



WorleMaths

**Helping your child
with maths
A parent's guide**

As a parent or carer, you give your child their first experiences with maths.

Even if you don't feel confident with maths, you can still make a huge difference to how your child's numeracy, confidence and ability develops.

Top tips for parents

- Be positive about maths. Do not to say things like "I can't do maths" or "I hated maths at school" - your child will likely start to think like that themselves.
- Point out the maths in everyday life. Include your child in activities involving numbers and measuring, such as shopping, cooking and travelling. (See the more detailed list below).

We all use maths every day, often without realising it. People can develop the numeracy skills they need both at school and throughout their lives. Helping your child feel confident about maths gives them a head start.

There are some essential everyday tasks you could involve your child in;

- Working out how much food is needed for the family meal and following recipes.
- Splitting the bill after a meal out with friends and working out what tip to leave.
- Converting currency rates when abroad.
- Managing personal finances, budgeting and saving.
- Working out which are the best buys in the supermarket, checking change, working out sale price of an item.
- Getting to work on time, estimating how long a journey will take, knowing when to fill up on fuel.
- Planning an outing for the family, packing a lunchbox or suitcase.
- Knowing if the answer on the calculator is reasonable, or if you pressed the wrong button.
- Reading data presented in a variety of forms, such as graphs and tables, scales on a thermometer or weighing scales, and interpreting statistics in the news.
- Working out the odds in sporting events, keeping score in games, knowing what to aim for in order to win.
- DIY jobs such as painting and decorating, or working out how many walls tiles are needed to cover an area.

Essential Maths Skills

Sometimes children struggle to grasp new concepts because they have forgotten some of the essential maths from primary. There are many sites and resources available to help remind children of these skills such as: <http://www.topmarks.co.uk/maths-games/11-14-years/number>

- One of the most important skills is to know the times tables. This is something which can be done in quick moments at home. Try printing out the tables and putting them around the house, on the fridge or on the inside of the toilet door.
- Be able to add or subtract 3 digit numbers using the column method
- Can your child multiply 2 digit numbers together.
- Practise division using the 'bus shelter' method.
- Use a ruler to measure and draw lines to the nearest millimetre.
- Use a pair of compasses to draw a circle.
- Use an angle measure to draw and measure angles.

Helping with maths (including homework)

Homework supports your child's learning at school, and is a great way for them to develop life skills, such as time management and self-discipline.

Unfortunately, homework is also often a source of arguments and unnecessary stress. Because teaching methods today are often different, parents and carers can worry that they will end up confusing their child rather than helping them. Whatever your maths skills, you can still help your child with homework.

- If you don't know something, that's OK. Try and work out the problem together.
- Set aside some homework time and start a homework routine, find a quiet place for your child to work and take away any distractions if possible.
- Rephrase questions using things that your child is interested in. If they're doing well, praise them for effort. Say "well done, you've worked so hard", rather than calling them "clever" or praising talent. This helps children learn that their abilities can develop as long as they work hard.
- When they get stuck, ask them to explain what they've done so far and what they're finding hard. Try and help them work out where they've gone wrong.

There are a number of resources available for you and your child to help them with their maths homework such as the **BBC Bitesize** website which requires no log in details. The maths homework booklets have a help section with clip numbers for the **MathsWatch** site.

MathsWatch - <https://www.vle.mathswatch.com/vle/>

Username: [student school user name@worle-school_]

Password: pentagon (lower case)

Hegarty Maths - <https://hegartymaths.com/>

Username: [student name]

Password: there school password

Method Maths (KS4) - <https://www.methodmaths.info/>

Centre ID: worle

Username: [student school username]

Password: pentagon (lower case)

There is a **homework club** in the library every afternoon after school and a **maths clinic** every Tuesday in L10. **GCSE revision** is in L06 every Wednesday from 3pm to 4pm, as well as a **MethodMaths** session in L12 on Tuesday from 3pm to 4pm. If all else fails remember that children can still ask their teacher for help. Just remind them to do this well before the deadline and not to leave it until the day before.

Core 30 Topic List

Fluency in the topics below will ensure your child is well prepared to begin their GCSE Maths course in Year 9. We recommend using 'MathsWatch' to find tutorial videos on any topics they are unsure of.

