Mathletics

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 mathematics fluency.
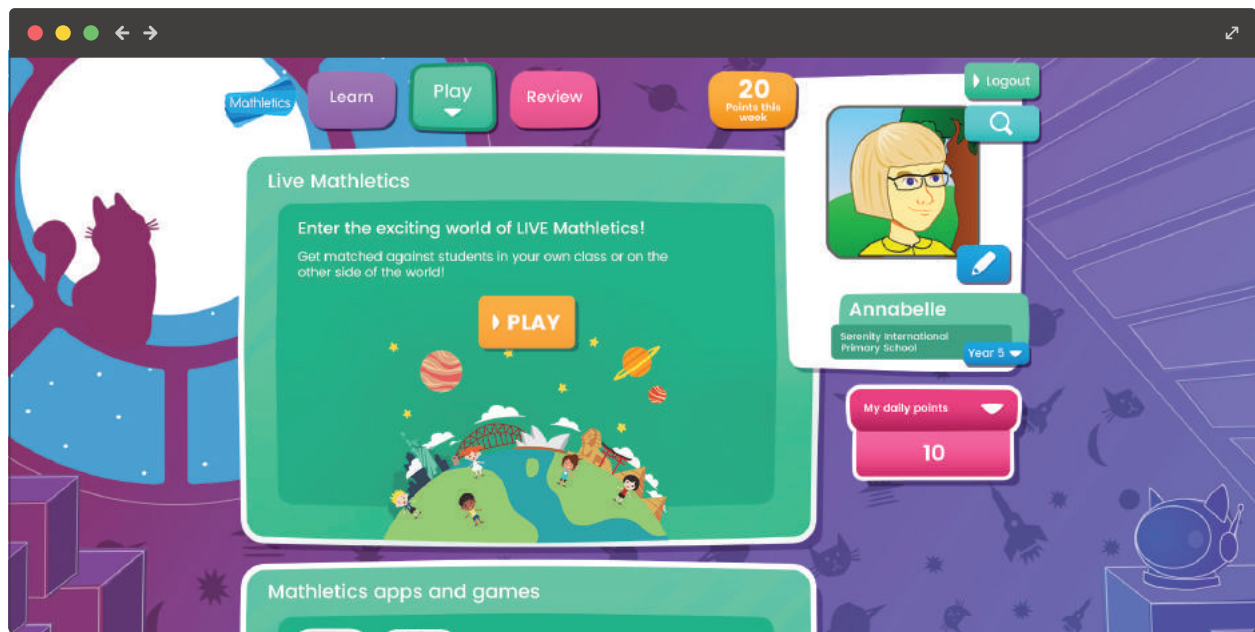
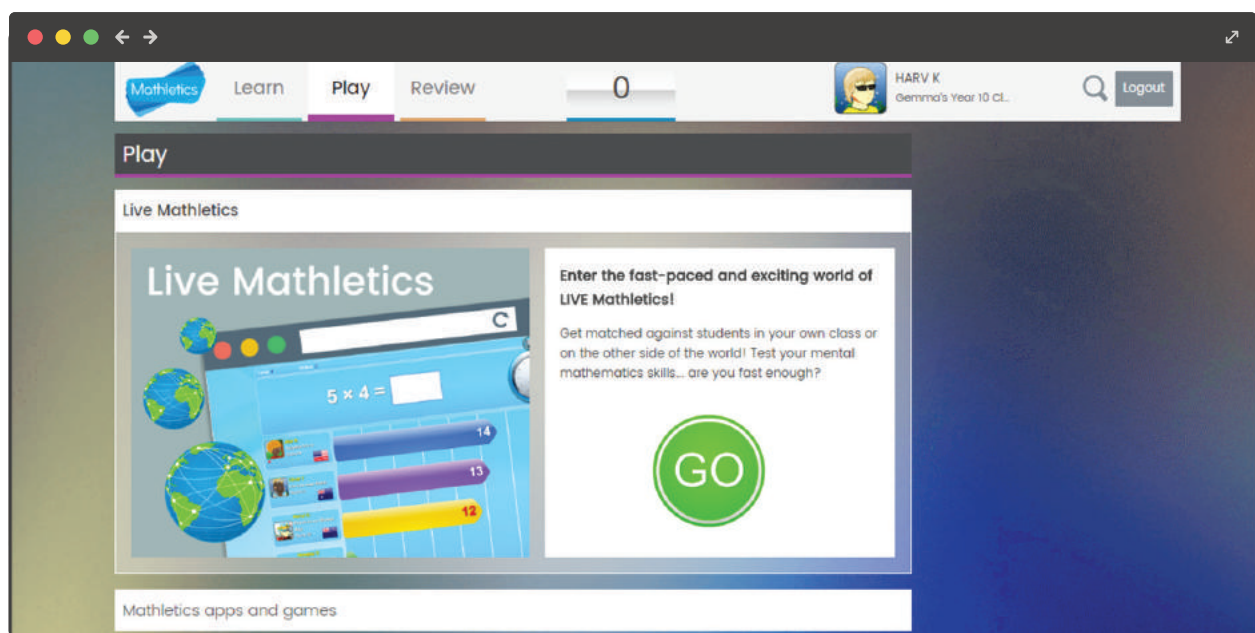This guide is designed for all learners across **all year levels** using Live Mathletics.

