

Introducing the <u>Alleynes Academy Maths Department</u> (Y9 to Y13):

<u>Our Maths Teachers:</u> We have an incredible team of Maths teachers at Alleynes. Each teacher is a maths specialist with over 10 years of experience. We are a united team who share ideas, resources and life on a daily basis. Our team is caring, consistent and committed. I am delighted that our students and parents can trust in our provision. I am incredibly proud of all of our maths teachers.

#### **Maths Department Culture:**

#### Relationships --> Systems --> Learning

I believe that through the hard work and commitment of our staff, the Maths Department has created a climate for learning where our students thoroughly enjoy Maths. (Some may not always admit it!) We prioritise building strong, positive and supportive relationships with our students. In addition, clear routines and systems mean our students know exactly what to expect from their maths lessons. These 2 factors provide the ideal platform to deliver content that promotes learning and a love of our subject.

#### **The Maths Curriculum:**

We are 100% committed to deliver a broad and balanced Maths curriculum for all.

Our in-depth Intent, Implementation and Impact philosophy is detailed within our full-scale Curriculum Maps.

We believe we have a straight forward curriculum, purposefully selected and designed to emphasise learning. Our curriculum is clear and consistent each year meaning teachers can focus on planning, delivery and students learning. The department culture, purpose and shared beliefs binds our maths curriculum.

The maths department prides itself on routines and consistency. The students know the high standards to expect from a maths lesson. However, our consistent approach is not prescriptive. We have a general structure we like to adopt collectively, but importantly, each teacher still has autonomy to deliver the content how they see fit. We deliver lessons using our vast experience, drawing upon an in-depth knowledge of our classes and utilising our own unique personality + creativity.

#### How do we support?

- Our Team: Caring, consistent and committed. We aim to go above and beyond to help and support all of our students all of the time.
- In lesson Well thought through, deliberate retrieval practice.
- Entry Level delivered by RH
- Specialist Pupil Premium Tutor JW
- Tutor time maths tuition delivered by MP
- Maths Club
- A general open-door policy of help is always available

### How do we challenge?

- Level 2 Further Maths in Y11 at FMA Club every Monday
- Relevant Further Maths and A Level content referenced in lesson and used to extend.
- This year we have 5 students who will take A Level Further Maths as an additional 4th A Level.
- Maths Challenge award for Y10, Y12 and Y13

# A typical Maths lesson and Why?

- **1. Retrieval Starter Activity**: To help our students think back, test their memory and ultimately learn more in their long term.
- 2. **Live Modelling**: We believe strongly in live modelling to demonstrate to our students how we want work presenting and crucially, to describe and explain our thought processes moving through each stage of a question. Students need to see us doing the maths.



- 3. An emphasis on **independent practice**: Independent practice is the student's opportunity to work. Work hard. Practice. Pause. Think. Consider. Retrieve. Solve. Apply.
- 4. **Assessment**: Marking pens at the ready because it's marking time! In maths we're in a great position where students can gain instant feedback on their work regularly throughout a lesson. We aim to mark at several intervals during a lesson, addressing issues and misconceptions at each interval.

It will be clear in books that students have had multiple opportunities to assess their work and ideally, make corrections.

5. **Teacher Reflection**: Has our teaching been impactful this lesson? If required, what adjustments or improvements can we make in our delivery ready for next lesson?

#### **Homework:**

We aim to set roughly 3 pieces of HW every 4 weeks and we usually set the work using the Satchel One app.

- 1. Skills check Retrieval
- 2. Revision or Recap
- 3. Rest week
- 4. Assessed HW which feeds into our STAR marking policy.

#### **A Level Uptake:**

The Maths Department has increased numbers choosing A Level Maths at Alleynes in successive years. I am hopeful that we can continue this positive trend in years to come. Below are the figures for A Level uptake:

Year (Leavers)	2021	2022	2023	2024	Y13	Y12	Y11
A Level Uptake	13	18	14	9	23	24	?

### Our strategies to increase A Level retention are as follows:

- 1. Our Team: Caring, consistent and committed.
- 2. It is now possible that the same 2 teachers can take the top set through from Y9 to Y13. The benefits of **continuity** and understanding are numerous.
- 3. Level 2 FMA and FMA Club in Y11
- 4. Information and guidance on careers, opportunities and next steps starting in Y9.
- 5. The option to take **A Level Further Maths** at Alleynes.

# **Extra-Curricular:**

#### **Maths Club:**

- When: Every Thursday

- Who: Y11

- Average Attendance: 40+

This impressive attendance statistic is evidence of our investment into strong relationships with our students, as well as the high aspirations and determination of Alleynes Academy students. I would also like to thank our parents and carers who encourage their children to attend.

