

DEPARTMENTAL CONTEXT

KS4 (years 9-11)

All students in KS4 are studying for the Edexcel GCSE Mathematics examination. The department has rewritten the Schemes of Work (SOW) to match the new GCSE specifications, and we have now seen the first examination. Resources and materials have been created, and embedded into the SOW, but this is ongoing as we continually improve and develop more resources to supplement the SOW.

Within each year group, a cohort of students study for an additional GCSE in Statistics following the specification for the exam board Edexcel. Previously this has been taught during the students normal timetabled mathematics lessons and was sat at the end of Year 10. For the new GCSE specification, with the removal of the controlled assessment component, we are planning to move the sitting of this exam to the end of Year 11 (June 2019). The number of classes studying Statistics varies to ensure that the extra teaching and workload involved in studying for two GCSE exams, does not negatively affect the students attainment in Mathematics, particularly when we take into consideration the demands of the new GCSE.

The department has changed its assessment criteria across the school. All pupils are now be graded on a system from 1 up to 9 (the new GCSE criteria) and a new system of tests has been bought in and has been given levels by the department, which are being monitored and adapted as more information becomes available. Jan Thompson & Lynn McGarry designed the initial levels in conjunction with several other schools in Sefton.

KS3 (years 7-8)

All boys in KS3 are in sets for mathematics. They are working on the Foundation, Intermediate or Higher SoW.

In Year 7, the boys are put into sets after a fortnight in school (by KS2 results supported by a baseline test within the first week). Boys can be moved up or down within the sets at any point and changes are generally looked at 3 times each year. As some year groups are split (for timetabling), moving across the boundary can be difficult as it involves changing classes in other subjects. This year the number of sets has been increased and there are now 7 sets in years 7 with 6 sets in almost every other year. The timetable has placed maths against ICT in year 7 which limits the number of boys allowed in the top sets, and will therefore increase the number of boys in the lower sets. This could prove to be an issue, especially as most of the boys who join the school during the year are tested and are usually found to be of lower ability thus increasing numbers further in lower sets.

All lessons are differentiated with set work at 3 levels, generally using the text books (at present still using the old 'Collins GCSE Maths, Collins New Maths Framework' until funds become available to be able to buy in texts written for the new curriculum) and worksheets. Homework is set once a week for all pupils but not on a specific day, varying in time expected to be spent depending on ability. The department is well resourced including puzzles and mysteries to consolidate learning; however, these will need to be reviewed and updated to better fit the new GCSE and SoW once we feel more comfortable with the new style of examination. A range of software is used both within the classroom and as homework

Staffing:

For the year 2017-2018, the maths department consists of 7 members, four of whom are based wholly within the maths department (one of which is part time, 4 days per week). Two members are part of the SLT (Assistant Head teachers), one has pastoral responsibilities across the school. This year all maths teaching staff have their own classroom, mainly based on the upstairs corridor.

Standards of teaching and learning within the department are good with examples of outstanding practice. This was validated by external reviews in the 2015-16 and 2016-2017. Good practice is shared across the department and the school. It is a particular strength in the department. Work scrutiny is carried out on 2-year groups every half term using a rotation of departmental staff, with the analysis being fed back to the department.

The mathematics results this summer 2017 were up by 10% on last year to 79.8%, which was very pleasing and there was a significant improvement in closing the Gaps with all groups. 7+ although not directly compared with A/A* has fallen slightly by 2.9%

The Statistics results again were outstanding and are a testament to the hard work put in by the department. At 94.3% A*/C these are incredible results. The Statistics examinations will next be taken in June 2019 by both the then year 11 and year 10. A decision will then be made as to whether the department continues with its policy of taking the examinations a year early or not.

OUTCOMES Grade 2

Evidence that supports this judgement

Attainment at GCSE

Maths: Summary Figures

GCSE 20.93% grades 9/7 79.84% grades 9/4 National 19.3% grades 9/7 68.9% grades 9/4

3 Year Trend - Headlines

	2017			2016			2015		
	Achieved %	National %	GAP	Achieved %	National %	GAP	Achieved %	National %	GAP
7+	20.93	19.3	+1.63	23.8	15.9	+7.9	23.4	17.3	+6.1
5+	55.81	48.1	+7.71						
4+	79.84	68.9	+10.94	69	61	+8.0	77.2	63.9	+13.3

Statistics Summary Figures

GCSE A*/A 49.1% A*/C 94.3% National A*/A 19.0% A*/C 70.5%

3 Year Trend - Headlines

	2017			2016			2015		
	Achieved %	National %	GAP	Achieved %	National %	GAP	Achieved %	National %	GAP
A*-A	49.1	19.0	30.1	47.4	17.8	29.6	38.1	18	20.1
A*-C	94.3	70.5	23.8	98.7	70.2	28.5	96.5	68.9	27.6

Areas to be addressed:

A great improvement in the MAPs with a progress 8 score improvement from -0.08 to +0.076, however this will continue to be a focus as they are still the lowest banded progress 8.

HAPs also will be monitored closely after each tracking to identify any boys who may need intervention as there was a slight dip in the percentage achieving a 7+ (comparable with A/A*) of 2.87% and a progress 8 drop from 0.17 to 0.118.

Next steps:

Disadvantaged MAPs are to be withdrawn into a small class (as we trialled last year) but this year by a full time member of the department

HAPs are to have 2 homework tasks per week one of which is the skill check to consolidate prior learning alongside the Monday Morning Maths

A departmental push on Problem Solving Questions as this is a poorly answered area of the exam for boys of all ability levels.