

Live Mathletics

A gamified learning experience



In Live Mathletics, learners can challenge each other to a real-time 60 second race that tests the speed and accuracy of their math fluency.

This guide is designed for all learners across all grade/year levels using Live Mathletics.

Mathletics



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Getting started

In the Mathletics student console, Live Mathletics is located in the middle of the navigation bar



Live Mathletics Dashboard



World Challenge

Students can take part in the **World Challenge**, where they compete in real time against other students from around the globe who are currently online.

To ensure a fair and balanced experience, students are only matched with others who are working at the **same difficulty level** they've been assigned. This helps keep competitions both fun and developmentally appropriate.



Class Challenge

Up to **four classmates** can participate in a Class Challenge. The **class list** appears on the **left-hand sidebar** of the screen.

A **green light** next to a student's name means they're **online and available** for a challenge.

To start a challenge, simply **click on a student's name**.



School Challenge

Students can race against other students within the same school.



Computer Challenge

Students can test their skills against the computer. Students are encouraged to beat their own high score displayed.



Shadow Mode

Students can challenge their classmates, even when they are offline! In shadow mode, students play against their classmate's high score.

Levels

Live Mathletics is designed to be used by students across all grade levels.

 Home

Live Mathletics

Level

1

2

3

4

5

6

7

8

9

10

Results



Within the dashboard, use the small bar below the level numbers to explore the questions within each level.



Bonus Level – When a game is played at this level, players earn double points for each question answered correctly.

Level 1

- ▶ Addition from 1 – 10

$$2 + 1 = \square$$

- ▶ Doubles up to 10

$$4 + 4 = \square$$

Level 2

- ▶ Addition from 1 – 20

$$10 + 4 = \square$$

- ▶ Subtraction from 1 – 20

$$13 - 7 = \square$$

Level 3

- ▶ Addition from 1 – 50

$$24 + 17 = \square$$

- ▶ Subtraction from 1 – 50

$$50 - 35 = \square$$

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

$$4 \times 5 = \square$$

- ▶ Doubles and halves up to 50

$$22 + 22 = \square$$

- ▶ Addition from 1 – 20 with a missing addend

$$3 + \square = 20$$

Level 4

- ▶ Addition from 1 – 100

$$85 + 13 = \square$$

- ▶ Subtraction from 1 – 100

$$66 - 24 = \square$$

- ▶ Times Tables to 10×10

$$9 \times 8 = \square$$

- ▶ Doubles and halves up to 100

$$\text{Half of } 78 = \square$$

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

$$10 \div 5 = \square$$

- ▶ Addition from 1 – 50 with a missing addend

$$23 + \square = 50$$

- ▶ Times Tables to 10×10 with a missing factor

$$7 \times \square = 56$$

Level 5

- ▶ Addition from 1 – 500

$$140 + 30 = \square$$

- ▶ Subtraction from 1 – 100

$$73 - 62 = \square$$

- ▶ Addition from 1 to 100 with a missing addend

$$26 + \square = 50$$

- ▶ All multiplication and division facts to 10×10

$$30 \div 6 = \square$$

- ▶ Time conversions

How many hours in 180 minutes?

- ▶ Length conversions

$$24 \text{ cm} = \square \text{ m}$$

Levels

Level 6

► Operations with decimals

$$0.7 \times 0.5 = \square$$

► Calculations using brackets

$$(8 + 3) \times 2 = \square$$

► Simple percentages

$$50\% \text{ of } 80 = \square$$

► Converting mm, cm and m

$$766 \text{ cm} = \square \text{ m}$$

► 24-hour time

$$1:00 \text{ PM in 24 hour time is } \square : 00$$

► Timetable calculations

Trains departing at 11:50 AM and 7:50 PM are $\square$ hours apart

► Fractions and decimals

The denominator for 0.60 in simplified fraction form is $\square$

► Percentages and decimals

$$35\% \text{ as a decimal is } \square$$

► Terms in a sequence with decimals I

$$3.3, 2.5, 1.7, \square$$

► Terms in a sequence with whole numbers

$$9, 45, 225, \square$$

Level 7

► Sum, difference, product and quotient

Find the quotient of 25 and 5

► Cubes

$$6^3 = \square$$

► Operations with integers

$$8 \times (-9) = \square$$

► Volume and capacity conversions

$$591 \text{ mL} = \square \text{ cm}^3$$

► Order of operations I

$$15 + 10 \times 7 = \square$$

► The Cartesian Plane I

(3, 7) is in quadrant 1, 2, 3 or 4 of the Cartesian Plane?

