

## Learning Strategies for Students with Limited English Proficiency

1. Point out new vocabulary words in context and practice using the words as much as possible throughout the activity.

Contribution      Composed      Valuable      Significance      Comprised  
 Mutual            Apparatus      Achieve      Parentheses

2. When writing chemical formulas, encourage students to visualize ionic parts. When students do this, they are actually thinking about ions in parentheses. Once students learn that charges must balance, they can organize the construction of formulas into steps. It is helpful to provide students with a scaffold for the logical steps in building formulas. For example, to write the formula for a compound containing ammonium and sulfide:

Name	Ammonium	Sulfide
Formula	$\text{NH}_4$	S
Charge	+1	-2
How many required to balance charges	$\times 2$	$\times 1$
Total charge must sum to zero	+2	-2
Parts	$(\text{NH}_4)_2$	$(\text{S})_1$
Removing parentheses where possible	$(\text{NH}_4)_2 \text{S}$	