	Core 30 Topics	MathsWatch Clip Number
1	Ordering numbers, decimals	N2
2	Number facts – Factors, multiples, roots, squares, prime numbers, power of 10	N10, N11, N25, N30a
3	Four operations including decimals	N3, N4, N5, N6, N13, N15, N16, N17, N20
4	BIDMAS	N20
5	Basic fractions – ordering, equivalent, simplifying	N28, N23
6	Fractions – four operations & fraction of an amount	N36, N34
7	Percentages - % of an amount, finding percentages	N24, N39
8	Angles and angle problems (notation, names, angles in a triangle, around a point, straight line and quadrilateral)	G13, G17, G14, G16
9	Measuring and construction	G10, G26
10	Using negatives	N18, N19
11	Rounding – 100s, 10s, whole, d.p. and s.f.	N27
12	Symmetry – Line and rotational Transformations – Translation, Rotation & Reflection	G3, G7, G4, G5 & G6
13	Area and perimeter – Square, rectangle, parallelogram, triangle & trapezium	G20
14	Product of prime factors, HCF and LCM	N30b, N31
15	3D shapes, volume and surface area of cube and cuboid, leading on to prisms	G12, G21, G25
16	Estimation – rounding to 1 s.f.	N38
17	Basic Index laws – Multiplying, dividing, brackets and power of 0	N25
18	Use of a calculator – fraction, square, square root, cube, cube root, S->D, standard form	N44
19	Solving equations – 1,2 terms and unknowns on both side	A17, A19a, A19b
20	Substitution (positive, negative numbers and using a formula)	A10
21	Expanding and simplifying	A8, A18
22	Area/Circumference of circle – given radius, given diameter	G22a, G22b
23	Ratio problems – splitting an amount by a given ratio using the block method	R1, R5
24	Proportion – recipes	R1
25	Proportion – unitary problems, best value, scale	R3, R4, R6
26	Coordinates in all four quadrants	A1
27	Sequences and patterns	A11
28	Averages (mean, median, mode and range)	S6, S7
29	Basic graphical representation – bar charts, line graphs, pictograms, pie charts	S1, S2, S9
30	Probability – probability scale, probability as fractions, mutually exclusive	P1, P2, P3

How can I stretch and challenge my child to further their maths skills?

We place great value on the hard work that parents do to support the learning of students outside of school. The role of parent/guardian is vital to the success of children. Most parents and guardians are committed to encouraging their children as much as possible. Young people should be challenged to raise their expectation. There are, then, many things that parents can do to help stretch their children.

- Encourage children to get involved in the yearly Maths Challenge – ask for past year's papers to help you to prepare.
- Get them to come along to the 'Mathia' club in L10 on Tuesday from 3pm to 4pm.
- Use Hegarty Maths and Maths Watch with your children to help explore topics that are a level higher than they are currently working at.
- Explore the NRICH website – where you will find engaging mathematical activities to provoke mathematical thinking.
- Look at http://www.furthermaths.org.uk/ks4_enrichment and <http://www.furthermaths.org.uk/resources> - for resources to encourage children to think more deeply about the mathematics that they study, to enrich understanding, develop problem solving and reasoning skills which the new GCSEs demand much more of. You will also find information to encourage the study of mathematics beyond GCSE.
- Encourage them to attend revision sessions where they will work with new staff and pupils and develop their maths skills further.

Maths Resources



**Maths
Department
Homepage**

This page contains key information and revision tips, as well as links to most of the resources listed below.
Go to the main school homepage, click on the 'curriculum' menu, select 'Mathematics'.



[@WorleMaths](https://twitter.com/WorleMaths)

Follow our department twitter feed for news, revision resources and information.



<http://numeracy.worle-school.org.uk/>

This website aims to support students at Worle Community School in developing their key number skills.
These skills are not only vital for success in GCSE Mathematics, but also for success in life. The site includes resources for students and parents.



<http://hegartymaths.com>

This site contains lots of online lessons on all topics. It also has online tasks that can be used for practice; you can then check your answers.

Username: student name

Password: normal network password



www.vle.mathswatch.com

This site contains video tutorials on all topics as well as lots of worksheets and exam practice materials.

Email: network username@worle-school (e.g. 20_JBL756@worle-school)

Password: pentagon



www.sumdog.com

Lots of fun maths games where you can play against friends.

Username: [normal network username]

Password: pentagon

School code: worle