## James Gillespie's High School

Parent Council - Wednesday 4<sup>th</sup> June 2025

# **Mathematics Faculty**

Ashling Dolan- Curriculum Leader



Respect

Kindness

Integrity

Inclusion

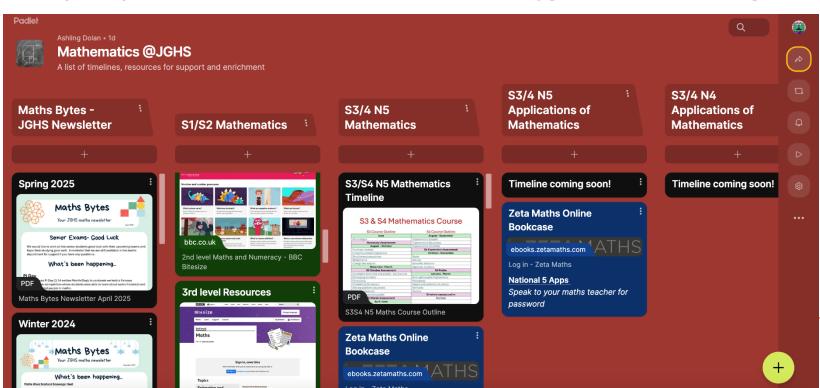
High Expectations

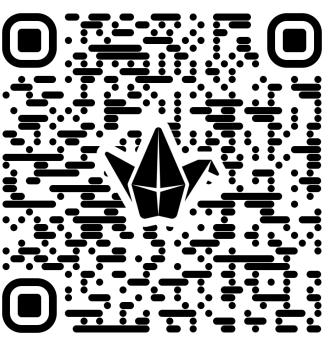
#### Resources and Timelines

Introducing the Maths department Padlet.

Maths@JGHS

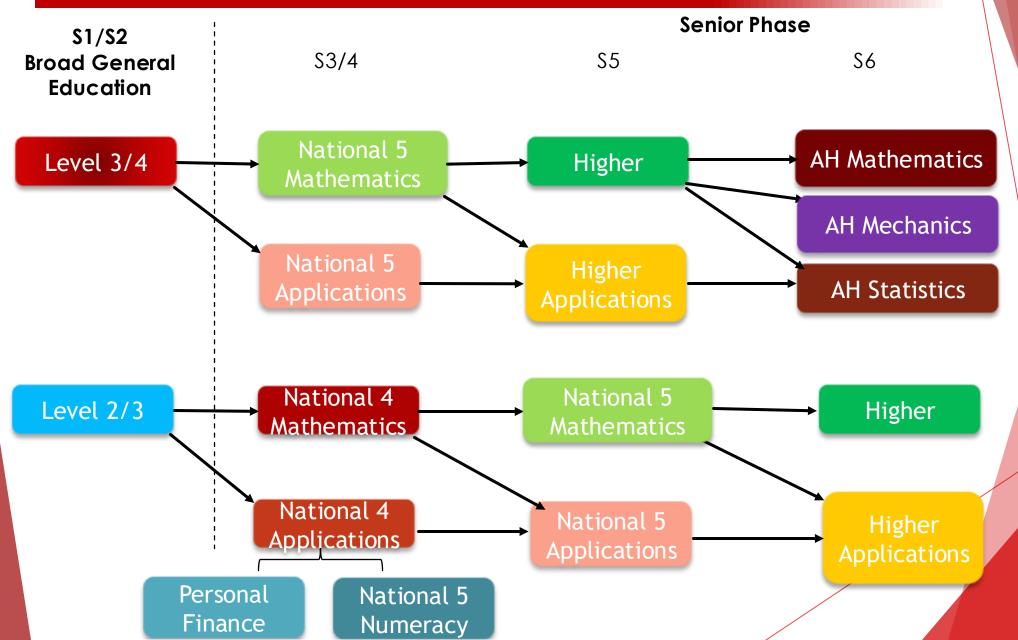
https://padlet.com/9071434/mathematics-at-jghs-8i4zrmf2mrtbogvr







## **Mathematics Pathways**



## Starting in S1

Pupils have been placed in mixed attainment classes.

Had supported numeracy extraction groups, differentiated materials in lessons

- Use data from primary schools, SNSA data and diagnostic assessment to determine and moderate BGE levels.
- Create a supported class in S2 for pupils working on level 1/level 2

#### Next steps:

- Continue to evaluate pace and challenge in lessons.
- More consistency across sharing resources
- ► Focus on support materials in both starters and lessons

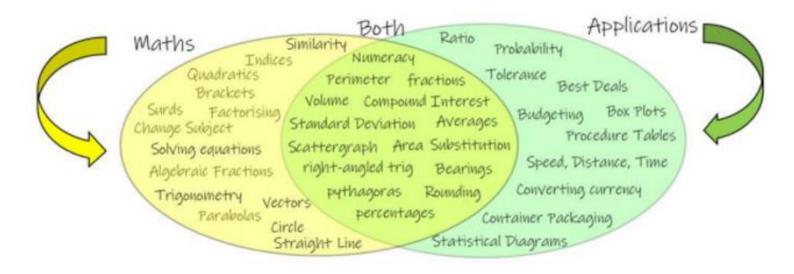
### General Principles of BGE at JGHS

#### In lessons

- Providing opportunities for group work and discussion in lessons.
- Valuing different approaches to solve a single problem rather than racing through similar questions.
- Providing suitable extension or support materials as needed.
- ► Low stakes quizzes which provide effective regular feedback and clear next steps for pupils.
- Using homestudy forms for regular revision
- Clear revision materials shared prior to assessment and detailed reflection sheet post assessment.

## S3/S4 Applications of Mathematics

#### National 5 Mathematics and National 5 Applications of Maths



- S2 December assessment broken into Number, Algebra and Geometry
- Pupils informed on their strengths (through reflection sheet)
- Recommendations shared with PSL
- During coursing pupils choose Maths or Applications of Mathematics
- End of S2 assessment allowed for class structure
- Pupils are either in S3 N5 maths/N5 Applications or N4 Applications

### Higher Applications of Mathematics

Pupils with C at N5 maths can achieve in Apps

In the 23/24 cohort, of the 16 pupils, 4 had Cs at N5, and so would have been unlikely to experience success had they done the Higher Maths course. The results for these pupils were 2 As, 1B, 1C.

Pupils are enjoying the course

Finance unit is a favourite

Useful skills with Excel and Rstudio

Numbers are growing

Second year to have two classes

### Mathematics Attainment - SQA

#### SQA results

Almost 72% S4 pupils achieved N5 A-C

Higher 86.7% pupils achieved A-C

### Attainment gap

100% S4 pupils achieved L4 Numeracy SIMD Quintile 1 (lowest 20%)

#### Next steps

Tracking S5/6 numeracy if pupils don't take maths



## **Maths Competitions**

UKMT (Junior/Intermediate/Senior/Team)

Follow on rounds

- Scottish Maths Challenge
- Enterprising Maths
- Naboj International Maths competition

### Extra curricular clubs

- Junior Maths club (\$1/\$2)
- Intermediate Maths club (\$3/\$4)
- Oxbridge club (\$5/\$6)

### Maths Events and Trips

#### Maths Week Scotland

During Maths Week Scotland we ran a school-wide maths scavenger hunt to celebrate Maths Week Scotland! Teachers around the school created a maths problem related to their subject and wore a badge throughout the week. Students then went around trying to solve the teacher's problems, matching the teacher to the solution. Around 40 students took part but there were some clear winners with some pupils solving 30 puzzles

#### Worlds Maths Day

Students in S1-3 competed in short 60 second maths challenges against students around the world. The students answered 35, 579 questions correctly and ranked 167 out of 6,460 worldwide!

#### Pi Week Competition- Famous Mathematician

14th March was Pi Day (3.14 written Month/Day); to celebrate we held a Famous Mathematician competition where students were able to learn about some historical and current influential people in maths

### **Maths Events and Trips**

#### **Thrive Live**

A group of 12 S2 and S3 students were invited to the RBS head office at Gogarburn for the first 'Thrive Live' event. Thrive aims to teach students some key real-world skills. They partook in several different activities including an AI masterclass, a digital escape room, and had the opportunity to ask for advice about future careers from some RBS employees.





## Support available

#### **JGHS Maths Department Supported Study Sessions 2024**

Level	Day	Time	Room
Nat 5	Mon	After School	2.16
All	Tue	Lunch	2.18
All	Tue	Lunch	D2.06
			(Darroch)
Higher	Tue	Lunch 1.10pm	2.06
S1-S2	Wed	Lunch	2.06
Nat 5	Wed	Lunch	2.07
Higher	Thurs	Lunch	2.18



### Positives and plans for next session

- Uptake in N5 applications during S2 coursing
- Higher applications of maths and statistics uptake continues to grow
- ▶ L4, L5, L6 Numeracy levels all above VC for S4, S5 and S6
- More broadly streamed classes and professional development
- Promoting maths engagement through competitions/events and games
- Positive feedback from S1 pupils through surveys

#### Improvement

- Developing a consistent approach/expectations to home learning
- Focus on Numeracy benchmarks
- Offer additional awards such as personal finance

## Questions

Please feel free to ask any questions you wish about the work of our Mathematics faculty.



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