MONTESSORI MATERIAL SPOTLIGHT

# The Short Bead Stair

*A concrete introduction to quantity and number*

## WHAT IT IS

- The Short Bead Stair is a set of colored bead bars representing quantities 1 through 9.
- It gives children a concrete way to see and feel number quantity.

## THE MATERIAL






Each bead bar has a consistent color and quantity, representing the numbers 1 through 9. Numeral cards can be matched to the bead bars.

## WHAT CHILDREN LEARN

- Quantity 1–9.
- One-to-one correspondence between object and number.
- Numeral-to-quantity matching.
- Visual discrimination of length and amount.
- Sequencing and counting.
- Preparation for later operations in mathematics.

## HOW IT'S USED

1. Invite the child to the work rug or table.
2. Build the bead stair from shortest to longest.
3. Count each bead bar carefully from left to right.
4. Match numeral cards to each quantity when appropriate.
5. Repeat until the child can build and identify the stair independently.

## EXTENSIONS

- Match bead bars to numeral cards.
- Build the stair in order.
- Use the bead bars for counting games.
- Explore missing-number work.
- Compare longer and shorter bead bars.
- Investigate early addition combinations with the bead bars.

MONTESSORI MATERIAL SPOTLIGHT

# The Cards and Counters

*Building number sense, quantity, and the foundations of odd and even.*

## WHAT IT IS

- The Cards and Counters are a Montessori math material used to help children match numerals with their corresponding quantities.
- The material includes numeral cards 1–10 and a set of counters that are placed beneath each numeral.
- Children count out the correct number of counters for each numeral, arranging them in rows beneath the card.
- As the counters are placed in pairs, the child discovers which numbers are odd and which are even.

## THE MATERIAL




Cards and Counters: numeral cards with matching quantities arranged in pairs.

## WHAT CHILDREN LEARN

- Recognition of numerals 1–10.
- One-to-one correspondence.
- Association between symbol and quantity.
- Counting in sequence.
- The concepts of odd and even.
- Independence, order, and concentration.

## HOW IT'S USED

1. Introduce the numeral cards and place them in order from 1 to 10.
2. Invite the child to count out the correct number of counters for each numeral.
3. Place the counters beneath each numeral in vertical pairs.
4. Notice together that some numbers have all counters paired, while others have one counter left over.
5. Name the even numbers and the odd numbers, then allow the child to repeat independently.

## EXTENSIONS

- Practice a three-period lesson for odd and even.
- Mix numeral cards and match them to quantities.
- Invite the child to build quantities from memory.
- Combine with sandpaper numerals or the spindle box.
- Use the material for counting games and oral number practice.
- Ask the child to identify all odd or all even numerals.

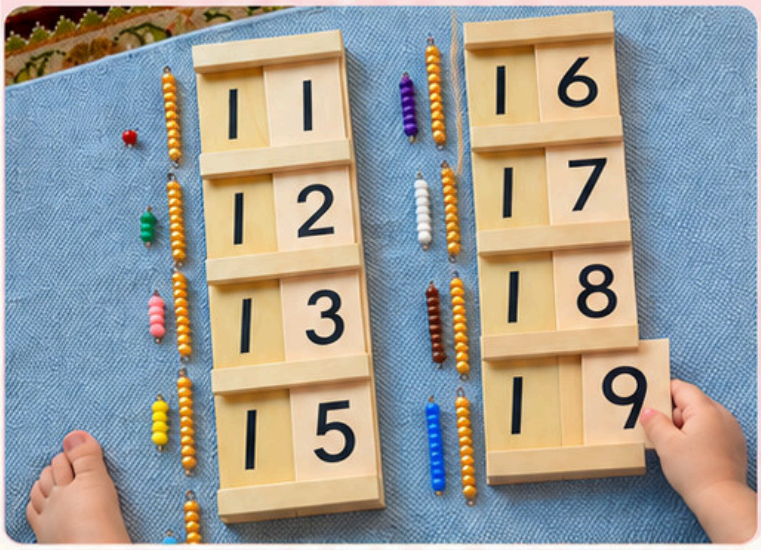
MONTESSORI MATERIAL SPOTLIGHT

# The Teen and Tens Boards

*Exploring the structure of the decimal system.*

## THE TEEN BOARD

*Building numbers 11–19.*




### WHAT IT IS

The Teen Board is a Montessori mathematics material used with the Golden Bead Ten Bars and the Short Bead Stair to build and recognize the numbers 11–19. It gives children a concrete representation of how teen numbers are formed within the decimal system.

### WHAT CHILDREN LEARN

- The composition of teen numbers (10 and a quantity).
- Number sequence and recognition (11–19).
- How numbers are built within the decimal system.
- Preparation for place value and later work with larger numbers.

