

# **Maths Setting Introduction**

Pupils progress mathematically at different rates and we feel that all pupils do a lot better when they are working at a speed appropriate to their ability. We also feel that the pupils who find Mathematics challenging need more support, thus we have fewer pupils in lower sets. We hope that Parents and Guardians trust our professional judgement and work with us to help their child achieve their potential.

# **Module tests for First to Fourth Forms**

Every three or four weeks, all pupils in a year group will sit a common module test based on the material that has recently been taught. In the Second Form a module test will have two sections: Section A is the easier section and tests the essential parts of a module; Section B is an extension section that is designed to be challenging for the top sets. As a result, pupils in the lower sets are encouraged to concentrate on section A, which they will receive a separate mark for, but the overall score is recorded to aid us with setting.

For the Third form module tests are split into 3 Sections: Support, Core, and Extension. This allows us to have a common section of the test for the year group (Core) whilst simultaneously offering challenging questions to the higher sets and appropriate questions for our smaller sets. Each class will do two sections – either S and C or C and E. The S section covers the building blocks of a topic and are based on the material learnt the previous year. The Core section tests the main focus of the topic, building on the S section. The Extension Section is aimed at the ablest pupils in the year group. All tests have questions taken from past examination papers. The Core and Extension sections are replicated in the Fourth form but our set 5 / 5 or sets 5,6 out of 6 break off at this stage to prepare for early entry GCSE.

# **Practice tests**

The majority of our module tests are supported by a practice test which is available on iTunesU or via Foldr. (Schemes of Work and resources are also available here and pupils can also use MyMaths for extra help). Typically, pupils will be set the practice test for homework. The test will then be gone over in class so pupils can go home and revise for the actual module test, paying particular attention to the areas they might have struggled with on the practice test. Revising for these module tests is essential and we offer a help desk facility for pupils seeking extra guidance outside lessons in addition to all the resources that we provide for independent learning.

## Setting

We are passionate that pupils who try hard and perform well throughout the year deserve the opportunity to move up a Mathematics set. This inevitably means that a few pupils who are not performing so well in a higher set might have to move down a set to accommodate high achievers from a set below.

We hope that Parents and Guardians trust our Judgement, we ultimately want every pupil to get the best possible grade in Mathematics. We base our setting on test results and we create a formula that gives a strong weighting to the end of year exam result, but also factors in the module tests. Although set movements do happen during the academic year, we spend a lot of time in setting meetings in the final half term discussing the many pupils that are on the boundaries. Our starting point is the formula mentioned above but other factors are discussed such as strong performances in the UKMT challenge, and we are mindful that some pupils are better motivated in a higher set whereas others might benefit from being one of the strongest in a lower set. Very occasionally, and typically only for smaller year groups, for pupils who are at the boundary between sets we can take their preference into account.

As you are no doubt aware we achieve excellent results from all of our pupils. This is in part due to the consideration we pay to the appropriateness of the sets in which we place our pupils. We do not claim that every single pupil in Kimbolton School is in exactly the right set for their academic career; however we never lose sight of our ultimate aim in giving every pupil their best opportunity of gaining their best possible examination grade in the Fifth Form. It is our experience that the vast majority of pupils perform at their best when in a set surrounded by pupils of like ability and that pupils who find Mathematics a real challenge do better in smaller sets where more individual attention is possible. In fact pupils in lower sets can, and have, out-performed pupils from higher sets in public exams.

The number of students achieving grades 9-4 from last year's IGCSE 1-9 paper are as follows

Set/grade	9	8	7	6	5	4	3
1	19	4					
2	7	11	5	2			
3		2	4	11	3	1	
4			1	4	6	1	
5					1	5	

We tend to start our 1<sup>st</sup> form with joint top sets, and then a set 3 and a set 4 (and a 5 if it is a large year group) From the Second Form there are tend to be 5 Mathematics sets in each year group. This allows for smaller sets four and five. Typically, we will have 24- 25 pupils in a top set going down to about 15 in a fourth set and 9 or 10 pupils in a fifth set.



We review our sets, and our pupil's progress, at Christmas and at Easter. For the sake of continuity, whole scale movements at these times will not happen but for the odd pupil doing exceptionally well an upward movement is possible, as is a downward movement for a pupil who is struggling to keep up with her or his classmates. We try to limit the top sets at 24, if a new pupil arrives mid-year we tend to go above this limit, but at the end of the year inevitably some pupils have to move down a set.

