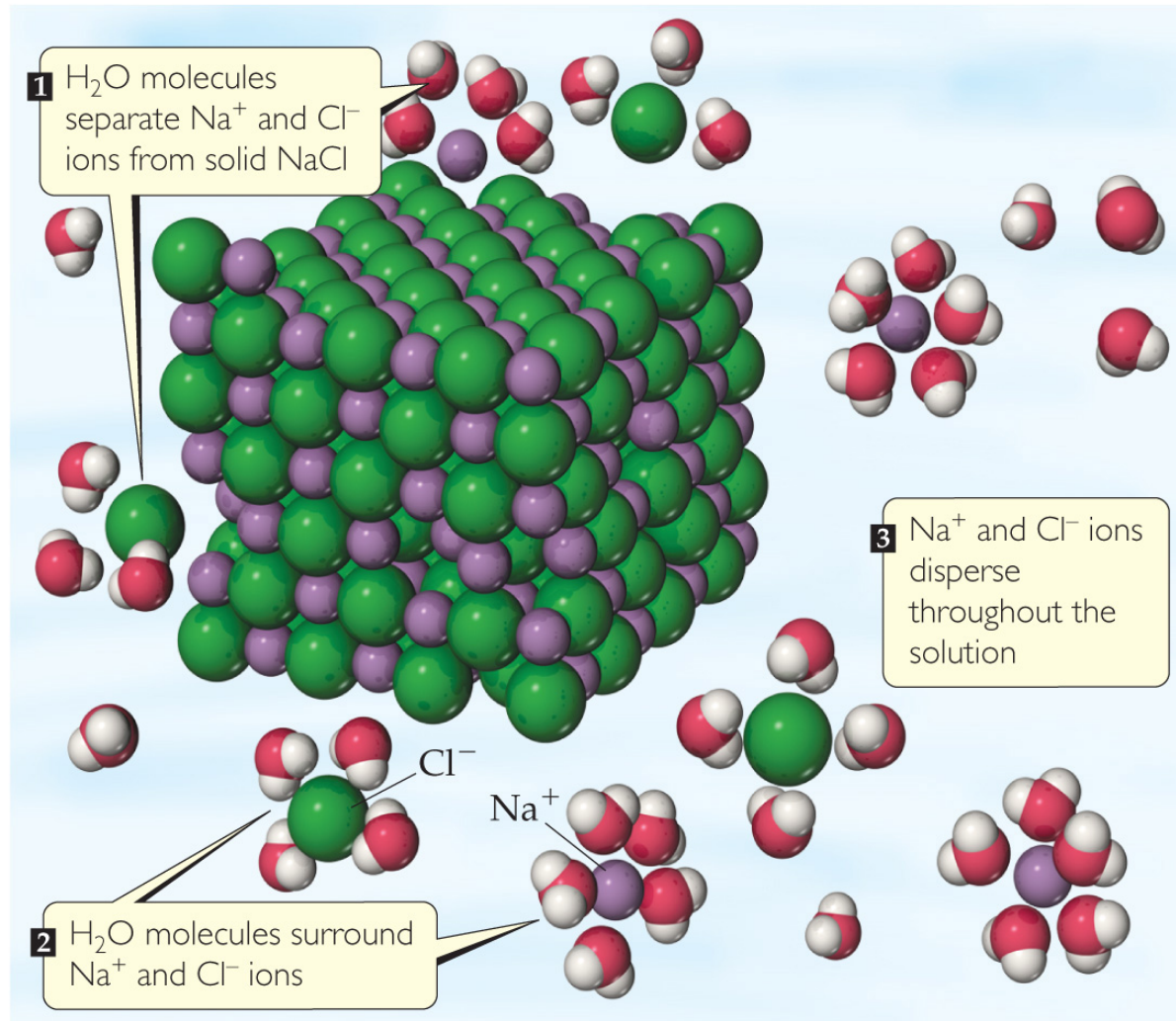
- Chapter 3: Chemical Reactions and Reaction Stoichiometry
 - Combustion Analysis
 - Limiting Reagents
 - Percent Yield
- Chapter 4: Aqueous Reactions and Solution Stoichiometry
 - Electrolytes in Solution
 - Molarity and Concentrations of Solutions

How is Combustion Analysis Performed in the Lab?



Mass gained by each absorber corresponds to mass of CO_2 or H_2O produced

Imagining Electrolytes in Solution



(a) Ionic compounds like sodium chloride, NaCl, form ions when they dissolve.

Making Solutions from a Solid

1 Weigh out 39.9 g
(0.250 mol) CuSO_4



2 Put CuSO_4 (solute) into
250-mL volumetric flask;
add water and swirl to
dissolve solute



3 Add water until solution
just reaches calibration
mark on neck of flask



Making Solutions from More Concentrated Solutions

1 Draw 25.0 mL of 1.00 M stock solution into pipette



2 Add concentrated solution in pipette to 250-mL volumetric flask



3 Dilute with water until solution reaches calibration mark on neck of flask and mix to create 0.100 M solution

