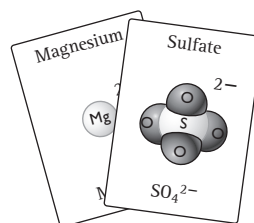


## RULES FOR IONIC GRID AND THREE-MINUTE BONDING

### Game 1: Ionic Grid

1. Play in groups of four with one deck of Polyatomic Ions cards. Shuffle the deck and place all the cards face up on the table in a grid five cards high and eight cards wide.
2. Take turns forming ionic compounds with the cards. Use two, three, or four cards to create a compound. Remove the cards you used from the grid.



3. Say the name of your compound out loud. Write the name and the correct chemical formula of the compound on the worksheet. Earn 1 point for each card used.
4. You can challenge the chemical formula written by anyone in your group. Your teacher must settle the challenge. If the formula is written incorrectly, the compound becomes yours. If your challenge is incorrect, your opponent scores double points.
5. When you use a Wild Card, you must name a cation or an anion and identify its charge.

### Game 2: Three-Minute Bonding

1. Your teacher will hand out one Polyatomic Ions card to each student.
2. When the game begins, move around the room to find another student whose card can combine with yours to form a compound. Some compounds may require more than two people. The goal is to create as many correct compounds as possible.
3. In the table, write down the chemical formula of each compound you create.
4. At some point during the game, the teacher will yell "Switch!" and you must trade cards with whoever is closest. Once you have traded, continue creating compounds until your teacher announces that time is up.
5. At the end of the game, determine your score. Compounds made from two cards are worth 2 points, three cards are worth 3 points, and four cards are worth 4 points. (The chemical formula must be correctly written.)