### HOW IT'S USED

1. Present the number 10 on the board.
2. Place a number card (11–19) over the 0.
3. Build the number with one ten bar and the corresponding short bead stair.
4. Say and read the number. Repeat with different numbers.

## THE TENS BOARD

*Building the multiples of ten and all numbers 10–99.*




### WHAT IT IS

The Tens Board is a Montessori mathematics material used with the Golden Bead Ten Bars to build and recognize the multiples of ten (10, 20, 30, 40, 50, 60, 70, 80, 90) and all numbers 11–99. It gives children a concrete representation of the tens and helps them understand the structure and pattern of our decimal system.

### WHAT CHILDREN LEARN

- The multiples of ten (10–90).
- All numbers 11–99.
- Place value: tens and ones.
- Skip counting by tens.
- Number patterns and the structure of the decimal system.
- Preparation for addition, subtraction, multiplication, and division.

### HOW IT'S USED

1. Present each multiple of ten (10, 20, 30, 40, 50, 60, 70, 80, 90).
2. Build the number with the correct number of ten bars.
3. Place a number card (11–99) and build the number with the appropriate tens and ones.
4. Say and read the number. Explore patterns and skip count by tens.

### EXTENSIONS

- Build and read any number 11–99.
- Explore place value, even and odd numbers.
- Skip counting by tens and by other numbers.
- Use with addition, subtraction, multiplication, and division.
- Record numbers and equations.
- Compare and order numbers. Investigate patterns in the decimal system.

MONTESSORI MATERIAL SPOTLIGHT

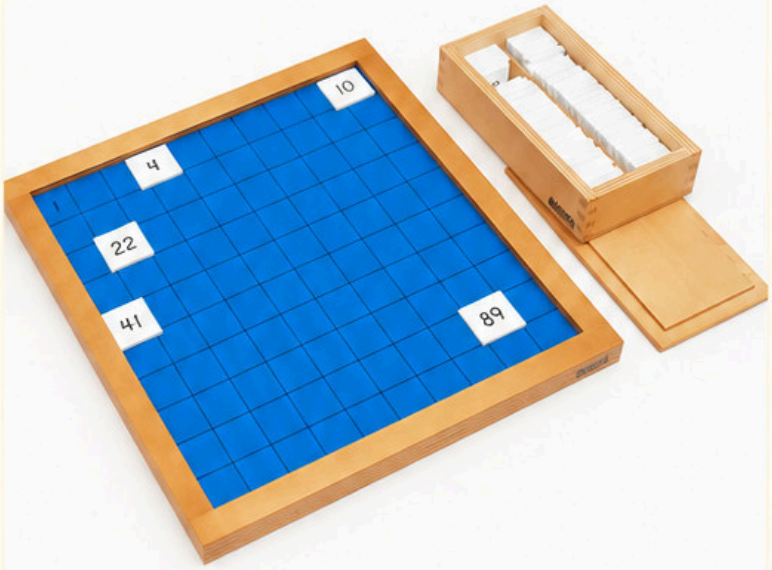
# The Hundred Board

*Exploring numbers, patterns, and the decimal system*

## WHAT IT IS

- The Hundred Board is a Montessori mathematics material used to explore the sequence of numbers from 1 to 100.
- It consists of a wooden board with a 10 × 10 grid and a set of numbered tiles from 1 to 100.
- Each tile represents a specific number and can be placed on the board to create the complete number sequence.
- The material helps children see the organization of our base-ten system in a concrete and visual way.
- It is used for counting, number recognition, patterns, skip counting, and preparation for operations.

## THE MATERIAL




## WHAT CHILDREN LEARN

- The sequence and order of numbers from 1 to 100.
- Patterns in the number system (e.g., counting by 1s, 2s, 5s, or 10s).
- The organization of numbers in rows and columns (tens and ones).
- Number recognition and symbol–quantity correspondence.
- The foundation for addition, subtraction, multiplication, and division.
- A deeper understanding of the structure of the decimal system.

## HOW IT'S USED

1. Present the board and number tiles.
2. Invite the child to place the tiles in order from 1 to 100.
3. Explore counting forwards and backwards.
4. Highlight patterns (e.g., rows of ten, skip counting).
5. Use the material for games, number work, and problem-solving activities.

## EXTENSIONS

- Explore skip counting (by 2s, 5s, or 10s).
- Identify and discuss number patterns.
- Use the board to explore odd and even numbers.
- Create simple addition and subtraction problems with the tiles.
- Use the board to explore multiplication (e.g., multiples, square numbers).
- Connect to other Montessori materials such as the bead material or the decimal system.

MONTESSORI MATERIAL SPOTLIGHT

# The Bead Material

*Making place value, number, and the decimal system visible.*

## WHAT IT IS

- The bead material is a Montessori mathematics material used to make the decimal system concrete.
- It consists of colored beads in specific quantities and forms: units, ten bars, hundred squares, and thousand cubes.
- Each quantity has a unique color and structure, allowing children to see and feel the hierarchical nature of our number system.
- The material is used for exploration of number, place value, operations, and the foundations of later work with larger numbers and ideas such as multiplication and division.

