APA citation of journal article:

The Basics:
1. What was the broad question being asked by this research project? What was the specific question being asked by this research project?
   a. Summarize the background information on the research topic in three sentences.
   b. What is the gap in the literature identified by the researchers? What question(s) are they trying to answer? What is their hypothesis and what should happen if the author's hypothesis is true?
   c. What are alternative hypotheses?

The broad question being asked was whether or not multitasking deteriorates with age. The gap in the research identified was that multitasking has often been tested with either task-switch, or dual-task paradigms, when in reality it is usually a mix of the two. They hypothesized that these decreases in specific multitasking domains would be reflected in their more realistic simulation.

2. What experiments were done to test the hypothesis or investigate the research question?
   a. Explain the task design – what are participants instructed to do and what is being measured? Think about the independent and dependent variables.

Participants were made to use a driving simulator, while presented with three different type of distractions, either memory, physical, or verbal. They were then measured to see how often their speed varied, they drove across the median, or veered off the road.

3. What evidence supports each of the conclusions?
   a. Before you read the discussion, summarize the main findings and link each one back to the research question(s). How does each result inform the hypothesis?

Older drivers veered off the road 38% more than younger drivers, and drove across the median at 15%, compared to 0% in younger drivers when attempting to complete multitasking tasks while driving.

4. What are the major conclusions?

     a. What do the results add to the field? How do the researchers interpret their findings? Summarize any limitations identified by the researchers.

The major conclusions are that multitasking ability, on a more realistic scale, does indeed differ between older and younger individuals, with younger individuals demonstrating better ability.

The Critique:

1. Is the paper well written? How do you know? For week 2 & later, use this space to practice headlines & summaries of the articles via tweets.

The paper is well written. Visuals aid in the understanding of it, and the synthesis behind their research idea was very well presented.

2. Do the conclusions seem logical given the data processed? Why or why not? Another way of thinking about this: do the results adequately support the conclusions that are drawn? Are there alternative explanations for the findings? What inferences about the hypotheses and questions can be made based on these results? The conclusions do seem logical. We may hypothesize that multitasking ability on a realistic scale declines with age, especially during tasks such as driving.

3. Are the conclusions important? How do you think this relates to everyday behavior? The conclusions are important because they should make us more aware of how often we multitask, and the consequences of what this multitasking may entail. It splits our attention, and as we age, it becomes more and more difficult to compensate for it.

4. What were the best aspects of the research presented, and how could the research be improved? Name at least one way to improve the experiment.

The best aspect was the synthesis of the two types of multitasking into one cohesive experiment. It could have been improved however by using a wider variety of ages, not simply splitting the groups into young and old groups. This leads me to believe that the researchers could have done this to improve their odds of getting a statistically significant result. It would be better to test a large range of ages, and find a correlational pattern between age and failed multitasking.

5. How would you follow-up this experiment or study?
   I would run the same study but with all ages. I find a major issue in the fact that middle aged individuals were omitted and would like to see the results of including them.

Additional Resources: What are the basic concepts that you need to know to understand the science presented in your paper? What other information or resources would help you better understand the paper? This is helpful to consider for your science communication pieces. Understand concepts of attention and forms of multitasking.

Further Questions:
Write at least five comments or questions about the article to discuss with the class.
1. What could be the motivation behind the large age gap in the two experiment groups?
2. Are their loading tasks indicative of both forms of multitasking?
3. Why is this subject important?
4. Can you think of any better situations or circumstances to test multitasking?
5. Knowing this, how could we apply this to society?

Titles and Sentences
1. **Evidence Suggests Our Ability to Multitask Decreases with Age**
   Researchers from Chemnitz University of Technology recently demonstrated that older individuals perform much worse on tests of multitasking than their younger counterparts.
2. **Father Time Doesn't Text and Drive**
   Research suggests that as we grow older, our ability to multitask declines.
3. **She's Not Ignoring You, She's Just Old**
   Your mother has been reading an article for the past 10 minutes, and still hasn't heard you calling her name, turns out, there may be a reason behind this.