

# Maths at PHS

## Curriculum

The National Curriculum is followed in years 7-11.  
-all years Follow the Active SOW as part of a 5 year curriculum and also complete a basic skills test, and termly assessments. All year 9 pupils are entered for GCSE entry level 3, as a pre qualification before KS4.

Year 11 study GCSE Maths (Edexcel) and sit their GCSE exams at the end of year 11 (completed in year 10 & 11).

## SEN/Interventions

- Basic Skills Tests are completed by every pupil, to assess and address any basic gaps in Maths. Individualised packs are created for each pupil to improve and master each knowledge gap. Packs to be completed on a one to one basis with class TA and with HOD during intervention lessons to ensure learning and understanding of each topic.

- Key vocabulary is highlighted in each lesson, and pupils asked to explain their understanding of the vocabulary. .  
- Lessons are differentiated based on ability where necessary.  
- The LO is shared with the TA at the start of each lesson and understanding of the topic is confirmed and TA/Pupil input is planned for each lesson.  
- Adaptive teaching used to alter the lesson when misconceptions arise.

- Topic areas are re - taught if there is a class wide knowledge gap and additional topic areas are gone through with students on a 1:1 basis.

- Teaching content and style of tasks are adapted based on the need type of the class (eg, potential sensory overload taken into account in classes with high ASD, tasks are chunked into smaller sections for higher proportion of ADHD)  
- TA's are directed to be with specific students in lessons based on individual needs of the class - could be knowledge based or engagement based with relationship to the specific student/s taken into account.

## Assessment

Maths is assessed using verbal, written and graded feedback. All tests are given a grade, GAP analysis and with areas/ questions to do to improve.

-At the start of year 7 **all students** complete a baseline assessment to ensure each pupil has an accurate and realistic predicted grade.

- All years complete end of term assessments using past edexcel GCSE papers and is marked using GCSE grading system. Their current grade is based on the highest grade GCSE boundaries.

- as well as a mock exam at Christmas (paper 1) and another mock exam after Easter (paper 2) for year 11 in full GCSE exam conditions.

## Moderation

- RH, So'B and GN internally moderate GCSE papers both termly and Year 11 mocks.

-HOD meets 3 X per year with HOD's from other schools - Goldwyn (SEMH), St. Antony's (SEMH), Laleham Gap (SEMH).

## Subject enrichment/ cultural capital

All year groups - Visit the bank for awareness and take part in money lessons, designed by and issued to all pupils by school specialist Nationwide bank employees. Best buy visits to the supermarket, hosted by the community champion at Morrisons supermarket. Pupils invited to learn about shopping and pricing and work on the tills serving customers.

## Rationale

AIMS of the curriculum - To secure for students high levels of educational attainment and prepare them for life beyond Portal House. If students complete year 9-11 at PHS they will be considered to be entered into Entry Level Certificate and/or, Maths GCSE. Maths is most useful for the trades that our pupils may end up in such as construction or electrical.

- Year 7, 8 and 9 Follow the SOW which identifies understanding of topics for each pupil, underpinned by a RAG (red amber green) self analysis system in each pupil book. - this gives a broad basis of all topics areas of the Maths National Curriculum that should be covered as part of KS3 and provides a base level for students moving on to Entry level and GCSE..

- Year 9 Bridges the gap between KS3 and GCSE whilst ensuring that revision of key areas within the KS3 curriculum are revised and consolidated, each pupil at the end of year 9 will achieve a GCSE entry level qualification.

- Year 10 and 11 study GCSE Maths in groups based on their Mathematical ability. All groups follow an active GCSE SOW and are assessed termly, gaps in knowledge are addressed following each assessment and also within lesson with use of the topic SOW and the RAG understanding which flag up misconceptions and additional key areas of understanding that require consolidation. Flight Paths are adjusted following each assessment, pupils are aware of current grade and predicted grade if they continue to develop according to the flightpath. Pupils assess themselves in each lesson, in the form of RAG at the beginning and end of each lesson to form a clear understanding for both teacher and pupil of content understanding.