## WHAT CHILDREN LEARN

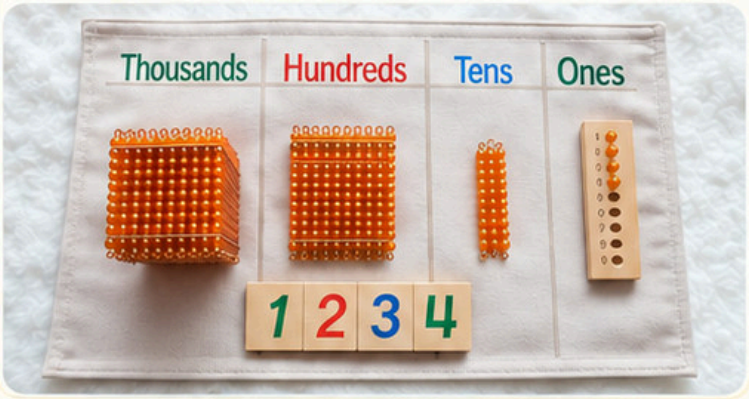
- The decimal system and place value from concrete experience.
- The names and values of units, tens, hundreds, and thousands.
- How quantities can be composed and decomposed.
- Addition, subtraction, multiplication, and division with larger numbers.
- Relationships between quantities and the hierarchical nature of number.
- A strong foundation for later work with fractions, decimals, and more advanced operations.

## HOW IT'S USED

1. Present and explore each quantity and its name.
2. Have the child build and record numbers.
3. Use the material for operations (addition, subtraction, multiplication, division).
4. Encourage the child to exchange quantities (e.g., 10 units for 1 ten, 10 tens for 1 hundred).
5. Move toward more complex work, such as the decimal system and larger numbers.

## EXAMPLES






## THE QUANTITIES

1. Unit (1) – small individual bead
2. Ten (10) – bar of 10 beads
3. Hundred (100) – square of 100 beads
4. Thousand (1,000) – cube of 1,000 beads
5. Each quantity has a specific color: unit (green), ten (blue), hundred (red), thousand (golden/amber).

## EXTENSIONS

- Build and read larger numbers.
- Explore skip counting and multiplication.
- Introduce the decimal system.
- Compare quantities and notice patterns.
- Use the beads for word problems and real-life applications.
- Connect to other Montessori materials such as the Stamp Game and dot cards.

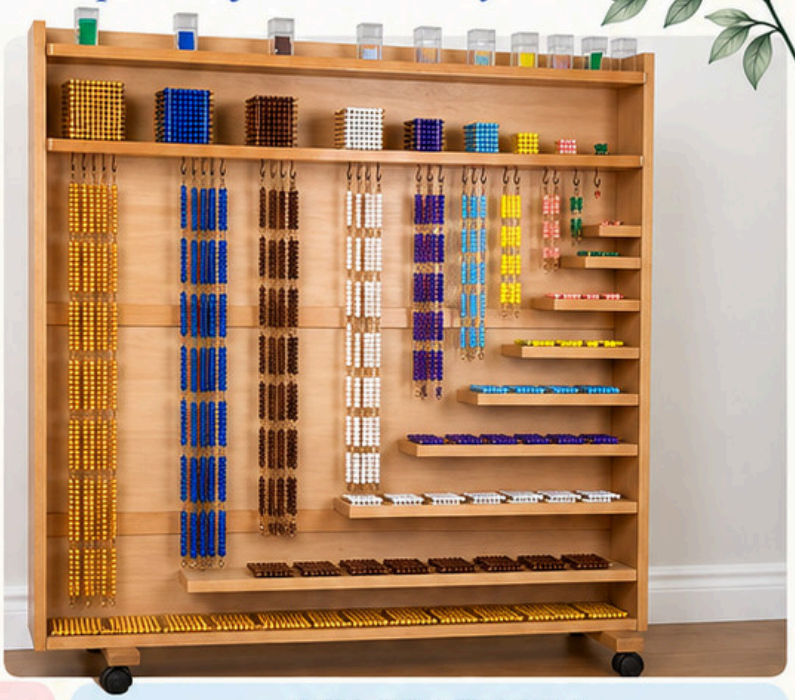
MONTESSORI MATERIAL SPOTLIGHT

# The Bead Cabinet

*Exploring number patterns and the power of the decimal system.*

## WHAT IT IS

The Bead Cabinet is a Montessori mathematics material that contains the complete set of golden bead materials, including chains, squares, cubes, and the number "tickets." It is used to explore number patterns, skip counting, multiples, squared numbers, cubed numbers, and the structure of the decimal system.



