

# Celebrate 15 years of World Maths Day. The World's Largest Online Maths Competition.

## **TEACHER PACK**

Warm up period: 9th March

World Maths Day: 23rd 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:

10m +

160 +

1b +

World Maths Day participants

Countries

Maths questions answered

## The History:

2007

Inaugural **World Math**s **Day** Event takes place with students from 98 countries taking part in the online event

2009

1.9 million students take part in **World Maths Day** 

2010

500 million maths questions answered during **World Maths Day** 

2011

World Maths Day sets the world record for the largest online maths competition

2012

5.9 million students register for 3P Learning's inaugural World Education Games, headlined by World Maths Day

2015

Participants from over 150 countries take part in **World Maths Day** 

**2019** 

Students take to Twitter to showcase their 'dress like a mathlete' costumes for **World Maths Day** 

2021

Very first Champions Challenge takes place







## 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
K	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

## 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 2 Addition from 1 - 20

Subtraction from 1 - 20

LEVEL 3 Addition from 1 - 50

Subtraction from 1 - 50

2s, 3s, 4s, 5s and 10s Times Tables

Doubles and halves up to 50

Addition from 1 - 20 with a missing addend

**LEVEL 4** Addition from 1 - 100

Subtraction from 1 - 100

Times Tables to 10 x 10

Doubles and halves up to 100

2s, 3s, 4s, 5s and 10s division facts

Addition from 1 - 50 with a missing addend

Times Tables to 10 x 10 with a missing factor

**LEVEL 5** Addition from 1 - 500

Subtraction from 1 - 100

Addition from 1 to 100 with a missing addend

All multiplication and division facts to  $10 \times 10$ 

Time conversions

Length conversions

**LEVEL 6** Operations with decimals

Calculations using brackets

Simple percentages

Converting mm, cm and m

24 hour time

Timetable calculations

Fractions and decimals

Percentages and decimals

Terms in a sequence with decimals I

Terms in a sequence with whole numbers

LEVEL 7 Sum, difference, product and quotient

Cubes

Operations with integers

Volume and capacity conversions

Order of operations I

The Cartesian plane I

Equivalent fractions

Ratios

Volume of rectangular prisms I

Area of plane shapes I

**LEVEL 8** Statistical measures

Simplifying algebra I

Algebraic substitution I

Order of operations II

Terms in a sequence with decimals II

Area and volume conversions

Factorina I

Volume of rectangular prisms II

Area of plane shapes II

Recurring decimals

LEVEL 9 Algebraic substitution II

Factoring II

Order operation III

Expanding brackets I

Find the midpoint between two points

Pythagorean triads

The Cartesian Plane II

Chance outcomes

Simplifying algebra

Scientific notation

**LEVEL 10** Logarithms

Solving equations

Algebraic substitution III

Expanding brackets I

**Expanding quadratics** 

Factoring quadratics

Surface area of cubes

Percentage probability

## Take the learning further

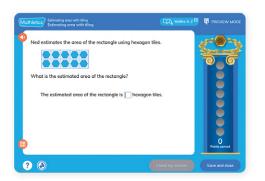


With Mathletics powering **World Maths Day**, students can use the entire platform to prepare for the event. Whether they're sharpening up on multiplication, eliminating divisional worries, or looking to mix things up with some contextual mathematics, Mathletics has all the resources and activities to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



# 3 × 4 × 5 6 1 2 3 0 +/- . 8 × 8 × 10

9 of 10 Addition and Subtraction - Doubles and Near Doubles

## 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.

## **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**

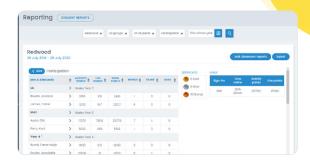
During both the warmup and event periods, teachers will be able to view their students' results using their teacher login. The results focus on students' strengths and weaknesses, and provides teachers with an overview of the learning going on amongst all the fun!



## View strengths and weaknesses by Class or by **Individual Student**

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

You can see results by average, highest, and latest scores for curriculum activities, Live Mathletics points, time online and certificates earned. Additionally, you can print out student reports individually or in bulk.



## 2 Course Results





- Click Courses
- · Open the topic you would like to review results for
- · Here the traffic light system gives you an easy overview

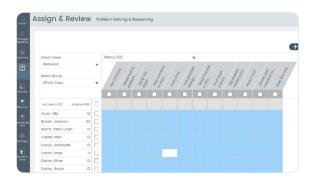
The traffic light system allows for a quick assessment of progress. You can select any of the activities you would like to re-assign by class or individual student while viewing results.



## 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.



## **Effort and Participation**

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





## 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 <a href="https://www.3plearning.com/world-maths-day">www.3plearning.com/world-maths-day</a>.

## 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'.



## On the day



## **Get started**

On the 23rd of March students can log in to their **World Maths Day** account via <a href="www.3plearning.com/world-maths-day">www.3plearning.com/world-maths-day</a> or <a href="mathletics.com">mathletics.com</a>. 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.



### 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.



## **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 **#WMD2022**. 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:

