



Gosford High School
Year 10 5.3 Mathematics
Assessment Task Notification 2024

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| Task | Task 1 – Topic Test |
| Topic | Surface Area & Volume and Single & Bivariate Data Analysis Test |
| Weighting | 30% |
| Due Date | Tuesday 7 th May Period 3 |

Outcomes to be Assessed

MA5.3-18SP, MA5.3-19SP, MA 5.3-13MG, MA 5.3-14MG, MA 5.3-16MG, MA 5.3-2WM

Task description

The task is a 50 minute topic test assessing student knowledge, skills and understanding in the following topics,

SURFACE AREA AND VOLUME

- Surface area of prisms, cylinders, pyramids, cones, and spheres.
- Volume of prisms, cylinders, pyramids, cones, and spheres.
- Surface area and volume of composite solids.
- Area, surface area and volume of similar figures.

SINGLE AND BIVARIATE DATA ANALYSIS

- Review of Year 9 statistics including frequency distributions, frequency histograms and polygons, dot plots, stem and leaf plots, box and whisker plots, measures of central tendency and measures of dispersion.
- Interpretation and analysis of time-series data.
- Analysis of bivariate data and scatter plots.
- Investigation of relationships between two statistical variables using lines of best fit.

WORKING MATHEMATICALLY

Develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly

Additional Information

- Students are required to bring an approved scientific calculator, a ruler, a blue or black pen, a lead pencil and an eraser.
- You will be provided with an examination paper.

Students are expected to utilize the following resources when undertaking their preparation for this task:

- Syllabus, available from <https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/mathematics/mathematics-k-10>
- Past papers and topic resources available from STURDY
- Cambridge Textbook Ch 1 and 4

Task Criteria

You will be assessed on the following processes

- **exploring and connecting mathematical concepts (understanding/fluency)**
- **choosing and applying efficient techniques to solve problems (fluency/problem solving)**
- **communicating their thinking and reasoning coherently and clearly (communicating/reasoning).**

Feedback

- Worked solutions including specific marking criteria for each question.
- Written general advice as comments and annotations from teachers.
- Verbal feedback from the class teacher.

Student Acknowledgement of Academic Integrity

By submitting the task for marking, I acknowledge the following:

1. The work submitted is my own work and appropriately acknowledges of all sources has been made.
2. I have not used generative AI in the construction of the task.
3. If there is an allegation of malpractice, I will be required to show my drafts/ planning to prove the task is all my own work.
4. I am aware that the work may be submitted to plagiarism detection processes.
5. Where the work of others is used and not acknowledged, a finding of plagiarism will be made and a mark of zero awarded and I will have to resubmit the task.

Marking Guidelines

Extensive marking guidelines will be provided on return of the task along with the written feedback.