

# Sweet 16 Chemistry Ion Tournament



With spring just around the corner, your students' thoughts will soon be turning to sunshine, prom, and the NCAA basketball tournament. This clever activity combines the ever-popular basketball office pool with a review of the formulas of ionic compounds and their solubility. The result is the Sweet 16 Chemistry Ion Tournament. This activity will spark interest in your chemistry class because students will have fun playing the "Tournament."

The rules for filling out the Tournament brackets are simple: For the first round, just add the charge for each ion. The second round is also easy, combine the two ions to form a neutral compound and write out the formula. Once the compounds are formed, they must now compete with one another to move on. Only one of the two compounds in each bracket from the second round will dissolve in water—move this compound on to the semifinals. When the two semifinal compounds in each bracket are both dissolved in water, two new compounds are possible; one is soluble and one will precipitate. The compound that is soluble moves on to the finals. The winner of the Chemistry Ion Tournament is the insoluble product obtained when the two finalists are dissolved in water. To save you time, the answer sheet is also attached.

Since the presentation of solubility rules varies slightly, we strongly recommend using the solubility rules found in the *Laboratory Solution Preparation* section of the *Flinn Scientific Catalog/Reference Manual*. If you have not received your *Flinn Scientific Catalog/Reference Manual* yet, please give us a call (800-452-1261) or e-mail to request one. Special thanks to Stephan Graham from Cristo Rey Jesuit High School in Chicago, IL for providing us with the idea for this clever activity.

## Connecting to the National Standards

This laboratory activity relates to the following National Science Education Standards (1996):

***Unifying Concepts and Processes: Grades K–12***

Systems, order, and organization  
Evidence, models, and explanation

***Content Standards: Grades 5–8***

Content Standard B: Physical Science, properties and changes of properties in matter

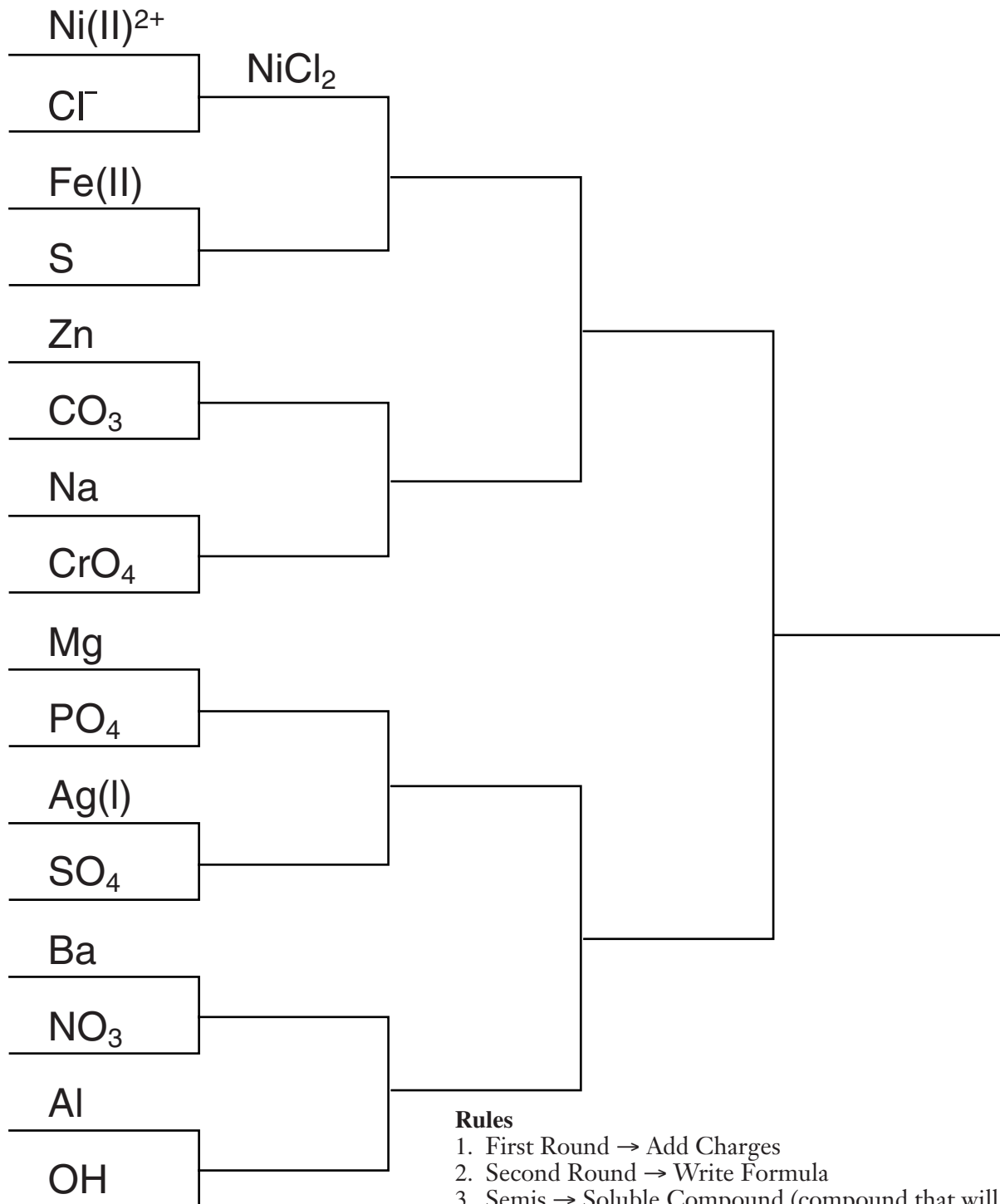
***Content Standards: Grades 9–12***

Content Standard B: Physical Science, structure and properties of matter, chemical reactions

Name \_\_\_\_\_ Class/Period \_\_\_\_\_

# Sweet 16 Chemistry Ion Tournament

First Round      Second Round      Semifinals      Finals      Winner



### Rules

1. First Round → Add Charges
2. Second Round → Write Formula
3. Semis → Soluble Compound (compound that will dissolve in water)
4. Finals → Soluble Product of Chemical Reaction
5. Winner → Insoluble Product of Chemical Reaction