

Bonding Rules Inquiry Activity

Summary

Through 4 activities students will discover the rules of nomenclature of ionic and covalent bonds, analyze the relationship between the valence electrons of an atom and the type of bond formed between atoms, and then test out these patterns in a experiment type format.

Main Core Tie

Science - Chemistry

[Standard 3 Objective 2](#)

Time Frame

1 class periods of 60 minutes each

Group Size

Small Groups

Materials

- [student pages](#)
(attached)

Background for Teachers

Time Needed:
45-60 minutes

Instructional Procedures

Copy the student pages off separately so that they can only have one activity at a time. If you give them all of the activities at the same time they will try to work on the in a divide-n-concur mentality. This will only prove to be more frustrating than usual.

Tell the students that they will be creating rule for how to put the elements and compounds together and then naming them. It is best to have the students work in groups, but for a more challenging activity you can have them work alone but it will double the time required.

As the students are work together, circulate among them to help and guide them. If they seem to be struggling suggest a strategy or a plausible rule.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)