



Education 432: Secondary Principles & Practices  
Lesson Plan Template

**Science 9: Series and Parallel Circuit Practice/Review**

**Teachers' Name: Mr. Andrew Kroon**

**Grade: 9**

**Subject: Science 9**

**Topic: Electricity**

**A. Learning Goals & Success Criteria**

Learning goals:

- Review series and parallel circuits
- Practice calculations regarding equivalent resistance, current, and voltage through series and parallel circuits
- Prepare for an upcoming assignment that has questions on these circuits

Success Criteria:

- Ability to identify circuit types (series vs parallel)
- Ability to apply simple circuit formulas in a series and a parallel circuit context
- Ability to correctly calculate voltage, resistance, current, and equivalent resistance of various series and parallel circuits

**B. Lesson Outcomes**

GCOs/Competencies: Knowledge & Skills

SCOs:

Students will be expected to...

- Explain the flow of charge in an electrical circuit (308-16)
- Describe series and parallel circuits involving varying resistance, voltage, and current (308-17)
- Use instruments effectively and accurately for collecting data (209-3)

**C. Lesson Phases**

Time:  
15 minutes

**Introduction:**

- I would start by handing out note booklets I made for the next couple lessons.
- At the start of the note booklet there are a couple examples of series and parallel circuit questions that I will work through with them on the board



Education 432: Secondary Principles & Practices  
Lesson Plan Template

<p>Time: 35-40 minutes</p>	<p><b>Body: (questions are in file Series and Parellel Whiteboard Work)</b></p> <ul style="list-style-type: none"><li>- I would then have the students line up along the back of the room and I would shuffle and hand out cards to assign groups.</li><li>- On the whiteboards around the room there are questions for each group to try an answer together.</li><li>- I would allow each group 5ish minutes at each question and reassess to see how much they have done and whether or not they need extra time.</li><li>- After all the groups have completed each of the questions I would have a volunteer from each group that ended on the same question to do rock paper scissors to determine which group is going to walk us through how they go the answer.</li></ul>
<p>Time: 5-10 minutes</p>	<p><b>Closing:</b></p> <ul style="list-style-type: none"><li>- For the end of the lesson if there is any time left to go, I would hand back the quizzes from the last class and let students ask any questions if they had any and I would also go over common errors made and tips for next time.</li></ul>

**D. Assessment Tasks**

Introduction Phase Assessment(s):

- Doing these examples with the students gives them a chance to re-introduce them with the content as it has been over a week since we have had a lesson with this material due to weather closures and parent teacher conferences
- I plan to allow students an opportunity to walk me through parts of the questions step by step to show that they know how to do it

Body of Lesson Phase Assessment(s):

- These questions on the whiteboards around the room allows students that better understand the material to show their classmates how to do it
- It gives the students a chance to get up and move around so they stay engaged (especially since it is first thing in the morning)
- Allowing students a chance to try things on their own without the teacher guiding them gives them a chance to show what they actually know.



Education 432: Secondary Principles & Practices  
Lesson Plan Template

Closing of Lesson Phase Assessment(s):

- Giving students a chance to ask questions about the quiz shows who actually cares about how they are doing
- Correcting common errors allows students a chance to see how they can improve for future assignments
- Giving tips for future work lets students know what you are expecting of them in future assignments so they know better how to improve their own work

**E. Resources**

- White boards & markers
- Calculators (maybe)
- Printer & Paper (practice questions and note booklets)

**F. Inclusive Practices**

- Visuals on paper and on the whiteboard allows students that learn better visually to have a visual stimulus to keep them engaged in the material
- Having questions around the room gives students a chance to get up and move around keeping them engaged in the lesson especially since it is so early in the morning
- Assigning groups also makes sure that everybody is included and allows students a chance to work as a team