

The World's Largest Online Maths Competition.

TEACHER PACK

World Maths Day: 8th March





Welcome!

This guide is designed to give you and your students a little bit of background to the event, as well as some hints and tips on how to get the most out of it.

Contents:

- About World Maths Day
- Preparing for World Maths Day
- Tracking progress
- Taking the learning further
- 7 essential tips for World Maths Day
- On the day
- Engaging your students
- Certificate



About

World Maths Day is a global celebration of learning that has been uniting students around the world with the wonder of numbers since 2007.

The Numbers:



World Maths Day participants

160 +

Countries



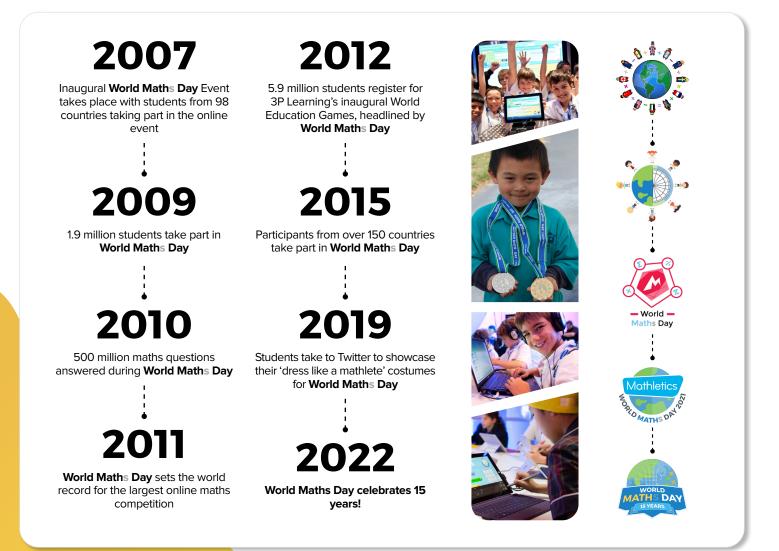
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Maths questions answered

The History:



Preparing for World Maths Day

Students looking to get the most out of **World Maths Day** should start by understanding Live Mathletics and the levels that they'll be doing on the day.

What is Live Mathletics?

Live Mathletics is the official host platform for **World Maths Day**. Students race against the clock to answer as many questions as possible within the 60 second time limit. For each question students get correct they earn 1 point. There are 10 levels of difficulty in Live Mathletics. Students can select the level of difficulty for their next game from the number bar along the top of the Live Mathletics menu screen.

Students can complete up to 20 Live Mathletics levels to achieve their total **World Maths Day** score. A student's current year/grade dictates the Live Mathletics levels that they'll need to complete. Below is a list of the year/grade levels and the corresponding levels that the students will complete during **World Maths Day**.

Year Group	Level 1 Games	Level 2 Games	Level 3 Games	Level 4 Games	Level 5 Games	Level 6 Games	Level 7 Games	Level 8 Games	Total
К	15	5							20
1	10	10							20
2	10	5	5						20
3	10	5	5						20
4	5	5	5	5					20
5	5	5	5	5					20
6	4	4	4	4	4				20
7	3	1	4	4	4	4			20
8	2	2		4	4	4	4		20
9+	1	3			4	4	4	4	20

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Preparing for World Maths Day

Each Live Mathletics level has a focus on specific areas of mathematics. Here is a basic breakdown of what areas are covered in each Live Mathletics level.



