

General Educator: Teacher 1

Special Service Provider: Teacher 2

Co-Teaching

Lesson Plan

Subject Area: Science

Grade level: 8th

Content Standard: SC. 8.4.13

Lesson Objective: SWBAT identify and calculate the number of protons, electrons, and neutrons in a series of elements.

Essential Questions: How do I calculate the number of protons, electrons, and neutrons in elements?

Key Vocabulary: Proton, Neutron, Electron, Atomic Weight, Atomic Mass, Bohr Atom, Electron Shell Configuration, Nucleus

Pre-Assessment:

Materials: Overhead Bohr Model, Poster Board, Poms (red-green-yellow), Glue, Markers, Worksheet on Electron Configuration, Periodic Table, Chapter 16 Reading Sheet, Planners, Calculator, Note-Cards, Lab feedback form, exit ticket

Lesson	Co-teaching Approach (can select more than one)	Time	General Education Teacher	Special Service Provider	Considerations (may include adaptations, differentiation, accommodation, or student-specific needs).
---------------	---	-------------	----------------------------------	---------------------------------	---

<p>Beginning: (may include: Opening; Warm Up; Review; Anticipatory Set)</p>	<p><input checked="" type="checkbox"/> One Teach, One Support <input type="checkbox"/> Parallel <input type="checkbox"/> Alternative <input type="checkbox"/> Station <input type="checkbox"/> Team</p>	<p>5 min</p> <p>10 min</p>	<p>Students will complete Bellringer on the board</p> <p>Go over homework assignment- using white board and having students fill in the blank- section 1 chapter 14 (Formulas for finding the number of protons, neutrons, electrons)</p>	<p>Take roll and give out make –up work</p> <p>Walk around to record who has completed homework</p>	<p>Have Tori and Allen hand out graded assignments.</p> <p>Have extra homework papers for Brandon, Patrick, Lyle, and Steven</p>
<p>Middle: (may include: Instruction; Checking for Understanding; Independent or Group Practice)</p>	<p><input checked="" type="checkbox"/> One Teach, One Support <input type="checkbox"/> Parallel <input type="checkbox"/> Alternative <input type="checkbox"/> Station <input checked="" type="checkbox"/> Team</p>	<p>5 min</p> <p>5 min</p> <p>5 min</p>	<p>Transition: Check for understanding (CFU) of content by posing essential questions based on reading content from HW/ Introduction to Activity</p> <p>Rotate around the room to monitor student progress on the construction of the atoms.</p> <p>Use a white board to complete an example of building atoms for the students. Call up student for each separate model to assist with the placing of the markers on the white board, while the other students complete theirs at their desk.</p>	<p>While CFU is occurring- hand out new lab worksheet and calculators to students who need them.</p> <p>Rotate around the room to monitor student progress on the construction of the atoms.</p> <p>Use overhead to complete an example of building atoms for the students. Call up student for each separate model to assist with the placing of the markers on the overhead, while the other students complete theirs at their desk.</p>	<p>Have calculators handy for students with math problems (Patrick, Steven, and Christine)</p> <p>Prior to lab have circles already drawn and labeled with the max number of electrons allowed in each shell- and have pre-made baggies with poms already counted out for each Bohr atom.</p> <p>Separate Chelsea and Haley while completing the pom activity.</p> <p>Describing and showing model (visual/auditory) while having students manipulate their own</p>

					(kinesthetic/tactile) should address all learning styles
<p>End: (may include: Closing, Assessments, Extension of the Lesson)</p>	<p><input type="checkbox"/> One Teach, One Support <input checked="" type="checkbox"/> Parallel <input type="checkbox"/> Alternative <input type="checkbox"/> Station <input type="checkbox"/> Team</p>	<p>10min</p> <p>10 min</p>	<p>Divide students in 2 equal groups. Pull group 1 students on the right side of the room and review the activity with the poms. Review key vocabulary words that were used in this activity and ask students to define the words orally.</p> <p>In the individual groups assign homework, complete worksheet on finding the number of protons, electrons, and neutrons. Also have students draw the Bohr Model on their worksheet.</p>	<p>Pull group 2 students on the left side of the room and review the activity with the poms. Review key vocabulary words that were used in this activity and ask students to define the words orally.</p> <p>In the individual groups assign homework, complete worksheet on finding the number of protons, electrons, and neutrons. Also have students draw the Bohr Model on their worksheet.</p>	<p>Make sure Haley and Chelsea are in different groups.</p> <p>Sign the planners of the students who will need a reminder tonight about the homework</p> <p>Fill in half of the chart for Patrick, Steven, Andrew, Kayla, and Josh and give them copies of teacher notes so they have the formulas to find the answers.</p>