

### What The Students Do

A significant feature of the way we work is the expectation that students take responsibility for their own learning.

Students are encouraged to work independently when beginning a task. Resources such as mathematical dictionaries are available for them to use for reference. Students may be directed to revise from an activity completed previously.

All students in a class will be working on the same topic and so may be able to help each other. We encourage this - discussion often helps with understanding.

When a student has completed a task they check their own answers and try to work through any errors. This gives instant feedback and encourages self-help techniques that are essential to effective learners.

When students need help or signing off they should put up their hands. The teachers see students in turn; students should have something to get on with while waiting.

Homework is set twice a week; students are expected to take responsibility for selecting an activity from their matrix or asking the teacher to set additional tasks.

### What Parents Can Do

Our system requires students to be very well organised:

- complete tasks in turn
- fill in the matrix sheet
- mark the completed work
- answer additional questions the teacher has asked
- get the task signed off.

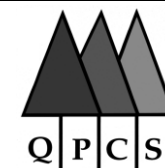
Some students find this difficult; you can help them check through the stages for each task so they are clear what to do at the start of the next lesson.

Ask your child to tell you about what they have learned – this will help them consolidate their understanding.

There is no restriction on the amount of extra work they can do so there is the potential for well-motivated students to make rapid progress. However, always encourage your child to complete tasks carefully and in depth.

A student who is working well will have at least three activities signed off each week; you can monitor this by checking their matrix sheet.

*Contact from parents about how we work or about the progress that students are making is always welcome. We look forward to hearing from you.*



Mathematics

## Mathematics at Queens Park Community School

### ***A Guide for Parents***

- *How we work and why*
- *The resources*
- *What the teacher does*
- *What the students do*
- *What you can do*

**Zewdu Lemma: Head of Mathematics  
Faculty**



### How We Work and Why

At QPCS our mathematics curriculum for years 7 to 10 is predominantly individualised and resource-based. This enables us to teach students in a mixed-ability environment in a fully differentiated fashion.

We teach mathematics like this because we can set each student tasks that:

- aim to extend what they know, understand and can do
- are appropriate to their ability and take account of what they already know
- are accessible but challenging
- fill gaps in their knowledge
- give them the opportunity to spend time overcoming their weaknesses or developing their strengths without holding up, or waiting for, the rest of the class
- ensure that they can achieve to their full potential at GCSE.

Students' mathematical progress is tracked very carefully; we know where they are and where we need to take them next.

### The Resources

We use a wide range of resources including SMILE activities, commercially available worksheets, text books, MyMaths, Kerboodle and tasks we develop ourselves.

Websites:

- [www.mymaths.co.uk](http://www.mymaths.co.uk)
- [www.kerboodle.com](http://www.kerboodle.com)
- SMILE and QPCS tasks are available via Fronter

We encourage an investigative approach to learning.

We further ensure that we:

- give opportunities for whole class lessons (for example to promote discussion and thinking skills)
- ensure we fulfil the requirements of the National Curriculum and GCSE syllabus
- give opportunities for review and reinforcement of knowledge and skills
- enable students to practise exam and test questions.

The activities we set vary in terms of topic and difficulty but generally encourage students to adopt a problem-solving approach to learning mathematics.

### What The Teacher Does

We generate a 'matrix' of work for each child setting out the activities they are expected to complete with the learning objectives for each task.

The activities are organised into modules of work on different mathematical topics.

We monitor students' progress through the tasks, providing help when they find the work difficult.

We question students in detail about the work they have completed to assess their level of understanding, help them to make links between topics and extend their knowledge. When we are convinced that the students have met the task objectives, we **'sign off'** the task on the matrix sheet.

*The questioning for signing off process is fundamental to the progress students make; it tells us about their level of understanding and so enables us to judge when and how we can increase the level of difficulty of their work.*

Members of the mathematics faculty are regularly available at breaks and after school to provide opportunities for extra help and to sign off additional activities.