



BISHOPS
DIOCESAN COLLEGE

Grade 8 Parents Information Evening

Mathematics

February 2019

Topics Covered

- ▶ The Curriculum (slide 3)
- ▶ Work Schedules & SBA (School Based Assessment) Schedules (slide 4)
- ▶ Homework (slide 5)
- ▶ Assessment (slides 6 – 11)
- ▶ The Setting System, Set Changes and Grade 8 Sets (slides 12 – 14)
- ▶ Mathematics and Mathematical Literacy (slide 15)
- ▶ Common Concerns, Homework Strategy & Reminders (slides 16 – 18)
- ▶ Mathematics and Computers (slides 19 – 20)
- ▶ Bishops intranet and email (slide 21 – 26)

The Mathematics Curriculum

Five key areas

- ▶ Numbers
- ▶ Algebra
- ▶ Geometry
- ▶ Measurement
- ▶ Probability & Statistics (Data Handling)

Goals

- ▶ to provide stimulation at appropriate levels
- ▶ to challenge boys to understand & appreciate their strengths
- ▶ to encourage boys to recognize and overcome their weaknesses
- ▶ to empower boys with skills essential for academic success in a rapidly changing world

Work and SBA Schedules

Boys are expected to plan ahead and meet deadlines

- ▶ under exceptional circumstance deadlines can be negotiated
- ▶ negotiations must take place when a task is handed out
- ▶ NO negotiations will be entered into on or just before the due date

A detailed breakdown of all work to be covered each term appears on the Bishops Intranet and can be accessed by the boys from home.

- ▶ 2019 dates for all SBA tasks are available on the intranet
- ▶ tests can ONLY be written in their assigned slots
- ▶ boys who miss tests should write them in their own time
- ▶ they will NOT count and they will be marked absent.

Homework

Work is covered at a fast pace

- ▶ the curriculum is both full and challenging
- ▶ homework plays an essential role in
 - empowering the boys to become more self-sufficient
 - helping boys to consolidate concepts covered in class
- ▶ Homework (not necessarily formal work set by the teacher)
 - completion of work done in class
 - preparation for SBA tasks such as common tests
 - completion of tutorials or assignments
 - revision for exams (past papers and tutorials from intranet)

Cognitive levels (across all grades)

- ▶ Knowledge 20%
- ▶ Routine Procedures 35%
- ▶ Complex Procedures 30%
- ▶ Problem Solving 15%

Rolling Averages on My Bishops Life

- ▶ Marks are updated on an ongoing basis
- ▶ Weightings change constantly
- ▶ Parents can track marks

Rolling averages continued

Common Tests (35 – 40 Marks)

- ▶ work covered in class
- ▶ work through past tests

Revision Assignments (Marks)

- ▶ Terms 1 and 3 only
- ▶ All work covered in the term
- ▶ Validation test to validate work handed in

Rolling averages continued

Investigations

- ▶ usually on unseen work
- ▶ relevant to classwork
- ▶ completed in class under test conditions

Graph Assignment

- ▶ Worked on both in class and at home
- ▶ Marks are awarded for
 - independence, punctuality & level of completion
 - validation test

June Report Mark

- ▶ June Exam
- ▶ All common tests
- ▶ All tutorials
- ▶ All investigations
- ▶ All assignments

November Report Mark

Approximate breakdown of marks, by percentage:

- ▶ November Exam (2 Papers) 60%
- ▶ June Exam (1 Paper) 16%
- ▶ Common Tests (14) 8%
- ▶ Revision Assignments (2) 8%
- ▶ All investigations (4) 4%
- ▶ Assignment (1) 4%
- ▶ 4 lowest test marks are dropped if a boy has written all the tests
- ▶ If a boy is absent for four or more tests, no tests are dropped.

The Setting System

There are 7 Maths sets in Grades 8 and 9

- ▶ Sets 1, 2 & 3 are extended to prepare the boys for AP Maths
- ▶ Set 7 is the smallest set and weaker maths students are able to show significant improvements if they work hard
- ▶ Boys who start in lower sets can work their way into higher sets
- ▶ Boys in higher sets will be dropped to lower sets if they under-perform

Grade 8 setting should be done by the **15th February**

Boys will be set based on their marks in the following assessments:

- ▶ Pattern Investigation written on the 25th January
- ▶ A common test on basic algebra, scheduled for the 8th February.
- ▶ A Setting Test scheduled for the 11th February

Set Changes

- ▶ Individual set changes are made if a boy is misplaced in his set.
- ▶ Set changes are made
 - at the end of the first term
 - after the June exams
 - after the November exams
- ▶ **Requests** from parents or boys for a particular teacher or set are **NOT considered**.
- ▶ Changes are based on academic performance.
- ▶ Trust us to know what is best for each boy.
- ▶ Set changes are NOT made after each test.

