

Welcome to HTA Maths - we look forward to meeting your child in September. Numeracy skills - being confident and competent to use numbers and data to make good decisions in daily life - are vital but often neglected. Ensuring your child regularly practises these skills between now and their start at HTA will have a significant positive impact on their progress.

Equipment

All students, in addition to the whole-school equipment requirements, are expected to have for every Maths lesson:

- ♦ Ruler with legible metric measures, at least 15cm or ideally 30cm (set squares are not acceptable)
- ♦ Compass
- ♦ Protractor, 180° or 360°
- ♦ Scientific Calculator
- ♦ Whiteboard pen (a small cloth is also useful)

Students are responsible for keeping all equipment in a useable state and ensuring they have spares for when items run out. Students are also expected to replace broken or damaged items promptly so they are available for use in their next lesson.



Scientific Calculators

We recommend the Casio fx-85GTX or fx-83GTX. Students are expected to know how to use their own calculator.

School ordering available

Many of the items listed above and other items such as Study Guides and Workbooks are available to order via the school at a discounted rate. The Casio fx-85GTX calculator can be purchased for £10 and for an additional £2 you can order the exam pack which also includes a pencil case and geometry set.

There should be an order form with your Induction information or contact the school's office.

Please note: Calculators are ordered during the first week of September due to minimum order requirements and we only keep a very limited amount in stock after that time.

How can my child practise Maths before they join HTA in September?

To improve your Maths you must do Maths – 5-10 minutes daily will keep their mental Maths skills sharp and support their future knowledge. Your child may continue to have access to online systems from their primary schools until August / September - keep a list of their logins and encourage them to continue practising, be it Booster Packs in MyMaths or Studio/Garage sessions in TT Rockstars. Even maths or logic puzzles in the newspaper such as Sudoku or Magic Squares are great practise.

Which topics should my child practise?

The Revision Topic List at the end of this document can be used to focus work completed over the holidays. Year 7 students complete a baseline assessment during the first fortnight and many of these topics will appear.

- ◆ Use the 😊, 😐, 😞 columns to initially track how confident your child is with a topic.
- ◆ Then encourage them to focus on the topics they are less confident with by watching videos explaining how to do the topic and also practising questions (always ensure you have the answers first!)
- ◆ Get them to review what they have done by correcting questions (ideally in a different colour so they can see the differences) and by making notes on what they are still struggling with.

Ensure your child brings their work and the Revision Topic List to their first Maths lesson in September. Their teacher will be able to use the information to direct them on their next steps (and they will be awarded house points for their efforts.)

Websites / Apps

There are lots of online resources that practise Maths. Some suggestions we have found useful are:

Websites

- ◆ **Number Training**
www.numbertraining.com
Free website providing practise on a variety of numeracy and Maths skills – answers appear with a click of a button so users get instant feedback. No login is required.
- ◆ **Corbett Maths Primary**
www.corbettmathsprimary.com
The 5-a-day worksheets are excellent - there are varying levels of challenge so everyone can have a go (even adults!) The videos are also really good at explaining methods and cover all the topics your child should be practising ready for Year 7.



Corbettmαths
primary

Websites (continued)

◆ Times Tables Rockstars

www.ttrockstars.com

Times tables practice either online or printed - accrue coins to equip your rockstar avatar and "play" in stadiums around the world! We can provide you with a login before September if your child doesn't already have one - please contact the school's office.



What if my child already has a Times Tables Rockstars account through their primary school and doesn't want to lose their avatar / coins / level progress??

All students will be given an account in September. But if they already have an account and wish to transfer that to us so they keep their level progress etc. you will need to "teleport" their account. Go to <https://ttrockstars.com/page/familyteleport> for details. We will then provide you with a teleport code for HTA in the first week of the Autumn Term to transfer their details to us, otherwise a new account will be created.

Apps for the phone or tablet

◆ Star Dash Studios (National Numeracy)

www.nationalnumeracy.org.uk/star-dash-studios

A runner game that helps improve your maths while exploring the world of film!



◆ Sumaze! (MEI)

www.mei.org.uk/sumaze1

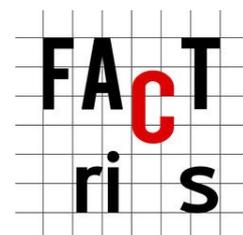
Educational Puzzle games - check out Sumaze!, Sumaze! 2 and Sumaze! Primary



◆ Factris (MEI)

www.mei.org.uk/factris

A tetris-style game involving factors



We often hear parents concerned that their own Maths skills are not as good as they would like and they feel they cannot support their children. Numeracy is the everyday Maths that children and adults alike should be comfortable with – National Numeracy is a charity to help raise levels of numeracy and to promote its importance. They have lots of resources to help adults to improve their own numeracy and support their children's understanding too.

So how do I improve my own Numeracy skills

www.nationalnumeracy.org.uk/improve-your-maths

Attempt the National Numeracy Challenge by clicking on the above link. It will review your current skills and then provide you with the necessary support to improve your overall numeracy.



How do I help my child with their Maths

1. Be positive about maths. Try not to say things like "I can't do maths" or "I hated maths at school" - your child may start to think like that themselves.
2. Point out the maths in everyday life. Include your child in activities involving numbers and measuring, such as shopping, cooking and travelling.
3. Praise your child for effort rather than for being "clever". This shows them that by working hard they can always improve.

National Numeracy have a Family Maths Toolkit which provides lots of ideas and resources that you can use with the whole family www.familymathstoolkit.org.uk

Any other questions / comments?

If you have any other queries or perhaps know of other sites/apps that you recommend then please contact the school via our website, stating it's for the attention of the Maths department.

Enjoy your summer holidays and we shall see you in September.

Ms. Jacqui Fletcher

Lead Teacher of Mathematics (KS3 Lead)

Mrs. Claire O'Brien

Head of Mathematics

This is our recommended list of topics to practise based on the Key Stage 2 curriculum.

Topic	😊	😐	😞	Notes
Times tables up to 12 x 12				
Place Value				
Words / Figures: writing numbers as words and words as numbers				
Inequality signs				
Ordering numbers				
Rounding				
Negative numbers				
Addition, Subtraction: integers and decimals				
Multiplication, Division: integers and decimals				
Order of operations (BIDMAS / BODMAS)				
Factors and Multiples				
Number types: square, cube, triangle and prime numbers				
Money: calculations				
Fractions: simplifying				
Fractions: comparing and ordering				
Fractions: adding, subtracting				
Fractions: multiplying, dividing				
Multiplying and dividing by 10, 100, 1000				
Fractions decimals and percentages: (simple) equivalents				
Ratio and Proportion				
Percentages of amounts				
Similar shapes and scale factors				

Topic	😊	😐	😞	Notes
Equations				
Sequences				
Substitution				
Missing number problems: Think of a number...				
Listing outcomes				
Units: capacity, lengths, mass				
Convert between miles and kilometres				
Area: rectangles, triangles, parallelograms				
Volume: cubes and cuboids				
Angles: measuring/drawing				
Angles: facts and types including at a point, on a straight line and vertically opposite				
Angles: triangles, quadrilaterals, polygons				
2D shapes: names and other properties				
3D shapes: names and other properties including edges, faces and vertices				
Nets				
Parts of a circle				
Coordinates (all four quadrants)				
Translation				
Reflection (in the axes)				
Pie charts: drawing, reading				
Line graphs				
Averages: mean				