3P Learning

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Getting Started

In the Mathletics learning space, students will find Live Mathletics in the **Play** area.
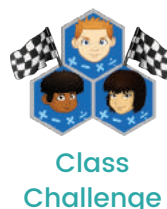

Student Console Grades **K–6**

Student Console Grades **7–12**

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Live Mathletics Dashboard

World Challenge

Where students challenge others around the world from the pool of students currently online. To make sure the race is a fair contest, students are only matched with those on the same ranking.

Class Challenge

Up to four classmates can participate. The class is shown on the left hand sidebar, with green lights next to their names. Click on a student name to start a challenge.

School Challenge

Where students can race against other students within the same school.

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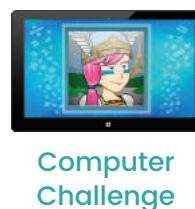
Students can test their skills against the computer. Students are encouraged to beat their own high score displayed.

Shadow Mode

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

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Levels

Live Mathletics is designed to be used by students across all grade levels.
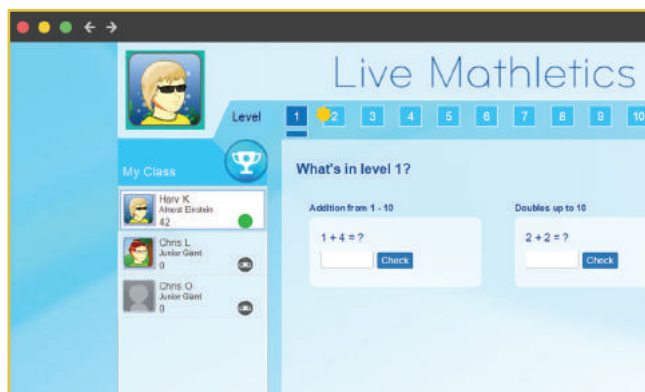
Within the dashboard, use **the small bar** below the level numbers to explore what is within each level.

