**Roles:** (3)Recorder, Coordinator, Reviewer/Consultant; (4) Recorder, Coordinator, Reviewer, Consultant

**Team Member Name 1: \_Redacted\_\_\_\_\_\_\_\_\_\_\_\_\_** **Role: \_Recorder\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Team Member Name 2: \_Redacted\_\_\_\_\_\_\_\_\_\_\_\_\_** **Role: \_Coordinator\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Team Member Name 3: \_Redacted\_\_\_\_\_\_\_\_\_\_\_\_\_** **Role: \_Reviewer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Team Member Name 4: \_Redacted\_\_\_\_\_\_\_\_\_\_\_\_\_ Role: \_Consultant\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Remember the 4 cardinal rules for question-storming!**

1. **Ask as many questions as possible in the allotted time.**
2. **Do not answer or discuss the questions and do not judge the quality of the questions!**
3. **Write the question exactly as stated (include even grammatical errors!)**
4. **Articulate everything as a question (no statements).**

**Step 1: Produce Many Questions** (4 minutes)

**QFocus**: *For a 1st order circuit, forever is only five time constants away!*

1. What is a first order circuit? C
2. Are there other orders of circuits? C
3. What defines a time constant? C
4. How do you find a time constant? O
5. What happens after 5 time constants? C
6. What happens if you evaluate the circuit before 5 time constants is up? C
7. Are time constants useful for anything other than RC and RL circuits? O
8. What are real world applications of first order circuits? O
9. When is forever in higher order of circuits? C
10. Are there other ways to find what forever is? C
11. Why are RC and RL circuits useful? O
12. What makes a circuit first order? C
13. Why do we consider time when looking at these types of circuits and not others? O

**Step 2: Improve the Questions** (8 minutes)

1. What is a first order circuit and what types of components make the circuit first order? [1,12]
2. Are there other orders of circuits and how does the time constant differ for higher order circuits? [2,9]
3. What defines a time constant and how do you use one? [3,4]
4. What happens after 5 time constants and how does this affect the circuit compared with before 5 time constants? [5,6]
5. Are time constants useful for anything other than RC and RL circuits?
6. What are real world applications of first order circuits?
7. Are there other ways to find what forever is and does anything change the fact that forever is 5 time constants?
8. Why are RC and RL circuits useful?
9. Why do we consider time when looking at these types of circuits and not others?

**Step 3: Prioritize the Questions [top 5 from group]** (3 minutes)

1. What are real world applications of first order circuits?
2. What happens after 5 time constants and how does this affect the circuit compared with before 5 time constants?
3. Why do we consider time when looking at these types of circuits and not others?
4. Are there other orders of circuits and how does the time constant differ for higher order circuits?
5. What is a first order circuit and what types of components make the circuit first order?