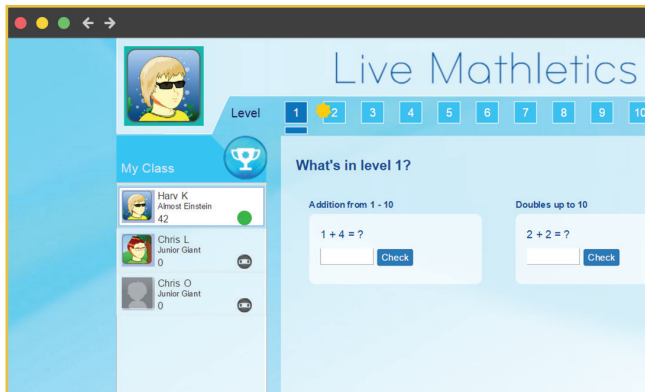


## Levels

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

$$2 + 1 = \square$$

▶ 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 x 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 x 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 x 10

$$30 \div 6 = \square$$

### ▶ Time conversions

How many hours in 180 minutes?

### ▶ Length conversions

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

## 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.

$$\text{Volume} = \square \text{ cm}^3$$

### ▶ Area of plane shapes I

A square has side lengths of 9 mm.

$$\text{Volume} = \square \text{ mm}^3$$

▶ **Algebraic substitution I**

Find  $x - y + z$  if  $x = 3, y = 2$  and  $z = 2$

▶ **Order of operations II**

$$-3 - (-4 + 5) = \square$$

▶ **Terms in a sequence with decimals II**

4.2,  $\square$ , 4.4, 4.5, 4.6

▶ **Area and volume conversions**

$$\square \text{ cm}^3 = 1000 \text{ mm}^3$$

▶ **Factoring I**

$$25x - 55 = 5(5x - ?)$$

▶ **Volume of rectangular prisms II**

A right-prism 8cm high has a cross-section area of 20cm. Volume =  $\square \text{ cm}^3$

**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**

$$0.000642 = 6.42 \times 10^a, \quad a = \square$$

**Level 10**

▶ **Logarithms**

$$\log(40) - \log(5) = \log(\square)$$

▶ **Solving equations**

$$\text{Solve for } y \text{ if: } -11y = 55, \quad y = \square$$

▶ **Algebraic substitution III**

$$\text{Calculate } -2x + 8y \text{ if } x = 3 \text{ and } y = -1 \quad \square$$

▶ **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  $216 \text{ cm}^2$  has sides of length  $\square \text{ cm}$

▶ **Percentage probability**

$$75\% \text{ probability} = \square \text{ in } 4 \text{ chance}$$