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 = ☐

▶ **Doubles up to 10**
4 + 4 = ☐

Level 2
▶ **Addition from 1 − 20**
10 + 4 = ☐

▶ **Subtraction from 1 − 20**
13 − 7 = ☐

Level 3
▶ **Addition from 1 − 50**
24 + 17 = ☐

▶ **Subtraction from 1 − 50**
50 − 35 = ☐

▶ **2s, 3s, 4s, 5s and 10s Times Tables**
4 x 5 = ☐

▶ **Doubles and halves up to 50**
22 + 22 = ☐

▶ **Addition from 1 − 20 with a missing addend**
3 + ☐ = 20

Level 4
▶ **Addition from 1 − 100**
85 + 13 = ☐

▶ **Subtraction from 1 − 100**
66 − 24 = ☐

▶ **Times Tables to 10 x 10**
9 x 8 = ☐

▶ **Doubles and halves up to 100**
Half of 78 = ☐

▶ **2s, 3s, 4s, 5s and 10s division facts**
10 ÷ 5 = ☐

▶ **Addition from 1 − 50 with a missing addend**
23 + ☐ = 50

▶ **Times Tables to 10 x 10 with a missing factor**
7 x ☐ = 56

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Level 5

▶ **Addition from 1 - 500**
$140 + 30 =$ ☐

▶ **Subtraction from 1 − 100**
$73 − 62 =$ ☐

▶ **Addition from 1 to 100 with a missing addend**
$26 +$ ☐ $= 50$

▶ **All multiplication and division facts to 10 x 10**
$30 ÷ 6 =$ ☐

▶ **Time conversions**
How many hours in 180 minutes?

▶ **Length conversions**
24 cm = ☐ m

Level 6

▶ **Operations with decimals**
$0.7 × 0.5 =$ ☐

▶ **Calculations using brackets**
$(8 + 3) × 2 =$ ☐

▶ **Simple percentages**
50% of $80 =$ ☐

▶ **Converting mm, cm and m**
766 cm = ☐ m

▶ **24-hour time**
1:00 PM in 24 hour time is ☐ : 00

▶ **Timetable calculations**
Trains departing at 11:50 AM and 7:50 PM are ☐ hours apart

▶ **Fractions and decimals**
The denominator for 0.60 in simplified fraction form is ☐

▶ **Percentages and decimals**
35% as a decimal is ☐

▶ **Terms in a sequence with decimals I**
3.3, 2.5, 1.7, ☐

▶ **Terms in a sequence with whole numbers**
9, 45, 225, ☐

Level 7

▶ **Sum, difference, product and quotient**
Find the quotient of 25 and 5

▶ **Cubes**
$6^3 =$ ☐

▶ **Operations with integers**
$8 × (−9) =$ ☐

▶ **Volume and capacity conversions**
591 mL = ☐ cm^3

▶ **Order of operations I**
$15 + 10 × 7 =$ ☐

▶ **The Cartesian Plane I**
$(3, 7)$ is in quadrant 1, 2, 3 or 4 of the Cartesian Plane?

▶ **Equivalent fractions**
$4/9 = 16/$ ☐

▶ **Ratios**
$7:10 =$ ☐ $: 50$

▶ **Volume of rectangular prisms I**
A rectangular prism is 3 cm by 5 cm by 4 cm.
Volume = ☐ cm^3

▶ **Area of plane shapes I**
A square has side lengths of 9 mm.
Volume = ☐ mm^3

Level 8

▶ **Statistical measures**
The mean score of 5 and 7 = ☐

▶ **Simplifying algebra I**
$−10a + 5a =$ ☐ a

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▶ **Algebraic substitution I**
Find $x - y + z$ if $x = 3$, $y = 2$ and $z = 2$

▶ **Order of operations II**
$-3 - (-4 + 5) = \boxed{}$

▶ **Terms in a sequence with decimals II**
4.2, $\boxed{}$, 4.4, 4.5, 4.6

▶ **Area and volume conversions**
$\boxed{}$ cm³ = 1000 mm³

▶ **Factoring I**
$25x - 55 = 5(5x - ?)$

▶ **Volume of rectangular prisms II**
A right-prism 8cm high has a cross-section area of 20cm. Volume = $\boxed{}$ cm³

Level 9

▶ **Algebraic substitution II**
Calculate $-5x + y$ if $x = 8$ and $y = 1$

▶ **Factoring II**
$40x + 12z = \boxed{}(10x + 3z)$

▶ **Order of operations III**
$-10 - 6 \times 2 \div 6 = \boxed{}$

▶ **Expanding brackets I**
$2(9x + 4) = \boxed{}\,x + 8$

▶ **Midpoint between two points**
The midpoint between $(-8, -6)$ and $(2, 16)$ is $(-3, \boxed{})$