# **A Level Maths Club:**

- When? Every Thursday
- Who? Y12 and Y13
- Average Attendance: 5

### **Further Maths Club:**

- When? Every Monday
- Who? Y11 Top Set Mathematicians



- Average Attendance: 20 +

I am delighted that we have staff so motivated and committed to invest in the development of our most able mathematicians after school every week. We are impressed and proud every Monday as we observe of our Y11 FMA cohort consider, discuss and solve the high-level problems they face on this advanced course.

# **Pupil Premium and Disadvantaged:**

Closing the gap for our disadvantaged students means a great deal to us. We have been tweaking and modifying our approach in recent years to find the best strategies and interventions to further help these students.

- 1. **Quality first teaching:** I personally believe that our best resource to help our disadvantaged students is our incredible staff, systems and delivery.
- 2. Early identification and intervention: We do not wait until Y11 to intervene with these students. We start as soon as they join in Y9.
- 3. **PP Maths Tuition** (Y9, Y10 and Y11): Our PP Numeracy and Literacy tutor Joe is a fantastic asset to our school. Her nurturing and caring nature is ideally suited to working with some of the school's most vulnerable students. The Maths Department work closely with Joe and we have conversations on a daily basis about strengths, weakness and best practice. (23 students this academic year)
- 4. **PP Tutor Time Maths Tuition:** MP delivers our tutor time maths tuition program. Tuition features twice as evidence suggests this is the most effective strategy to help close the gap. MP is 2nd in Maths and we trust her with this highly valued role.
- 5. **Resources:** We provide carefully selected resources to all our PP students. Selecting the right resource for the right student is of utmost importance.

#### **Cultural Capital:**

We are delighted with the range of trips we have on offer across all the departments at Alleynes. There are so many rich and diverse opportunities available to all students at our school. I particularly admire the incredible STEM activities undertaken in the Design + Technology Department, led by GT and his amazing team of students. The Maths Department is committed to contribute to this enrichment culture and RH leads the way on this front.

Our department organises several trips for our students each year and we always look out for new opportunities:

- 1. Y10 Much Ado About Numbers usually in a theatre in Sheffield or Chester- Annually.
- 2. Y12 Maths Inspiration Trip Birmingham Annually
- 3. A Level Interested in Engineering talk Staffordshire University new to us this year

#### **Careers:**

The Maths Department refers to careers on a regular basis. It is our duty to ensure that our students know the importance of Maths in the real world and how our subject can help them get some incredible jobs. At the end of each term we find time to have a focus on careers. Please take a look around our department to see some fantastic displays created by our students. The displays really highlight the thought and passion we put into this important element of the curriculum.

#### **Professional Development:**

The Maths Department thrives on collaboration. We talk, reflect, consider and interact on a daily basis. Sharing resources and sharing good practice is firmly embedded into our everyday working lives.

We now intend to ring-fence regular periods of time dedicated to improving our teaching. Given the experience and expertise we have available in Maths, I believe we have all the ingredients required to become a truly self- improving department. The time required will have to be found from greater prioritisation towards Professional Development compared to other aspects of school life.

### Results:

We work tremendously hard to help our students succeed in all areas of life. Of course, Maths results are often an important part of this overall success; providing students with the best possible opportunities in their next steps. We are proud of our students and we are proud of their results.



Our latest results can be seen in the tables below:

# **GCSE SPI by Group:**

Year	18/19	19/20	20/21	21/22	22/23	23/24
Total	0.43	0.59	X	-0.19	0.21	0.06
PP	0.08	0.28	Х	-0.36	-0.19	-0.10
SEND	0.76	0.69	Х	-0.25	-0.02	0.04
Girls	0.47	0.69	Х	-0.3	0.14	-0.05
Boys	-0.12	0.47	Х	-0.1	0.28	0.18

# A Level:

Year	18/19	19/20	20/21	21/22	22/23	23/24
Value Added	0.05	0.05	0.51	-0.83	-0.01	-0.55
Average Grade	B-	B=	B+	B-	B=	C+
No of Entries	10	15	13	18	14	9

# **Marking Policy:**

Where appropriate and possible the Maths Department aims to complete 2 STAR Marking assessments per Half Term in line with the whole school marking policy.

In Maths, STAR marking is routinely completed on all Assessed Homework and Monitoring Tests. Students can respond to this feedback within the response boxes provided. Students record their results and target to improve in their maths tracker at the front of their books. We encourage students to take pride in their tracker. All Assessed Homework and Tests are kept in their Maths Assessment Folders. The folder is a new initiative and we will review it at the end of this academic year.

<u>Thank you</u> for taking the time to read about our Maths Department and we endeavour, as always, to work hard in the best interest of the Alleynes Academy community.