The different sections of your paper should generally follow an hourglass shape structure. The introduction and discussion section are broad and engaging, while the methods and results are narrow and very specific. The typical order of a research paper is: **introduction; materials and methods; results; discussion / conclusion.** Results and discussion can sometimes be combined, but it is far more common to see them separately.

### General Guidelines
- Have a descriptive title
- Use clear headings and sub-headings
- Use active voice throughout
- Avoid repetition; every sentence is important
- Write clearly and concisely
- Don’t quote sources, unless necessary for your point
- Paraphrase sources and use proper citation

### Abstract
- An essential part of your research paper
- Stands apart from your actual paper
- Is a concise summary of your paper
- Identifies the key points of each section in chronological order
- Should be written last
- Is usually between 200-300 words

### Introduction
The introduction is one of the most important parts of your research paper. In the introduction, you should set the tone for your paper by engaging the reader and telling a compelling story of your work. A well-written introduction will hook the reader into wanting to know more about your research.

#### General structure
- Discipline-specific premise
- Literature review
- Gaps in knowledge
- Hypotheses/aims of paper
- Overview of experimental approach

#### Tips
- Aim for 2-5 paragraphs
- Non-technical writing
- Use active voice
- Avoid long, drawn-out sentences
- Paraphrase and cite all sources

### Materials and Methods
- Dry and technical writing
- Always use past tense
- Provide the reader with enough details and facts to reproduce your study independently
- Describe the experimental design of your field/lab work
- Describe your statistical methods
- Properly cite previous methods that you borrowed or modified (It is also okay to just refer the reader to a previous study that details your methods)

### Results
- Usually written in present tense
- Include only relevant results
- Label tables and figures clearly
- Describe key relationships and trends
- Describe positive and negative; expected v. actual results
- Do not elaborate; just describe
- Do not use citations

### Discussion
The discussion section is a close second to your introduction in importance. This is where the questions posed and gaps identified in the introduction are addressed in the context of your results and study. Again, you can engage the reader by continuing the story you started in the introduction.

#### General structure
- Address the significance of your results
- Support and defend conclusions
- Ask “What’s next?”
- Propose future research studies
- End with the big picture message

#### Tips
- Aim for 2-5 paragraphs
- Answer the questions / gaps posed in the introduction; i.e. ‘We found that…”
- Include critiques of past studies, if relevant
- Include studies that support results, if relevant