## Staffing

Year 7H is taught by Miss Newcombe 7P by Mr O'Brien  
Year 8H is taught by Mr O'Brien and Mr Heaps teaches 8P  
Mr Heaps Teaches 9H and Miss Newcombe 9P.  
Miss Newcombe teaches 10S and 11PHS  
Mr Heaps is HOD and teaches 10P and 11P  
Mr O'Brien teaches 10H and 11H

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## Feedback

- Verbal feedback is given within the lesson where appropriate.
- Detailed written and verbal feedback given after end of topic tests/ mock exams. Tests are marked and handed back within a week. Feedback is provided by pupils in the form of RAG feedback and the beginning and end of each lesson, this in turn influences how the SOW is completed and updated for each individual pupil. Students self-assess where required in green pen.
- Where noted and required they are marked for literacy (Capital letters, spelling and punctuation) according to the whole school literacy policy.

## Revision

- Different revision techniques are modelled to students before end of topic tests from year 7 through to year 11 (spider diagrams, flash cards, online revision and quizzes).
- Students are all shown websites (Maths Genie, White Rose Maths, First Aid Maths) in preparation for their GCSE's.
- Students are also encouraged to use GCSE Bitesize, Youtube revision videos and Tik Tok revision videos.

## Literacy

**Aim:** *To ensure that all students leave Portal House with high levels of literacy. To develop a highly skilled workforce. To prepare students for life beyond Portal House School.*

- Key vocab is identified in the Demo and key vocab for the lesson is shared with the class during the demonstration.
- Teacher to model the correct pronunciation and spelling of key vocab. Meaning of the word talked through where necessary to develop students understanding in a structured way.
- Command terms identified in questions, emphasised and meaning explained when questions are modelled. Walking, talking mocks/ end of topic tests completed where necessary for the class (This is being introduced gradually)
- Correct mathematical language is promoted in all lessons eg. increase, decrease, positive, negative.
- Students are prompted to be specific and to explain what 'it' is in their answers (exam technique).
- Students to be given regular access to read, discuss (verbal comprehension) and answer questions that require students to take key information from the question and process it in order to solve the question.
- Starter activities used that include reading and summarising small pieces of key text to improve inference and comprehension skills.
- Long writes completed as a minimum once per term. Long writes take can be independent research, method writing, whole experiment planning, conclusions and evaluations. These are signposted in books and feedback given.
- Long writes are scaffolded where necessary with key terms, sentence starters, layout ideas and clear criteria of what to include.
- Work also marked for capital letters, spelling and punctuation as per the whole school literacy policy.
- Comprehension of questions is practised regularly, by highlighting key words and choosing the meaning of the words and alternative words and phrases that could be substituted to give greater understanding to the question

The following websites are excellent sites of background reading for Maths:

BBC Maths bitesize :<https://www.bbc.co.uk/bitesize/subjects/z6vg9i6>

BBC Newsround: <http://www.bbc.co.uk/newsround/15743115>

Maths Genie :<https://www.mathsgenie.co.uk/>

Maths Drills: <https://www.math-drills.com/>

## Numeracy

**Aim:** *To ensure that all students leave Portal House with high levels of numeracy. To develop a highly skilled workforce. To prepare students for life beyond Portal House School.*

Good levels of numeracy are essential for higher achievement in Maths and understanding of the GCSE curriculum.

- Basic skills in numeracy are essential for engagement in other areas of the curriculum and in the outside world in everyday life. Students in year 7 are assessed in basic skills and gaps in knowledge addressed through 1 to 1 teaching in that gap. Students re-assessed regularly to demonstrate progress in each topic.

Real life lessons in numeracy are provided to pupils from year 7 upwards by outside agencies, (supermarket and bank) and through enrichment lessons.

Numeracy is supported across the whole school and throughout the curriculum, and each subject promotes numeracy as part of the daily lesson content. Numeracy across the whole curriculum is celebrated throughout the school with termly numeracy focus's that demonstrate how numeracy is applied throughout the curriculum. The focus changes each term and pupils and teachers are encouraged to highlight where the numeracy focus applies in other subjects.