LEVEL 1	Addition from 1 - 10 Doubles up to 10	LEVEL 7	Sum, difference, product and quotient Cubes Operations with integers
LEVEL 2	Addition from 1 - 20 Subtraction from 1 - 20		Volume and capacity conversions Order of operations I The Cartesian plane I Equivalent fractions
LEVEL 3	Addition from 1 - 50		Ratios
	Subtraction from 1 - 50		Volume of rectangular prisms I
	2s, 3s, 4s, 5s and 10s Times Tables		Area of plane shapes I
	Doubles and halves up to 50		Ctatistical management
	Addition from 1 - 20 with a missing addend	LEVEL 8	Statistical measures
			Simplifying algebra I
	Addition from 1, 100		Algebraic substitution I Order of operations II
LEVEL 4	Addition from 1 - 100		•
	Subtraction from 1 - 100		Terms in a sequence with decimals II Area and volume conversions
	Times Tables to 10 x 10		
	Doubles and halves up to 100		Factoring I Volume of rectangular prisms II
	2s, 3s, 4s, 5s and 10s division facts Addition from 1 - 50 with a missing addend		Area of plane shapes II
	Times Tables to 10 x 10 with a missing factor		Recurring decimals
		LEVEL 9	Algebraic substitution II
LEVEL 5	Addition from 1 - 500		Factoring II
	Subtraction from 1 - 100		Order operation III
	Addition from 1 to 100 with a missing addend		Expanding brackets I
	All multiplication and division facts to 10 x 10		Find the midpoint between two points
	Time conversions		Pythagorean triads
	Length conversions		The Cartesian Plane II
			Chance outcomes
	Operations with desimals		Simplifying algebra
LEVEL 6	Operations with decimals Calculations using brackets		Scientific notation
	Simple percentages		Logarithms
	Converting mm, cm and m		Solving equations
	24 hour time		Algebraic substitution III
	Timetable calculations		Expanding brackets I
	Fractions and decimals		Expanding guadratics
	Percentages and decimals		Factoring quadratics
	Terms in a sequence with decimals I		Surface area of cubes
	Terms in a sequence with whole numbers		Percentage probability
	Terms in a sequence with whole numbers		r creentage probability

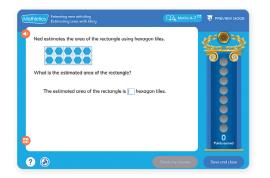
Take the learning further

With Mathletics powering **World Maths Day**, students can use the entire platform to prepare for the event. Whether they're sharpening up on multiplication, eliminating divisional worries, or looking to mix things up with some contextual mathematics, Mathletics has all the resources and activities to get students ready for the big day.

Here is how Mathletics can provide additional help:

Curriculum Activities

The core activities area in Mathletics gives students the ability to easily search for topics they need to freshen up on in preparation for **World Maths Day**.



9 of 10 Addition and Subtraction - Doubles and Near Doubles What is the double? 4 5 6 7 8 9 4 5 6 1 2 3 0 +/-. 8 8 + = = 10

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Skill Quests (formerly Understanding, Practice and Fluency)

Looking to focus on a specific learning outcome? Mathletics' Skill Quest activities are specifically aligned to curriculum outcomes, if students are struggling with a specific area, you can easily assign them a Skill Quest, targeting their learning.

Multiverse

Set in a rich, animated story world, Multiverse is a multiplication fact fluency game where students take charge as space traders exploring new worlds. Learners use their multiplication facts in a story context to scan asteroids, harvest minerals, plot coordinates and defeat space pirates.





Problem solving and reasoning

Why not try out one of Mathletics' 700+ problem solving and reasoning activities. Designed by our team of education specialists, **Mathletics Problem-Solving and Reasoning** activities help students master soft mathematics skills, develop critical thinking abilities, and shows them how mathematics can be applied to real life **problem-solving**. Built for a modern learning environment, students are encouraged to show their working and thinking, whilst also able to submit a question directly to you. You can assign a PSR activity via the 'Assign & Review' area in your Mathletics Teacher Console.

Rainforest Maths

A vibrant and interactive collection of maths activities designed for learners aged 5 to 10. Students can practice their skills across a range of topics including number, measurement, algebra, chance & data, and more.



Tracking Progress

Your Teacher Console

During the event, teachers will be able to view their students' results using their teacher login. The results focus on students' strengths and weaknesses, and provides teachers with an overview of the learning going on amongst all the fun!

1 View strengths and weaknesses by Class or by Individual Student

- Click Reports
- Click Student Reports
- · Drill down to individual student view

Using the drop down filters at the top of the page you can see results by average, highest, and latest scores for curriculum activities, Live Mathletics points, Skill Quests mastered, time online and certificates earned. Additionally, you can print out student reports individually or in bulk.

2 Course Results

- Click Assign & Review
- Click Courses
- Open the topic you would like to review results for or assign specific work.
- Here the traffic light system gives you an easy overview

The traffic light system allows for a quick assessment of progress. You can select any of the activities you would like to re-assign by class or individual student while viewing results.