# **Help Desk**

The Mathematics Department operates a lunchtime help desk, open from 1310 to 1410 at least 4 days a week. Typically pupils in the Fifth and Sixth Form use this facility the most, especially in the lead up to public examinations, but we are there to help everyone and are delighted when younger pupils come to ask for help with prep or practice tests.

We view the teaching of Mathematics to be a partnership between the teaching staff, the pupils and their parents and actively encourage all pupils to take some responsibility in their learning. We will encourage pupils to attend our help desk if we feel they are struggling in class, but will not force them to.

Obviously the more pupils put into a subject the more they will get out; any additional help they receive can only be a benefit whether it be from us in help desks or at home.

# **FOLDR**

Our Mathematics learning area on FOLDR is a resource that should be utilised by all pupils. Our itunesU course is another way of getting to the same resources.

The scheme of work for each year group is available here and has references to the hundreds of worksheets also available. Furthermore all the practice tests are available to download well in advance. After doing a practice test the mark scheme is typically released before the actual test, allowing pupils to do the practice test on their own as many times as they like in order to prepare for the main test of the modules work. These practice tests then become an excellent resource for the end of year test.

# **Mathematics in the Sixth Form**

We are a very popular choice at A level but we only advise pupils from sets 1 and 2 who enjoy the subject to consider it. Pupils should have at least a level 8 at GCSE. There are usually five Mathematics sets in the Lower Sixth with 7-13 pupils in, typically three or four doing single Mathematics and two or one doing Further Mathematics. Further Mathematics is a challenging course and should only be considered by a few pupils from the top set, although we have had the occasional success story from pupils who were in the second set in the 5<sup>th</sup> Form

# **APPENDIX – Setting by Year Group**

#### **First Form**

In the first form pupils will initially be taught in sets based on their entrance test, the only comparative data we have; we usually start with 2 joint top sets and a set 3 and 4 (and 5 if it is 5 form entry). After four short module tests on different aspects of number work (integer arithmetic, factors and primes, decimals, negative numbers, fractions and percentages) they will have a Numeracy Test based on all the work covered, this will be in late November or early December. We then re set the first form based on large number test (0.5 weighted) and their individual module test scores (the average is weighted 0.5). We then move onto Algebra with one lesson a fortnight dedicated to Numeracy, and our internal Numeracy Awards (an example of the Bronze, Silver and Gold awards can be found on FoldR)

## **Setting First to Second Form**

We typically start the Second form with sets 1 through 5, thus roughly half of the pupils who were in one of the two top sets last year will be in set 1 and the other half in set 2, but some will also move down to set 3. In setting at the end of the first year several factors are taken into account; the end of year examination is the most important but performance in the tests throughout the year matter, as does our professional judgement.

## **Setting Second to Third Form**

At the beginning of the 3<sup>rd</sup> Form we have a small extra intake, typically ten pupils, which inevitably affects the setting at the end of the 2<sup>nd</sup> Form more than in future years. We spend a lot of time discussing the sets with this year group in particular as our aim is to try to keep the sets the same from 3<sup>rd</sup> form through to GCSE.

### IGCSE years 3rd to 5th Form

We cover GCSE and IGCSE material throughout Ingrams. However, pupils do not officially start the GCSE course until the 3<sup>rd</sup> Form. All pupils will be prepared to sit the Edexcel International GCSE. In the third form all pupils cover the same syllabus as mentioned above but there is a change in the fourth form. In 2018: Set 1 In addition to aiming for a level 9 or 8 in the IGCSE, pupils in set 1 will also be prepared for the AQA Level 2 Further Mathematics Qualification, and pupils in set 2 will be given the option to do this also. Set 3 and 4 will also be prepared for the Higher entry.



Set 5 and 6 are prepared to take the Foundation level paper at the end of the 4<sup>th</sup> Form. The aim is to get a level 4 or better at the first attempt and improve at the end of the fifth form. Pupils who do not manage the 4 on their first attempt will get two more chances.

**Setting Third to Fourth and Fourth to Fifth Form** We try not to make any changes at this stage but do not rule out the possibility.