▶ **Pythagorean triads**
The hypotenuse of a right triangle with sides 6 and 8 is $\boxed{}$

▶ **The Cartesian plane II**
The point $(10, -10)$ moved 3 units right and 8 units down is now at $(13, \boxed{})$

▶ **Chance outcomes**
A 6-sided die has $\boxed{}$ different possible outcomes

▶ **Simplifying algebra**
$m \times m \times m = m^n$ $n = \boxed{}$

▶ **Scientific notation**
$0.000642 = 6.42 \times 10^a$, $a = \boxed{}$

Level 10

▶ **Logarithms**
$\log(40) - \log(5) = \log\left(\boxed{}\right)$

▶ **Solving equations**
Solve for y if: $-11y = 55$, $y = \boxed{}$

▶ **Algebraic substitution III**
Calculate $-2x + 8y$ if $x = 3$ and $y = -1$ $\boxed{}$

▶ **Expanding brackets II**
$-9n(-2n - 11) = \boxed{}\,n^2 + 99n$

▶ **Expanding quadratics**
$(b - 6)(b + 12) = b^2 + \boxed{}\,b - 72$

▶ **Factoring quadratics**
$a^2 + 12a + 36 = \left(a + \boxed{}\right)^2$

▶ **Surface area of cubes**
A cube with a surface area of 216 cm² has sides of length $\boxed{}$ cm

▶ **Percentage probability**
75% probability = $\boxed{}$ in 4 chance

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Participating in a Live Mathletics Game

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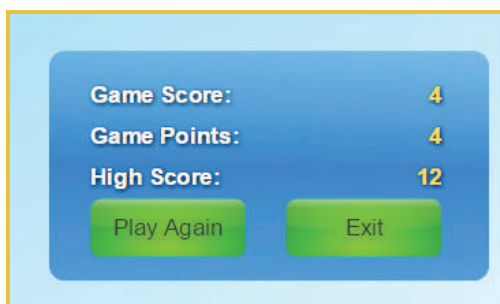
2 Click **GO**.

During the game, a student 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.

▶ Correctly answer as many questions as possible in 60 seconds.

▶ Each time a question is answered correctly, the total will increase in the coloured bar.

▶ Track against opponents by keeping an eye on their coloured bars.

▶ The timer in the top right hand corner will count down from 60 seconds.

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 place a learner finished in, their answers, results and correct answers where applicable.

Choose to Play Again or Exit

Game Score:	4
Game Points:	4
High Score:	12

Play Again   Exit

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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.

Score at each level

Ranking	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	5 – 10	5 – 9	4 – 7	3 – 5	3 – 4	4 – 7
Speed Demon	24 – 38	20 – 33	19 – 29	15 – 23	11 – 17	10 – 14	8 – 12	6 – 9	5 – 6	8 – 12
Almost Einstein	39 – 52	34 –44	30 – 40	24 – 32	18 – 24	15 – 20	13 – 16	10 – 12	7 – 8	13 – 16
Human Calculator	>53	>45	>41	>33	>25	>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	44/47	2	94.00%	44	Junior Giant
2	0/0	0	0.00%	0	Raging Rookie
3	18/42	10	43.00%	12	Raging Rookie
4	22/24	1	92.00%	22	Speed Demon
5	12/13	1	92.00%	12	Speed Demon
6	14/20	2	70.00%	9	Junior Giant
7	0/0	0	0.00%	0	Raging Rookie
8	2/5	1	40.00%	2	Raging Rookie
9	0/0	0	0.00%	0	Raging Rookie
10	0/0	0	0.00%	0	Raging Rookie

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Points and Credits

▶ 1 correct answer = 1 point

▶ 1 correct answer **Bonus Level** ⭐ = 2 points

▶ Achieving a new **High Score** = 10 Credits

▶ Earning **1st Place** = 5 Credits

> *For more information about Mathletics points, credits 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

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