Grade 8 Sets

Sets 1 – 3 have the same teacher from Grades 8 – 12.

Sets 4 – 7 have the same teacher for Grades 8 – 9.

2019 Grade 8 Maths teachers

- ▶ Set 1 Mr Vamvadelis
- ▶ Set 2 Mrs Campbell
- ▶ Set 3 Mrs Gardner
- ▶ Set 4 Mr Gibbon
- ▶ Set 5 Mr Shabangu
- ▶ Set 6 Tshabalala
- ▶ Set 7 Mr Jacobs

Mathematics & Mathematical Literacy

In Grades 10 – 12 all boys take Mathematics or Mathematical Literacy

- ▶ Mathematics is essential for boys wanting to study
 - Medicine
 - Engineering
 - Commerce
 - Sciences
- ▶ Mathematics is **not required** by boys wanting to study
 - Fine Art
 - Law
 - Music, Art, Advertising and a multitude of other careers

Common Concerns

Homework can be frustrating

- it may be too difficult
- some boys don't know where to start
- it may take too long
- poor organizational skills result in neglected homework

Common Tests and Exams

- may feel inaccessible
- results may be poor and lead to low self-esteem

Helpful Strategy to minimize frustration

Set a digital timer for 5 minutes

No matter how challenging or frustrating the question:

- persevere for 5 minutes
- look over notes
- look for a similar example
- Give the problem a full go

Stop after 5 minutes

- leave all the attempted working on the page
- never erase the only effort as it provides proof of engagement
- the teacher can build on the effort if they can see it

Advice

Try to stay positive and encouraging no matter what!

- ▶ Challenge your son to take responsibility for his own progress.
- ▶ A good work ethic in class is essential.
- ▶ Homework must be properly attempted on a daily basis.
- ▶ Encourage your son to
 - attend Maths Support as often as possible
 - arrange a catch up session during an Open Period if he has fallen behind
 - form a study and/or homework group with friends
 - take full advantage of all the resources on the Bishops Intranet

ONLY resort to extra lessons if all else fails.

Maths and Computers

Maths is mostly done with pen and paper.

- ▶ understanding is enhanced by computer based teaching and learning
- ▶ **Excel** is a very powerful mathematical program
 - Grade 9s use Excel when they do statistics
 - Boys learn how to
 - use formulae
 - perform basic calculations
 - draw graphs
- ▶ Grade 11s and 12s use Excel to understand
 - Regression analysis
 - Recursive sequences
 - Financial Mathematics

Maths and Computers continued

Geogebra, Autograph, Desmos, Geometer's Sketchpad and other software products are particularly useful in helping the boys to explore and understand

- ▶ the properties of graphs (Grades 9 - 12)
- ▶ the properties of quadrilaterals (Grade 9)
- ▶ circle geometry theorems (Grades 11 & 12)

Grades 8 & 9 have access to [computer worksheets](#) to enhance their learning

- ▶ factors worksheets using Excel
- ▶ a factor test
- ▶ transformations using Excel
- ▶ Quadrilateral investigations
- ▶ a quadrilateral properties theory test

Bishops Intranet and email

The **intranet** is a very important resource and boys should access it frequently to

- ▶ prepare for common tests by
 - working through CTs from previous years
 - checking their solutions to tutorials before handing in their work
 - consolidating their understanding by working through past tutorials
- ▶ prepare for exams by working through past papers and checking their answers
- ▶ look for additional worksheets and notes on sections they are struggling with

Communication between teachers and boys is often via **email** and boys need to

- ▶ check their emails regularly
- ▶ respond appropriately and timeously

Bishops Intranet

The screenshot shows a web browser window with the URL <https://learning.bishops.org.za/maths/#>. The page features a dark blue header with the "MATHS BISHOPS" logo and a navigation menu with links for Home, Maths, Maths Literacy, AP Maths, Competition Maths, Software, and Maths Teachers. A dropdown menu is open under "Maths", listing Grade 8, Grade 9, Grade 10, Grade 11, and Grade 12. Below the header is a large image of a chalkboard filled with mathematical equations. The main content area contains four white boxes with icons and text:

- Maths Society** (Calculator icon): Competitions, Olympiads and Problem Solving Training. **WHERE:** J7, Mr Vam Classroom. **WHEN:** Wednesdays. **TIMES:** 13h00 – 13h50. **CONTACT:** liam.foxcroft@bishops.org.za and thomas.warner@bishops.org.za
- SA Maths Olympiad** (Pencil icon): **Round 1**. **WHEN:** 12 March 2019. For practice, notes and past papers click here
- UCT Maths Competition** (Trophy icon): **WHEN:** 25 April 2019. For practice, notes and past papers click here. Speak to your teacher should you wish to be part of the team. Selection based on attendance to Maths Society will be important.
- Content to follow**

The browser's taskbar at the bottom shows various application icons and the system tray with the date and time: ENG 10:34 PM.

Bishops Intranet

Grade 8

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WORK SCHEDULES

[G8 SBA Schedule 2019](#)

[G8 Work Schedule 2019](#)

GUIDELINES

[Parents Mathematics Info \(2018\)](#)

[CAPS Document](#)

[G8 J Exam Guidelines 2019](#)

[G8 N Exam Guidelines 2019](#)

OTHER

[Old Maths Intranet](#)

REVISION BOOKLETS

EXAMS

[BISHOPS Past Papers](#)

[OTHER PAST TESTS](#)

TESTS AND TUTORIALS

[2012](#) [2017](#) [2022](#)

[2013](#) [2018](#) [2023](#)

[2014](#) [2019](#) [2024](#)

[2015](#) [2020](#) [2025](#)

[2016](#) [2021](#) [2026](#)

NOTES

[Notes](#)

WORKSHEETS

[Worksheets](#)

SOFTWARE RESOURCES

[Investigating Bottles](#)

Bishops Intranet

2018 SBA Tests and Tutorials

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TERM 1

CT 1	Algebra Basics	Memo
CT 2	Setting Test	Memo
Booklet	Numbers	Memo
CT 3	Numbers	Memo
Booklet	Algebra 2	Memo
CT 4	Algebra 2	Memo
Booklet	Equations	Memo
Tut 1	Equations	Memo

Bishops Intranet

BISHOPS Past Papers

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JUNE

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Exam	Exam	Exam	Exam	Exam	Exam	Exam	Exam	Exam	No Exam	Exam	Exam
Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	No Memo	Memo	Memo

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Exam	Exam	Exam	Exam	Exam	Exam	Exam	Exam	Exam	Exam	Exam	Exam
Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo

NOVEMBER

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Paper 1	Exam	Exam	Exam	Exam	Exam	Exam	Exam	Exam	Paper 1	Paper 1	Paper 1
Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo
Paper 2									Paper 2	Paper 2	Paper 2
Memo									Memo	Memo	Memo

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Paper 1	Paper 1	Paper 1	Paper 1	Paper 1	Paper 1	Paper 1	Paper 1	Paper 1	Paper 1	Paper 1	Paper 1
Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo
Paper 2	Paper 2	Paper 2	Paper 2	Paper 2	Paper 2	Paper 2	Paper 2	Paper 2	Paper 2	Paper 2	Paper 2
Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo	Memo

2019 Tests and Tutorials

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I HW 1		
CT 1	Algebra Basics	Memo
CT 2	Setting test	Memo
Booklet	Numbers	Memo
CT 3	Numbers	Memo
Booklet	Algebra 2	Memo
CT 4	Algebra 2	Memo
Booklet	Equations	Memo
Tut 1	Equations	Memo

I HW 2		
CT 5	Equations	Memo
Booklet	Geometry	Memo
Tut 2	Geometry	Memo
CT 6	Geometry	Memo
Booklet	Pythagoras, Area, Perimeter of triangles and circles	Memo
Tut 3	Pythagoras, Area, Perimeter of triangles and circles	Memo

I HW 3		
Booklet	Circles	Memo
CT 7	Pythagoras, Area, Perimeter of triangles and circles	Memo
Booklet	Exponents	Memo
CT 8	Exponents	Memo
Booklet	Finance	Memo
CT 9	Finance	Memo
Booklet	Volume and Surface Area	Memo
CT 10	Volume and Surface Area	Memo
Booklet	Graphs	Memo

I HW 4		
CT 11	Transformations	Memo
Booklet	Algebra and Equations with Fractions	Memo
CT 12	Algebra and Equations with Fractions	Memo
Booklet	Probability	Memo
CT 13	Probability	Memo