► Equivalent fractions

$$4/9 = 16/\square$$

► Ratios

$$7:10 = \square : 50$$

► Volume of rectangular prisms I

A rectangular prism is 3 cm by 5 cm by 4 cm.
Volume = $\square \text{ cm}^3$

► Area of plane shapes I

A square has side lengths of 9 mm.
Volume = $\square \text{ mm}^3$

Level 8

► Statistical measures

The mean score of 7 and 1 = $\square$

► Simplifying algebra I

$$-4 \times 4a = \square a$$

► Algebraic substitution I

Find $a - (b + c)$ if $a = 33$, $b = 4$ and $c = 10$

► Order of operations II

$$(-4 - 20) - 1 = \square$$

► Terms in a sequence with decimals II

$$5.7, \square, 4.3, 3.6, 2.9$$

► Area and volume conversions

$$7 \text{ m}^2 = \square \text{ cm}^2$$

► Factoring I

$$6x + 22 = 2(3x + \square)$$

► Volume of rectangular prisms II

A rectangular prism is 4mm by 2mm by 4mm.
Volume = $\square \text{ mm}^3$

► Area of plane shapes II

A rectangle is 4m by 14m. Area = $\square \text{ m}^2$

► Recurring decimals

$$0.888... = \square/9$$

Levels

Level 9

- ▶ Algebraic substitution II
Calculate $-5x + y$ if $x = 8$ and $y = 1$
- ▶ Factoring II
 $40x + 12z = \square (10x + 3z)$
- ▶ Order of operations III
 $-10 - 6 \times 2 \div 6 = \square$
- ▶ Expanding brackets I
 $2(9x + 4) = \square x + 8$
- ▶ Midpoint between two points
The midpoint between $(-8, -6)$ and $(2, 16)$ is $(-3, \square)$
- ▶ Pythagorean triads
The hypotenuse of a right triangle with sides 6 and 8 is $\square$
- ▶ The Cartesian plane II
The point $(10, -10)$ moved 3 units right and 8 units down is now at $(13, \square)$
- ▶ Chance outcomes
A 6-sided die has $\square$ different possible outcomes
- ▶ Simplifying algebra
 $m \times m \times m = m^n \quad n = \square$

- ▶ Scientific notation
 $0.000642 = 6.42 \times 10^a, a = \square$

Level 10

- ▶ Logarithms
 $\log(40) - \log(5) = \log(\square)$
- ▶ Solving equations
Solve for y if: $-11y = 55, y = \square$
- ▶ Algebraic substitution III
Calculate $-2x + 8y$ if $x = 3$ and $y = -1$
- ▶ Expanding brackets II
 $-9n(-2n - 11) = \square n^2 + 99n$
- ▶ Expanding quadratics
 $(b - 6)(b + 12) = b^2 + \square b - 72$
- ▶ Factoring quadratics
 $a^2 + 12a + 36 = (a + \square)^2$
- Surface area of cubes
A cube with a surface area of 216 cm^2 has sides of length $\square \text{ cm}$
- Percentage probability
 $75\% \text{ probability} = \square \text{ in } 4 \text{ chance}$

How to set levels in Live Mathletics

- 1 Log into your Teacher Console.
- 2 Click  **Settings** in the left navigation menu.
- 3 Adjust each student's minimum level (1 to 10). Students will then have access to that level and **all levels above it**, which restricts them from playing easier levels.
- 4 Click **Save** to confirm your changes.
- 5 If you want to verify your changes, use **student view** to see which Live Mathletics levels are visible.

Level 1 & above	Level 2 & above	Level 3 & above	Level 4 & above	Level 5 & above	Level 6 & above
☐	☐	☐	☐	☐	☐
☒	☐	☐	☐	☐	☐