## WHAT CHILDREN LEARN

- Skip counting by 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, and 10s.
- Multiples, squared numbers, and cubed numbers.
- Patterns and relationships within the decimal system.
- The composition of numbers and place value.
- Number sense, fluency, and confidence with larger numbers.
- Preparation for multiplication, division, and higher mathematics.

## KEY FEATURES

- Colored bead chains (1–10) match the Short Bead Stair.
- Each chain has corresponding number "tickets" (e.g., 5, 10, 15, 20, 25…).
- Includes ten bars (10), squares (100), cubes (1,000), and additional bars and chains.
- Provides a concrete and visual representation of number patterns.
- Supports the transition from concrete to abstract understanding.

## HOW IT'S USED

1. Choose a chain (e.g., the 5 chain).
2. Lay out the number tickets under each bead as you skip count (5, 10, 15, 20, 25…).
3. Explore other chains and skip count by 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, and 10s.
4. Use the chains, squares, and cubes to investigate multiples, squared numbers, cubed numbers, prime and composite numbers, and the structure of the decimal system.

## IN ACTION: THE 5 CHAIN



Laying the number tickets under the short 5 chain while skip counting by fives.

MONTESSORI MATERIAL SPOTLIGHT

# The Stamp Game

*From concrete quantities to abstract arithmetic.*




## WHAT IT IS

The Stamp Game is a Montessori mathematics material that helps children bridge the concrete experience of the golden bead decimal system to more abstract calculation. It consists of color-coded wooden or plastic stamps and skittles representing units, tens, hundreds, and thousands. Children use the stamps to build, read, and manipulate numbers and to perform the four basic operations.

## THE COLOR CODE

| | |
|---|---|
| 1 | Green = 1 (units) |
| 10 | Blue = 10 (tens) |
| 100 | Red = 100 (hundreds) |
| 1000 | Green = 1,000 (thousands) |

## WHAT CHILDREN LEARN

- Build and read multi-digit numbers
- Recognize the value of each place and the decimal system
- Understand and practice exchanging ten of one hierarchy for one of the next (e.g., 10 ones = 1 ten)
- Perform the four operations: addition, subtraction, multiplication, and division
- Develop concentration, precision, and mental organization

## HOW IT IS USED

1. Bridge the golden beads to the numeral stamps.
2. Form numbers by placing the stamps in columns according to place value.
3. Perform static addition and subtraction (no exchanging).
4. Perform dynamic addition and subtraction (with exchanging between place values).
5. Perform static and dynamic multiplication and division.

## STATIC AND DYNAMIC

**Static = No Exchange**

Each place remains less than 10.

1000 | 100 | 10 | 1

1,234

**Dynamic = Exchange**

Regroup between place values when a quantity reaches 10.

