

# The Montessori Philosophy of Mathematics

“

*Mathematics in Montessori education is not taught as a separate, abstract discipline — but as a natural expression of the child's drive for order, precision, and logical understanding.*



TODDLER · AGES 1½-3

## *The Emergence of Order*

*Mathematics begins long before a child encounters numbers or symbols. Toddlers live in a world of patterns, repetition, and discovery.*

When a toddler lines up objects, matches lids to containers, or arranges items by color or size, they are engaging in the early logic of mathematics.

PRIMARY · AGES 3-6

## *Math in the Hand*

*Montessori's genius lies in transforming these delights into learning that honors the developmental sequence from the concrete to the abstract.*

Children physically build numbers using unit beads, ten bars, hundred squares, and thousand cubes — an embodied understanding of place value.



*Golden Beads & the Decimal System*



*Fraction Equivalence — material meets paper*

LOWER ELEMENTARY · AGES 6–9

## ***The Reasoning Mind***

*The child who once performed concrete operations with beads now seeks to grasp the reasoning behind them. They are no longer content to know **what** — they want to understand **why**.*

The materials, still present, serve as support for increasingly abstract thought — a bridge the child walks across, year by year.

IN SUMMARY

“

*By the time a child leaves Greene Towne Montessori, they have not simply learned math — they have come to know it from the inside.*

CONTINUE THE CONVERSATION AT HOME

*Small invitations that match what your child is already doing.*

AT HOME · TODDLER

### ***Sort, nest, transfer.***

Pair socks from the laundry. Let them scoop rice from one bowl to another. Math is already there.

AT HOME · PRIMARY

### ***Count things that matter.***

How many steps to the door?  
How many pieces of pasta? Let counting live in the real world.

AT HOME · LOWER EL

### ***Ask how, not just what.***

When they get an answer, ask them to show you the thinking. The reasoning is the real work.



SCAN TO READ

***Read the full essay online.***

Or visit [gtms.org/parent-education-math](https://gtms.org/parent-education-math)