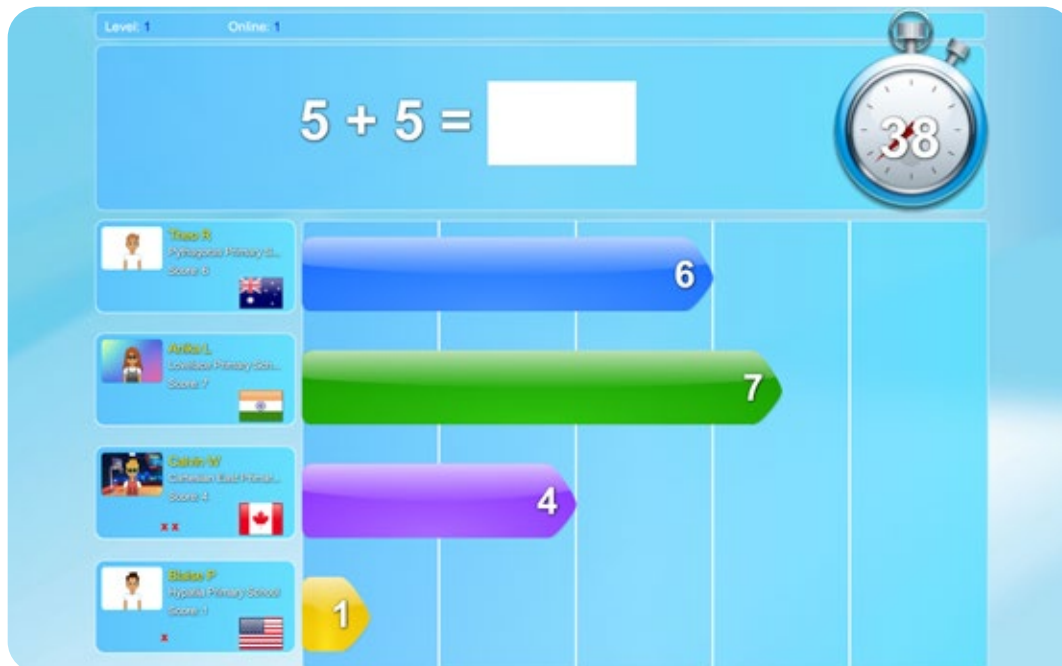
Tips & things to keep in mind

- ▶ You can **adjust levels anytime** throughout the year depending on student progress.
- ▶ Be strategic: set the minimum level just high enough to challenge students without overwhelming them.
- ▶ After setting levels, monitor how students perform and adjust levels if necessary.
- ▶ Use **reporting** and **Live Mathletics records** to inform your decisions about level adjustments.

Participating in a Live Mathematics Game



- 1 Select a **game mode** – World Challenge, Computer Challenge, School Challenge, Class Challenge or select students in Shadow Mode.
- 2 Click **GO**.



During the game

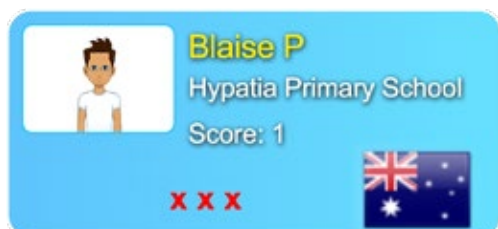
Students will see their avatar at the top of the list on the left hand side of the screen. Up to three other players will be listed below them.

Students correctly answer as many questions as possible in 60 seconds. The timer in the top right hand corner will count down the time left.

Each time a question is answered correctly, the total points will increase in their bar. Track against opponents by keeping an eye on their bars.

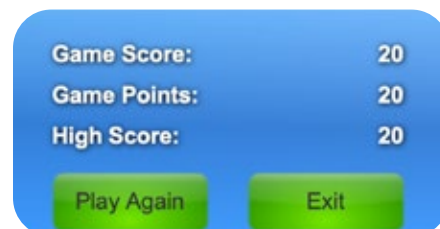
Three strikes, you're out!

If students answer three questions incorrectly, they strike out of the game – not only do learners need to be quick, they must be accurate!



After the race

Results are displayed with the learner's ranking, their responses and correct answers where applicable. Students can choose to **Play Again** or **Exit**.



Rankings and Results

As more and more games of Live Mathletics are played, a player's speed and accuracy will earn them a Live Mathletics ranking. Rankings are calculated as an average of their three most recent Live Mathletics games within a level.

Score at each level										
	1	2	3	4	5	6	7	8	9	10
Raging Rookie	<10	<8	<8	<6	<4	<4	<3	<2	<2	<3
Junior Giant	11 – 23	9 – 19	9 – 18	7 – 14	11 – 23	5 – 9	4 – 7	3 – 5	3 – 4	4 – 7
Speed Demon	24 – 38	20 – 33	19 – 29	15 – 23	24 – 38	10 – 14	8 – 12	6 – 9	5 – 6	8 – 12
Almost Einstein	39 – 52	34 – 44	30 – 40	24 – 32	39 – 52	15 – 20	13 – 16	10 – 12	7 – 8	13 – 16
Human Calculator	>53	>45	>41	>33	>53	>21	>17	>13	>9	>17

Click on Results

Correct: correct answers out of the total of questions completed at that level.

Games Played: total number of games played at that level.

Accuracy: percentage of correct answers out of the total of questions completed at that level.

High Score: highest score earned at that level.

Rank: rank at that level based on the chart above.

Level	Correct	Games Played	Accuracy	High Score	Rank
1	120/154	16	78.00%	51	Speed Demon
2	18/20	1	90.00%	18	Junior Giant
3	38/44	3	86.00%	20	Junior Giant
4	14/16	1	88.00%	14	Junior Giant
5	14/16	1	88.00%	14	Speed Demon
6	9/11	1	82.00%	9	Junior Giant

Points and Coins

1 correct answer = **1 Point**

1 correct answer in a  **bonus level** = **2 Points**

Achieving a new **high score** = **10 Coins** 

Earning **1st place** = **5 Coins** 

For more information about Mathletics points, coins and Hall of Fame, please view a **Student Console User Guide**.



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For more information about Mathletics,
contact our friendly team.

www.mathletics.com/contact