1 1 1 1 1 1 1 1 1 1

=

10

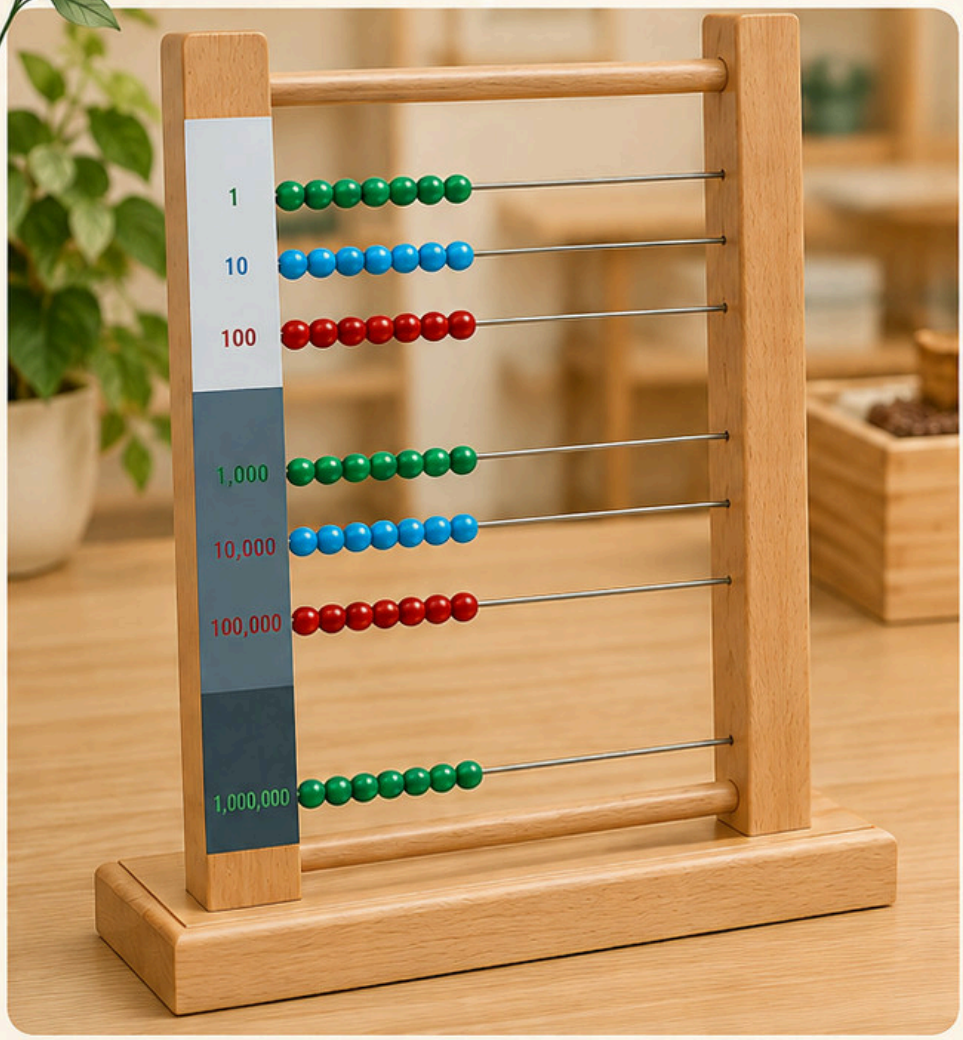
## WHY IT MATTERS

- Moves from concrete quantities to abstract arithmetic.
- Develops a deep understanding of place value and the decimal system.
- Builds mental organization and number sense.
- Prepares for written algorithms and more advanced mathematics.
- Encourages independence, perseverance, and confidence in problem solving.

MONTESSORI MATERIAL SPOTLIGHT

# The Bead Frame

*A concrete path to understanding the decimal system.*




## WHAT IT IS

The bead frame is a concrete material that presents the hierarchy of the decimal system. It shows the quantity and symbol for 1, 10, 100, 1,000, 10,000, 100,000, and 1,000,000 using color-coded bead bars. It helps children see the 10:1 relationship between each place value and prepares them for more complex work with large numbers.

## THE COLOR CODE

- 1 (units)
- 10 (tens)
- 100 (hundreds)
- 1,000 (thousands)
- 10,000 (ten thousands)
- 100,000 (hundred thousands)
- 1,000,000 (millions)

## HOW IT'S USED

1. Introduce each bead bar, naming the quantity and corresponding symbol.
2. Explore the 10:1 relationship between each place value.
3. Build, read, and write numbers using the bead frame.
4. Compose and decompose larger numbers.
5. Use for addition, subtraction, multiplication, and division of large numbers.
6. Support work with the bead chains, stamp game, and written methods.

## WHAT CHILDREN LEARN

- A concrete understanding of the decimal system
- The concept of place value through quantity and symbol
- That each place to the left is 10 times greater
- How to read, write, and build large numbers
- Number sense and the ability to compare quantities
- A strong foundation for operations with large numbers
- Confidence working with millions

## WHY IT MATTERS

- Makes abstract concepts concrete and visual
- Builds deep number sense
- Prepares children for the bead chains, stamp game, and written algorithms
- Encourages independence and confidence
- Helps children see the beauty and logic of our base-ten number system

MONTESSORI MATERIAL SPOTLIGHT

# The Checkerboard

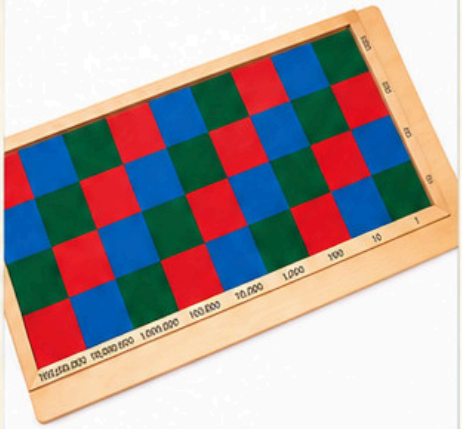
*Making multi-digit multiplication visible and concrete.*

## WHAT IT IS

- The Checkerboard is a Montessori elementary mathematics material used for multi-digit multiplication.
- It consists of a board with four rows and nine columns of colored squares.
- The colors represent the hierarchical place values: green for units, blue for tens, and red for hundreds.
- Diagonally aligned squares on the board share the same place value.

## EXAMPLES





## WHAT CHILDREN LEARN

- Place value and the hierarchical nature of our number system.
- Skip counting and multiples.
- Multiplication facts and multi-digit multiplication.
- How to organize and combine partial products.
- That the same place value runs diagonally across the board.
- Confidence with complex multiplication through hands-on exploration.

## KEY FEATURES

- Four rows and nine columns of colored squares (green = units, blue = tens, red = hundreds).
- Diagonally aligned squares share the same place value.
- Bead bars (1–9) are placed on the board to build each partial product.
- Allows children to work with multi-digit multiplication even before multiplication facts are memorized.
- Supports concrete to abstract learning.
- Provides a strong foundation for later work with the decimal checkerboard.

