

Ionic Compounds in Solution

Summary

Students will have the opportunity to practice naming and writing formulas for compounds. They can see what the chemicals look like with which they have been working.

Time Frame

1 class periods of 45 minutes each

Group Size

Individual

Materials

- [student sheet](#)

(attached)

18 ionic compounds (suggestions are found on the student sheet but they can be altered to fit your collection of chemicals)

Petri dishes

flasks or test tubes for the solutions

stoppers

Background for Teachers

Time Needed:

40 minutes. Half of this assignment can be given for homework.

Safety considerations:

Make sure the chemicals are sealed. If you dispose or store the chemicals follow safety protocol. I did not have KCN for the class to look at. I used it as an example for the class to follow.

Student Prior Knowledge

Students should know how to name ionic compounds including polyatomic ions.

Instructional Procedures

For each compound labeled on the worksheet, put the solid sample in a Petri dish (I sealed mine with tape). Put the corresponding compounds in a safe container (the students will be shaking them) and make a solution of the solid mixed with water. Mark the aqueous solutions and corresponding solids with the name or formula (which ever is on the worksheet). Place these in pairs around the room.

Have the students mark the color and make note of whether the solid is a powder or crystalline (reflects light). On the aqueous blank they will write the color of the solution and mark whether or not it is opaque or transparent (some of them need to be shaken).

Students will walk around the lab to see the different compounds and fill in the blanks. Have them turn in the assignment the next day.

Assessment Plan

Students are given participation points for completion. After points have been awarded, put a transparency of the right answers so the students have compound names and formulas with which they can practice.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)