3 Problem Solving & Reasoning Results

- Click Assign & Review
- Click Problem Solving & Reasoning
- · Click on any of the completed activities
- View your students' work, answers and respond to any questions they have

Remember, students can ask questions related to their assigned Problem Solving & Reasoning activities all within the Mathletics Console.

4 Effort and Participation

- Click Reports
- Click Effort and Participation
- Use the filters for groups, individual students, and custom dates

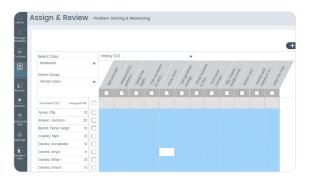
These results are great for competitions. Your students earn the same amount of points and certificates regardless of the grade/year level you've assigned them to, so you can run a class competition without complication!

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		Red	wood 👻	All groups	• All stu	dents 👻	Participation	This school	year 👔	٩		
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C Book Participo	tion							CERTIFICATES	USAGE			
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Bowen, Jackson	>	2150	331	2481	1	0	0	😑 90 Bronze		39min		
James, Carter	>	12010	197	12207	4	0	0					
MAT	>	Wales Year	r 6									
Ayres, Olly	>	17270	7800	25070	7	1	0					
Parry, Kaci	>	5020	492	5512	1	0	0					
Year 4 *	>	Wales Year	4									
Byard, Tiana-Leigh	>	1930	213	12143	3	0	0					
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Place Value Partitioning	•	90%	90%	60x	100%	90%	100%	60%		100%	6 0%	50%	•	90%	90%	9 70%	90%	
Expanding Numbers	•	100%	90%	90%	100%	100%	100%	100%		1	100%	100%	40%	90%	100%	90%		
Model Numbers	•	90%	100%		100%	100%	90%	10%	60x	Э.		0 100%		100%	90%	100%	0 100%	
Missing Numbers 1	•	90%	100%	90%	100%	100%		40%	50%	1	80%	100%	•	100%	100%		60%	
Compare Numbers to 100	•	100%	100%		100%	100%	100%	9 100%	100%	100%	100%	9 100%	•	100%	100%	3 100%		1
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Number and Place Value to	10.000		0		0	0	0	0	0		0							





7 student tips



1. Make sure you have a login

Current Mathletics students can use their existing login details to take part (no registration required). No worries, if you don't have one, you can sign up for free at www.3plearning.com/world-maths-day.

2. Use Live Mathletics to prepare

Live Mathletics is the competitive engine behind **World Maths Day**. At any given time of day (or night) you can log on and find a peer somewhere in the world who is ready to pit their mathematics skills against yours.

To see which Live Mathletics levels you should practise, check out the year/grade to Live Mathletics level comparison chart on page 4.

3. Sharpen your skills in the areas where you need extra practise

Mathletics is full of revision tools to help you with any concept you're finding tricky. For example:

To practise multiplication

- Try Multiverse, a space themed multiplication adventure that's found under the 'play' section of Mathletics.
- Learn times-tables as a song using Times Table Toons (also under the 'play' section).

To practise division

• Use the division revision activities under the 'learn' section of Mathletics.

Addition and subtraction

- Trek through the mathematical jungle in Rainforest Maths
- Find plenty of activities in the 'Addition and Subtraction' topic under the 'Learn' section.

4. Working out your best "Mathletics hand position":

You'll want to make sure you're ready to type in the answers as soon as they come to mind. Here are some tried and tested strategies for rapid-fire typing:

The Two Hander: use fingers from both of your hands on the number pad. A great beginner position.

The Pinkie-masher: use all fingers on the number keys along the top of the keyboard and your pinkie to hit enter.

The Accountant: right hand for typing, left hand for fighting! The right hand answers questions on the number pad whilst your left hits enter after each one.

The Reverse Accountant: left hand uses the number pad to answer, while your right hand is firmly placed on the 'enter' button.

The Top Shelf Reverse Accountant: left hand uses the number row at the top of the keyboard, while your right hand is firmly placed on the 'enter' button.

The One Hander: know your way around the number pad with confidence? Try doing it with one hand!

5. Trust in your fingers!

Once you feel confident with your typing position, try to do a few practice rounds without looking at the keys!