## HOW IT'S USED

1. The child sets up a multi-digit multiplication problem.
2. Bead bars are placed on the board to represent each partial product.
3. Partial products are combined, sliding quantities as needed.
4. The board helps the child see the value of each digit in the correct column.
5. As understanding grows, the child records the work and moves toward the abstract algorithm.

## EXTENSIONS

- Practice with larger numbers and additional digit combinations.
- Explore skip counting and multiples using the checkerboard.
- Move to the decimal checkerboard once the whole number board is mastered.
- Compare written algorithms with the concrete work on the board.
- Solve word problems and real-life applications.

MONTESSORI MATERIAL SPOTLIGHT

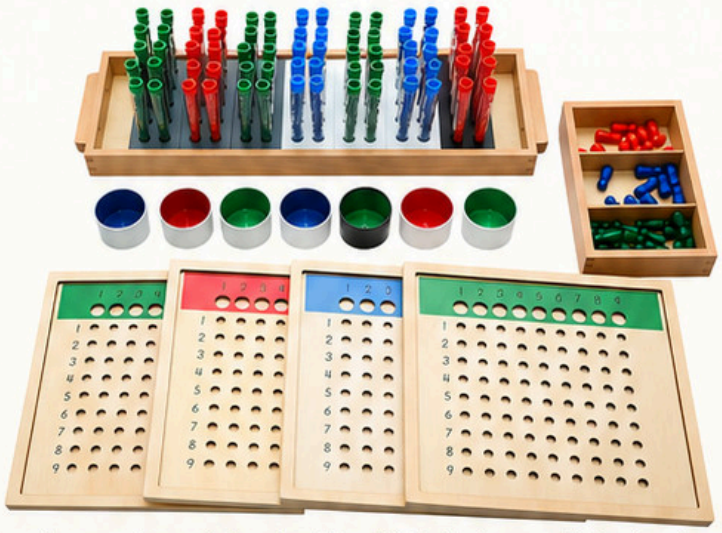
# The Racks and Tubes

*Building a concrete understanding of division, place value, and exchange*

## WHAT IT IS

- The Racks and Tubes are a Montessori math material used to give children a concrete experience of long division.
- The material helps children see how quantities are distributed fairly and evenly while reinforcing place value and exchanging.
- Children manipulate beads, racks, bowls, and boards to solve division problems in a hands-on way before relying only on paper and pencil.

## THE MATERIAL



Seven color-coded racks of bead-filled tubes, matching bowls, and three wooden boards with holes for setting up division problems.

## IN USE



The child sets up the divisor with skittles and distributes beads by place value, exchangng as needed to create equal groups.

## WHAT CHILDREN LEARN

- How division creates equal groups
- Place value from units through larger quantities
- Exchanging between place values
- Accurate recording of long-division work
- Concentration, precision, and logical sequence
- Confidence with more complex mathematical operations

## HOW IT'S USED

1. Choose a division problem and set up the correct board or boards.
2. Place skittles to represent the divisor.
3. Put the bead quantities into the matching bowls by place value.
4. Distribute beads fairly beneath the skittles, exchanging when a remainder cannot be evenly shared at that place value.
5. Record the answer by reading what one complete equal group receives.

## EXTENSIONS

- Connect the material to written long division.
- Practice larger divisors using multiple boards.
- Review exchanging with the stamp game, checkerboard, or bead frame.
- Invite children to explain each exchange step aloud.
- Use the material to deepen understanding before abstract practice.
- Encourage careful recording and self-checking of answers.

MONTESSORI MATERIAL SPOTLIGHT

# Montessori Reading Acceleration Pathway

*A structured, multisensory pathway that builds strong, independent readers through explicit phonics, decodable texts, and meaningful reading.*




## WHAT IT IS

The Montessori Reading Acceleration Pathway (MRAP) is a carefully sequenced, multisensory reading program designed for Montessori classrooms. It provides explicit, systematic phonics instruction using the Movable Alphabet, decodable readers, and meaningful texts to move children efficiently from emergent literacy to fluent, independent reading.

## WHAT CHILDREN LEARN

- Phonemic awareness and phonics through explicit lessons
- Build and decode words using the Movable Alphabet
- Read decodable texts with increasing complexity
- Develop fluency, comprehension, vocabulary, and a love of reading
- Gain confidence as independent, thoughtful readers

## HOW IT'S USED

1. **Explicit Lesson**
   Children learn a targeted phonics skill using the Movable Alphabet.
2. **Word Building**
   They build and manipulate words, applying new skills.
3. **Decodable Reading**
   Children read leveled, decodable Monarch Readers.
4. **Comprehension & Discussion**
   They engage with the text through purposeful follow-up questions.
5. **Independent Practice**
   Children choose appropriately leveled books and reread to build fluency.

