Chapter 11 Textbook Questions

List and describe the 5 components of a STEM research paper

1. Introduction
   1. Introduce problem and rationale for studying it
   2. Connect present study to background research
   3. Narrow down problem to specific hypothesis/question and variables
   4. Summarize background research
2. Materials and Methods
   1. Describe materials used in experiment
   2. Explain experimental process so that it is reproducible
   3. Add photos of experimental process and reference in text
3. Results
   1. Describe results/data gathered from experiment
   2. Do not try to explain results yet
   3. Explain math and statistical analysis
   4. Address outliers, but wait to try to explain them
   5. Refer to figures/tables in text
   6. Put tables/figures that are too big in appendix
4. Analysis and Conclusions
   1. Explain results
   2. How much did results support your hypothesis?
   3. Address possible causes for data/results
   4. Paragraphs should clearly address their own section of results
   5. Include past research for support
   6. Explain limitations
5. Works Cited
   1. Works cited list like in chapter 10