History of the Atom

Summary

Students work in small individually and in small groups to learn about models of the atom during different time periods up to our current understanding. They make a poster or foldable book and teach what they have learned to other groups with other models. (This could easily be done using a PowerPoint also)

Main Core Tie

SEEd - Grade 8

Strand 8.1: MATTER AND ENERGY INTERACT IN THE PHYSICAL WORLD Standard 8.1.1

Time Frame

3 class periods of 60 minutes each

Group Size

Small Groups

Materials

Books or information on the different models of the atom
Poster paper
Markers, crayons, colored pencils
Computer lab if doing PowerPoint

- Student Worksheet

Instructional Procedures

Hook activity: ask students to work in groups and write down every word they can think of that has to do with the atom. Have a member of each group come to the board and write down 2-3 terms that no one else has written yet. See how large a list each class can make
Assign each student (groups of four) one of the atomic models & give them time to find the information and fill it out on the student sheet. (30-40 min)
Have students with the same model get together and share what they learned, and check each others' information. (10 min)
Back in their original groups, students can make a poster, foldable book or power point presentation to summarize their work and the work of others. (25 min) Once they have created their product, have groups share by reading each others' work. (10-15 min)
Give each student a copy of the Atom History Notes, and arrange them into larger groups including each of the models (Dalton, Thompson, Rutherford, Bohr). Have the students discuss who should present first and why.
As students are presenting, the others in the group should be filling in the notes on that model. (50 min)

Assessment Plan

Atom History Research----------Points

Included adequate & relevant information on the assigned model. Uses complete sentences.-----15
Diagram/drawing of the assigned model that is colorful & neat----15

Explains how model represents the atom----15

Atom History Notes

10 points for accurately completing each section and using complete sentences-----40

Participation:

Students participate in preparing for the presentation-----10

Students participate in the actual presentation---10

Student record the information presented by other groups.------10

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

Utah LessonPlans