## THE 14-LEVEL PATHWAY

| | |
|---|---|
| Levels 1–2 | Short vowel sounds and simple words |
| Levels 3–4 | Consonant blends, digraphs, and growing vocabulary |
| Levels 5–6 | Longer words and increasing sentence complexity |
| Levels 7–8 | Advanced phonics patterns and multi-syllable words |
| Levels 9–10 | More complex texts, expanding comprehension |
| Levels 11–12 | Rich vocabulary, longer passages, and deeper understanding |
| Levels 13–14 | Confident, fluent, independent readers with strong comprehension |

## WHY IT MATTERS

- Provides a clear, research-informed pathway for reading development
- Supports individualized progress through 14 leveled readers
- Builds strong foundational skills in phonics and decoding
- Develops confident, independent readers who love to read
- Prepares children for success across the curriculum and in real-world reading

MONTESSORI MATERIAL SPOTLIGHT

# Phonetic Sound Tubs

*A hands-on way to explore, isolate, and hear the sounds in words.*




## WHAT IT IS

Phonetic sound tubs are a hands-on language material that supports phonemic awareness and phonics development. Each tub contains small objects or pictures that begin with the same sound as the letter on the container. Children explore the objects, name them, and listen for the beginning sound, building a strong foundation for reading and spelling.

## WHAT CHILDREN LEARN

- Identification of beginning sounds
- Connection between sounds and letters
- Phonemic awareness (hearing and isolating sounds)
- Vocabulary development
- Preparation for reading and spelling
- Independent exploration and classification

## HOW IT'S USED

1. The child selects a tub and explores the objects inside.
2. They name each object and identify the beginning sound.
3. The child notices that all of the objects begin with the same sound as the letter on the tub.
4. They can sort additional objects or pictures, listen for sounds in the environment, or find items around the classroom.
5. As familiarity grows, children can work with blends, digraphs, and ending sounds.

## IDEAS FOR EXTENSION

- Sort objects or picture cards by beginning sound.
- Record each object's name on a list.
- Match to movable alphabet letters.
- Use for writing simple words and sentences.
- Play "I spy a sound…" using classroom objects.
- Extend to blends, digraphs, cvc, and ending sounds (rhymes).

## WHY IT MATTERS

- Builds the essential skill of phonemic awareness
- Connects sounds to symbols in a meaningful, concrete way
- Supports all areas of language development (reading, spelling, and writing)
- Encourages independence and self-correction
- Creates a joyful, hands-on entry point to literacy
- Can be adapted for individual needs and extended as skills grow

MONTESSORI MATERIAL SPOTLIGHT

# The Pink Material

*Building early reading through phonetic CVC words*

## WHAT IT IS

The Pink Material is often the first time a child will truly 'read' in the Montessori classroom. It is a series of increasingly abstract materials that focus on three-letter phonetic words that begin and end with a consonant and have a vowel in the middle, also known as CVC words.

## THE STAGES OF THE PINK MATERIAL

- Matching CVC words with picture cards (picture boxes)
- Reading mini booklets with one CVC word per page
- Reading short phrases
- Reading complete sentences
- Reading short stories
- Reading word lists

## THE MATERIAL




Picture Boxes




Mini Booklets




Sentence Cards




Word Lists

## MASTERY

Students have mastered the Pink Material when they can read the word lists without hesitation.

## WHAT CHILDREN LEARN

- Phonetic reading of CVC words
- Left-to-right tracking
- Matching spoken language to print
- Reading words, phrases, sentences, and short stories
- Increased confidence and fluency in early reading
- Visual discrimination and decoding skills

MONTESSORI MATERIAL SPOTLIGHT

# The Blue Material

*Building fluent reading through phonetic consonant blends*

## WHAT IT IS

- The Blue Material is a series of increasingly abstract reading materials that focus on words containing a consonant blend, typically at the beginning or end of a word.
- Words range in complexity from stop to milkman to address.

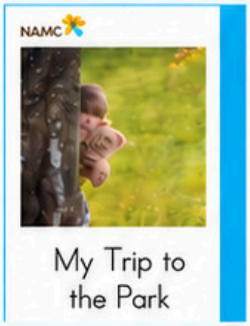
## THE STAGES OF THE BLUE MATERIAL

- Matching words with blends with their picture cards (called Consonant Blend Boxes). This material introduces 21 beginning consonant blends.
- Matching words with blends with their picture cards (called Blue Object Boxes) either at the beginning or end of a word.
- Reading mini booklets with one blend word per page.
- Reading word lists.
- Reading complete sentences.
- Reading short stories.

