### 

### Maths Faculty Handbook

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**Aims and Philosophies**

**Aims and Objectives**

**The Vision**

At [school name] we believe that it is our duty to inspire young people to see the true beauty of maths in the wider world by bringing maths alive, and make it interesting and easy.

These core beliefs and ideals should be modelled in our practice at all times to promote the value and enjoyment of the study of maths to students, parents and colleagues.

**Results**

Our most recent GCSE results are as follows:

[Insert maths results summary]

Actions:



**Courses Offered**

**KS3**

[Summarise content of course, number of lessons per week/fortnight and assessments used]

**KS4**

[Summarise content of course, number of lessons per week/fortnight, assessments and end of year 11 exams, including exam board used]

**KS5**

[Summarise content of course, number of lessons per week/fortnight, assessments and end of year 13 exams, including exam board used]

**Teaching and Learning**

There is an expectation that all lessons in maths will be good or better. Teachers are expected to plan lessons appropriately for each lesson. Knowledge of SEND, pupil premium, most able and EAL is expected for each group and should be accounted for in each lesson. Staff should have an annotated seating plan easily accessible for every class. Assessment for learning should be an integral part of every lesson through questioning, peer and self-assessment and teacher feedback.

Lessons should be planned to be motivating and engaging with learner activity forming 80-90% of the time. Activities should be planned effectively focussing on providing practical opportunities for learners that will make learning relevant and accessible to all students. Differentiation should be evident and there should be opportunities for discussion.

**Schemes of Learning**

The schemes of learning can be found at [insert link or pathway].

[Describe units within the schemes of learning, estimated time scale for each unit, how to use medium term plans]

[Describe suggested lesson resources to be used and where they are to be found]

**Action Plan**

[Insert screen shot of faculty action plan – try to condense to one page]

**ICT**

[Describe ICT resources available to the faculty]

[Detail where ICT resources can be found/how they can be booked and suggested ways they can be used]

**Literacy**

[Detail any literacy requirements of lessons, eg. keywords displayed on all PowerPoint slides, verbal reasoning by students, etc.]

[Suggest extra ways in which literacy can be incorporated into lessons]

**Exercise Books**

Insist on efficient use of exercise books. Do not accept graffiti and scruffy books – refer any pupil to CTL if this becomes an issue.

All work should be dated with the title written clearly. A good working practice is established by staff encouraging pupils to write a mathematical summary of the question; show detailed working; write a clear answer.

Staff must not issue a new exercise book without first seeing the completed one and making sure no pages have been wasted.

[Detail any further expectations, eg. gap analyses stuck in, learning plans for topics, etc.]

Mathematics Classrooms

[Detail resources available in each maths classroom, eg. interactive whiteboard, calculators, mini whiteboards, etc.]

[Describe suggested layouts of classrooms, if applicable]

[Describe any expectations of displays, eg. number line, learning objectives included, etc.]

**Policies and Procedures**

**Homework and Consequences**

**Rationale**

Homework is work that is set to be done outside the timetabled curriculum. It contains an element of independent study in that it is not usually directly supervised by a teacher. It is important in raising student achievement.

Homework enhances pupil learning, improves achievement and develops students' study skills and as such is an integral part of the curriculum. It requires careful planning and integration into the scheme of work of each curriculum area.

**Aims**

Homework enables students to:

* Consolidate and extend work covered in class or prepare for new learning activities
* Access resources not available in the classroom
* Develop research skills
* Have an opportunity for independent work
* Show progress and understanding
* Provide feedback in the evaluation of teaching
* To enhance their study skills e.g. planning, time management and self-discipline
* To take ownership and responsibility for learning
* Engage parental co-operation and support
* Create channels for home school dialogue

**Expectations: By whom and how much?**

|  |  |  |
| --- | --- | --- |
| **Year group** | **Time -** per fortnight (minutes) | **Type** |
| **7** |  |  |
| **8** |  |  |
| **9** |  |  |
| **10 and 11** |  |  |
| **12 and 13** |  |  |

**Types of homework used**

[Detail suggested resources or websites and types of homework, eg. flipped learning, exam questions, etc.]

*Homework should be differentiated where necessary in order to stretch or support students of different abilities within classes.*

**Sanctions**

[Detail sanctions for incomplete homework – these will need to be consistent with the whole school policy]

**Incentives**

[Detail rewards for outstanding homework – these will need to be consistent with the whole school policy]

**Monitoring**

[Describe monitoring process that will be used to hold members of the faculty to account – recording of homework by staff and students, tracking of completed homework]

**Written and Verbal Feedback**

[Describe types of feedback expected, and regularity of each type]

[Detail written feedback policy, subject-specific targets, follow-up tasks to be set, time allocated to complete follow-up tasks]

**Assessment**

[Detail regularity of assessments and whole-school data points]

**KS3**

[Summarise content of assessments, where they will be sat, how results will be tracked]

**KS4**

[Summarise content of assessments, where they will be sat, how results will be tracked]

**KS5**

[Summarise content of assessments, where they will be sat, how results will be tracked]

[Detail expected follow-up procedure after assessments, eg, turnaround for marking, opportunity for students to correct mistakes, gap analyses to be completed and shared with students and parents/carers]

[Describe plans for moderation throughout the year to ensure consistency of marking]

**Contact with Parents**

[Detail expectations of types and regularity of contact with home, eg. phone calls, postcards, letters, and how each of these is to be recorded centrally]

**Extra-Curricular Activities**

[Insert club timetable]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Day** | **Time** | **Club** | **Students required** | **Responsible staff member** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**SMSC Development**

## Spiritual development within Mathematics

Developing deep thinking and questioning the way in which the world works promotes the spiritual growth of students. In maths lessons pupils are always encouraged to delve deeper into their understanding of maths and how it relates to the world around them. The skills of analysing data are taught from Year 9 to Year 11 to enable students to make sense of vast amounts of data available in the modern world around them. Year 11 students who have chosen maths as an option are able to extend this knowledge through the study of Statistics. Sequences, patterns, measures and ultimately the entire study of maths was created to make more sense of the world around us and we enable each of our students to use maths as a tool to explore it more fully.

## Moral development within Mathematics

The moral development of pupils is an important thread running through the entire mathematics syllabus. In all year groups students experience various functional projects to use maths in real life contexts, applying and exploring the skills required to solve various problems. Projects include a variety of maths skills and give students the opportunities to problem solve.  **Social development within Mathematics**

Problem solving skills and teamwork are fundamental to maths, through creative thinking, discussion, explaining and presenting ideas. Students are always encouraged to develop their reasoning skills, communicating with others and explaining concepts to each other. Self and peer assessment are very important to enable pupils to have an accurate grasp of where they are and how they need to improve. Working together in pairs or groups and supporting others is a key part of maths lessons. Every maths lesson should have a large element of student led discussion. **Cultural development within Mathematics**

Maths is a universal language with a myriad of cultural inputs throughout the ages. We encourage the teaching of various approaches to maths including the Chinese lattice method for multiplication. We also explore the maths applied in different cultures such as Rangoli patterns, symmetry, tessellations and Islamic geometric patterns. The ability to use exchange rates for foreign travel is also important life skills students will learn.

Important websites:

**hegartymaths.com**

Name and date of birth

Password set by students

**vle.mathswatch.com**

Username: [insert format]

Password: [insert]

**www.methodmaths.com**

Centre ID: [insert]

Username: [insert format]

Password: [insert]

**www.mymaths.co.uk**

1st level login: [insert]

Password: [insert]