

**Douglas Academy
Mathematics Department**



**National 5 Mathematics (S4)
2019/2020**

A Guide for Parents

Classes

In S4 this session we have 6 classes working towards National 5 Mathematics. All of the classes are 'mixed ability'.

Textbook, Notes & Homework

All classes use the Hodder Gibson National 5/ Teejay IC2 textbook supplemented by other resources. Our N5 teachers typically go through notes and examples which pupils copy into their Notes Jotter before attempting an exercise from the textbook.

S4 classes have 4 periods of new work to get through each week. Teachers will set homework on a daily basis and pupils require to make their best effort to complete this. Some teachers may also issue Ink Exercises as well. Typically a week would be given to complete these.

Additional Support

The Mathematics Department run twice weekly lunchtime drop in sessions open to all pupils from S3-S6. The drop in sessions will take place on Wednesday & Thursday lunchtimes from 1:00 to 1:30pm in Room 5. They run from early September until the SQA exams in May. All classes are repeatedly made aware of these sessions.

We also offer Supported Study in the 4/5 weeks prior to the November/December Prelim and the May exam. Supported Study is after school and pupils 'sign up' in advance.

Assessments & Preparation Resources

The final grade for N5 Mathematics is based solely on the final exam in May which consists of 2 papers:

Paper 1 (Non-calculator)	1 hour 15 minutes	50 marks
Paper 2 (Calculator)	1 hour 50 minutes	60 marks

UASPs – these are no longer mandatory for National 5 courses. Our S4 classes will not be completing these as a matter of course. (Any pupil who is identified as struggling after the Prelim will be offered the chance to opt out of the final exam and complete the UASPs during February, March & April after they complete the N5 course. This will ensure that they finish S4 with some measure of success and the accompanying SCQF points. Parents will be consulted before any such decision is taken.)

September Assessment - this will include 40% level A/B questions. This will give pupils an idea of exam standards. A revision sheet will be issued around 3 weeks in advance. When pupils get their scripts returned they will be issued with a summary sheet detailing performance for each question and identifying next steps.

November/December Prelim – this covers all work completed to that point. **3 Practice Prelims** and at least **5 past papers** will be issued in advance. Pupils may well also be issued with a revision schedule to keep them on track. When pupils get their scripts returned they will be issued with a summary sheet detailing performance for each question and identifying next steps.

May Exam – this covers the whole course. **6 Practice Exams** and at least **5 Past Papers** will be issued in advance. Pupils may well also be issued with a revision schedule to keep them on track.

Useful Revision Websites

Notes and Examples

Maths Revision: www.mathsrevision.com

National 5 Maths: www.national5maths.co.uk

Video Past Papers and Lessons

Larbert High Youtube Lessons:

<https://www.youtube.com/channel/UCeJ1pRPUBkh5S5mzh5UvYfg/feed>

DLB Maths Youtube Past Paper Videos:

<https://www.youtube.com/channel/UCXt3XIkIJoAMovD7ngorKQQ>

Study Skills

To keep stress levels to a minimum at this time we recommend that all pupils are organised and have a clear revision plan to use their time effectively across all subjects. The following structure should help with this process:

- Ensure all pupils have access to a quiet space/area to study at home without the distractions of social media etc.
- Pupils should have planners up to date including dates and times of each exam.
- Pupils should have a clear plan of how and when they study for each subject. It is not recommended that pupils spend full days on one particular subject and should instead aim to cover around 2 subjects. Pupils should be flexible with this structure e.g. if struggling and find studying a particular subject is ineffective at that point, switch to another subject until in a better headspace.
- Ensure pupils take frequent short breaks. We work best and most efficiently in 50 minutes intervals. When taking breaks leave the working space even for 5 minutes to allow the brain to rest. Fresh air and exercise should also be encouraged even if just a walk.
- Studying for Maths.
Pupils should identify which formulae are provided in the formula sheet at the front of the exam and create a list of those which need to be learned. Pupils should initially be working through specimen papers **with notes** to produce good quality solutions, asking for help as required. Once having worked through the first few papers with notes pupils should start to recognise and become familiar with the exam style questions and then less reliant on notes as completing specimen papers.

It is important to note that this is a stressful time and it is easy for pupils to develop a fixed mindset when they struggle to see progress. This is only natural and pupils should be made aware that the feeling of being overwhelmed is simply an indication that they value the importance of their studies. At these times pupils should be encouraged to talk about their feelings, break down problems and work through issues one at a time. Assure pupils that hard work and effort is the key to success.

Pupils should adopt a growth mindset, where instead of thinking 'I can't do this' they should take the view of 'I can't do this YET'. This more positive approach to learning combined with hard work provides a better chance of achieving success.

Appendix

S4 National 5 Mathematics

Session Plan (2019-2020)

All Assessment Dates are provisional - Updated May 2019

<u>Chapter (HG Nat. 5)</u>	<u>Start Date</u>
1. <i>Approximation & Estimation</i>	
2. Working With Surds	3 rd May
3. Using Indices	10 th May
4. Algebraic Expressions	22 nd May
5. Algebraic Fractions	3 rd June
6. Gradient Of A Straight Line	12 th June
7. <i>Arcs & Sectors (Revision)</i>	18 th June
8. <i>Volumes Of Solids (Revision)</i>	20 th June
SUMMER HOLIDAY	
9. Straight Line Graphs	15 th August
10. Equations & Inequalities	27 th August
11. <i>Simultaneous Equations(Revision)</i>	
12. Formulae	3 rd September
14. Quadratic Equations	11 th September
SEPTEMBER MINI EXAM on Chapters 2-6 & 9	w/b Mon 9th September
13. Graphs Of Quadratic Functions (using TJ Ch 18)	25 th September
15. <i>Pythagoras' Theorem (Revision)</i>	
16. Properties Of Shapes	7 th October
17. <i>Similar Figures (Revision)</i>	
Prelim exam revision – NB the Prelim will cover <u>all</u> of National 5 Expressions & Formulae and National 5 Relationships <u>except Chapter 18</u> . From 2017/2018 Chapter 19: Using Trigonometry <u>will</u> be included.	21 st October