6. Get it wrong and move on

You can get up to 3 incorrect answers per Live Mathletics session before it stops the round. If you get stuck, just try an answer so you can tackle the next question before time runs out. You can always review any incorrect answers at the end of the round.

7. Find your inner-Mathlete

Fun is the main aim of **World Maths Day**, so don't be afraid to have a go, make mistakes, and learn from the experience. Anyone can succeed at mathematics – all it takes is confidence!



Important teacher tips

Remove any Live Mathletics settings

If you've blocked students from certain levels of Live Mathletics, you'll need to remove those settings for **World Maths Day** to ensure students can compete at the relevant levels for their year/grade group (see page 3 of this guide for more details on the levels students will use on **World Maths Day**).

Check the Live Mathletics levels for your class by going to **Settings** in your Teacher Console left-hand menu. Select the '**Set minimum levels**' tile. Ensure all students are set to 'Level 1 & above'.

Ensure students have Open Access

To ensure that your students can take part seamlessly on the day, make sure they have Open Access to Mathletics.

If you've assigned any curriculum activities, Skill Quests or PSR work, it may prevent them from accessing Live Mathletics and the **World Maths Day** platform.

To make sure this doesn't happen (and keep the assigned activities), simply head into the 'Assign' area of Mathletics and make sure the student access is set to 'Student Open Access'.

Settings

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On the day

Get started

On the 8th of March students can log in to their **World Maths Day** account via <u>www.3plearning.</u> <u>com/world-maths-day</u> or <u>mathletics.com</u>. Once they're logged in, they can select the **World Maths Day** button from the right-hand side of their console, or via the 'Play' area. They'll then find everything they need to compete in the event and track their **World Maths Day** performance.



GET READY

Welcome to the launch zone! From here you can begin your live competitions with other students. Four gaming modes are available – you can choose to challenge other students from around the world, within your own school or class, or warm up your skills against the computer. The panel on the left shows your classmates. If they're online, you can choose to challenge a student directly by clicking their name.

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TRACK YOUR WORLD MATHS DAY RESULTS...

Only points from your first 20 games will be counted towards your **World Maths Day** score. You can track this using the panel on the right of the screen. **World Maths Day** has ten gaming levels. You can enter at any level, but you'll need to compete at specific levels to earn your **World Maths Day** points. This is to make the competition fair for students of all ages. Your results panel will show you which levels you need to enter, depending on your age/grade level.

4+4=	
AT =	18
	9

ENTER A LIVE GAME...

Select your game level and click "GO!" to begin. You will be matched with up to three other students of a similar ability to compete against. Once you enter the gaming arena you will have sixty seconds to answer as many questions as possible, beating your opponents to the finishing line!



BEAT YOUR OPPONENTS...

The game will continue until the clock runs down to zero. Continue answering questions to earn points as quickly as possible – but be careful! **World Maths Day** is about speed and accuracy, three incorrect answers and you're out of the game!

The points from your first 20 games will be counted as your official **World Maths Day** score.

Ways to engage your students on the day



CHALLENGE STUDENTS TO COMPLETE ALL OF THEIR EVENT GAMES

The **World Maths Day** Hall of Fame counts the total score for a student's first 20 games during the competition period. There are trophies for the top 3 students in each year/grade.

RUN AN INTER-CLASS OR INTER-HOUSE COMPETITION

Track points earned from **World Maths Day** to run an inter-class or inter-house competition. Points could contribute to a class or house's overall points with a special prize for the winner.

DRESS UP

Take part in the official **World Maths Day** dress-up competition. Simply dress-up in anything maths related, post it to the school/class Twitter or Facebook feed and tag it with **#WMD2023**. The Mathletics Team will pick a winner based on creativity, over the top celebrations and a link to maths.



CHALLENGE A NEIGHBOURING SCHOOL

Make **World Maths Day** a local derby by comparing: student high scores, numbers of points, average points per students with another school in your area.

MAINTAIN LEADERBOARDS FOR THE FASTEST AND MOST ACCURATE CHALLENGERS

Keep track of the highest scores on each level from students in your own class. Award prizes for class champions.



CERTIFICATE OF ACHIEVEMENT Super Mathlete Award

Awarded to:



From the Mathletics Team



Brought to you by:

