

Presentation of Results

Mathematics Session 8

T J James

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Schedule

1 Preparation

- Expectations
- Preparatory Time

2 Presentations

- Presentation of Results

3 Conclusion

- Career Opportunities
- Closing Remarks

PREPARATION

Expectations

Academic Writing

Any piece of academic writing or academic presentation follows a general structure.

- 1 Abstract
- 2 Introduction
- 3 Method
- 4 Results
- 5 Analysis
- 6 Conclusion
- 7 Questions

Abstract

- An abstract is a summary of an entire piece of writing
- It usually includes:
 - ▶ What was being researched.
 - ▶ How it was researched.
 - ▶ What the marquee result was.
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Graphene, a one-atom thick, two-dimensional sheets of sp^2 hybridized carbon atoms packed in a hexagonal lattice with a Caron-Carbon distance of about 0.142 nm. Its extended honeycomb network forms the basic building block of other important allotropes; it can be stacked to form 3-Dgraphite, rolled to form 1-D-nanotubes and wrapped to form 0-D-fullerenes. Long-range π conjugation in graphene results in its extraordinary thermal, mechanical and electrical properties, which have been the interest of many theoretical studies and recently became an exciting area for scientists. Graphene is impermeable to gas and liquids, has excellent thermal conductivity and higher current density in comparison to other most effective materials. All of its exceptional properties have opened up new avenues for the use of graphene in nano-devices and nano-systems, which initiated its prominent use as a material for drug targeting. In addition, several fabrication techniques are outlined, starting from the mechanical exfoliation of high-quality graphene to the direct growth on silicon carbide or metal substrates and from the chemical routes utilizing graphene oxide to the newly developed approach at the molecular level. By this article reviewers intend to emphasize on unique properties, fabrication techniques and updated applications of graphene. In addition, we discuss about the potential of graphene in drug targeting in fields of nanotechnology, biomedical engineering and technology and its use for innovations in various fields such as electronics and photonics.

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- Motivation

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- ▶ Discuss the main outcome of your experiment.

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- Background Theory
 - ▶ Discuss any theory or piece of information which might be relevant to your experiment.

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- Should be one of the longer sections.

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 - ▶ Don't feel the need to present *everything*
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- Leave any manipulating of your results for the Analysis section

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- Discuss where any errors could have come from in your results.
 - ▶ Consider how these errors could be corrected or mitigated

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Conclusion

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- Summarise your findings
- Suggest any improvements
 - ▶ What could you change to make it better?
 - ▶ What else could you do to go further?
 - ▶ What would you do differently if you had to do it again?

PREPARATION

Preparatory Time

Preparation

Prepare for your presentations. They should last approx. 10 minutes. Be ready for questions.

PRESENTATIONS

Presentation of Results

Questions

For each presentation, you must each think of at least one question to ask. Your question must be related to the project, not about cats or the latest version of Geometry Dash.

CONCLUSION

Career Opportunities

Mathematics

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- Institute of Mathematics and its Applications

Engineering

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- Economist
- Business Analyst
- Auditor

CONCLUSION

Closing Remarks

Well Done!

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You should be proud of yourselves!

On behalf of Amalia and myself, thank you for being such a lovely group and so engaged through the programme.

Good luck for the future!