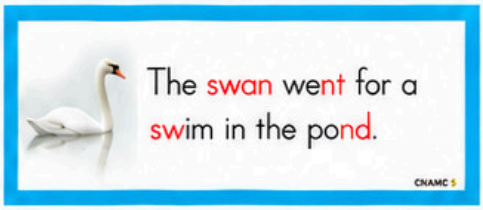
## THE MATERIAL




Consonant Blend / Blue Object Boxes




Mini Booklets




Sentence Cards




Word Lists

## WHAT CHILDREN LEARN

- Phonetic reading of consonant blend words.
- Left-to-right tracking.
- Matching spoken language to print.
- Reading words, phrases, sentences, and short stories.
- Increased confidence and fluency in early reading.
- Visual discrimination and decoding skills.

## BLENDS

- Students practice and master consonant blends through repeated reading and word work.

MONTESSORI MATERIAL SPOTLIGHT

# The Green Material

*Building reading with phonograms and multiple spellings for one sound*

## WHAT IT IS

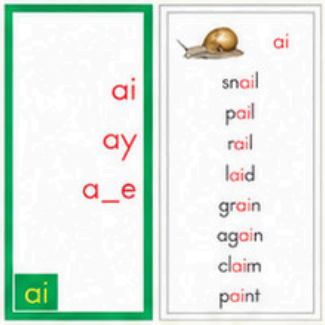
The Green Material is the last material in the kindergarten reading series, and it focuses on more challenging words containing phonograms that were not introduced in the earlier stages of the reading program. The focus of this material is for children to understand that there can be multiple ways to spell words with the same sound.

The phonograms include: ae, oy, ie, ai, etc.

## THE MATERIAL




Picture Boxes




Phonogram Charts and Word Lists




Sentence Cards




Short Stories / Booklets

## THE STAGES OF THE GREEN MATERIAL

- Matching words with their picture cards (called Picture Boxes). This material introduces 22 phonograms.
- Reading word lists
- Reading complete sentences
- Reading short stories

## KINDERGARTEN EXPECTATION

- Unlike in the Pink and Blue Materials, the Green Material introduces the concept that sounds can be represented in more than one way. For example, /a/ can be shown as a_e, ai, and ay.
- Students are unlikely to master the Green Material in kindergarten. Rather, this material provides exposure to more complex concepts to come in first and second grade.

## WHAT CHILDREN LEARN

- Recognition of common phonograms
- Understanding that one sound can have multiple spellings
- Reading words with vowel patterns such as ai, ay, and a_e
- Reading word lists, sentences, and short stories
- Greater flexibility in decoding
- Preparation for more advanced spelling and reading patterns

MONTESSORI MATERIAL SPOTLIGHT

# The Moveable Alphabet

*Building words, sentences, and early reading and writing skills*

## WHAT IT IS

- The Moveable Alphabet is a Montessori language material used to help children build words and sentences with movable letters.
- It consists of wooden letters, with vowels in blue and consonants in red, stored in a compartmentalized box.
- The letters are cut in a cursive-like script and are arranged in multiple copies based on the frequency of use in the language.
- Children use the letters to compose words, explore sounds, and prepare for reading and writing.

## THE MATERIAL



## IN USE




## WHAT CHILDREN LEARN

- The relationship between sounds and written symbols.
- How to build words using phonetic knowledge.
- Vocabulary, spelling, and word structure.
- How words form sentences and convey meaning.
- Independence in writing and expression.
- A strong foundation for reading and language development.

## HOW IT'S USED

1. Introduce the letters and their sounds (vowels in blue, consonants in red).
2. Invite the child to build simple words by listening for the first sound.
3. Progress to building longer words and sentences.
4. Encourage the child to read the words and sentences they have made.
5. Use the material for grammar, storytelling, and creative writing activities.

## EXTENSIONS

- Build and read sentences or short stories.
- Explore word families and rhyming words.
- Use the letters to practice grammar concepts (nouns, verbs, adjectives, etc.).
- Encourage independent writing, journal entries, or story composition.
- Combine with other Montessori language materials, such as sandpaper letters or picture cards.
- Use for word sorts, categorization, and vocabulary building.

MONTESSORI MATERIAL SPOTLIGHT

# The Metal Insets

*A writing material that develops control, precision, and the ability to form letters.*



## WHAT IT IS

The metal insets are a writing material that consists of a series of metal shapes set into wooden frames. Children trace around the insets to explore two-dimensional geometric forms, refining the movements needed for precise control and for the later formation of letters and numbers.

## THE SERIES

The metal insets are presented in a sequence of geometric shapes, from simple to more complex forms.


Circle


Square


Triangle


Oval


More Complex Shapes

## WHAT CHILDREN LEARN

- Careful, controlled pencil movement
- Refinement of fine motor skills
- Hand-eye coordination
- Concentration and attention to detail
- Awareness of beginning and ending points
- Preparation for the formation of letters and numbers
- Confidence and independence in writing

## HOW IT'S USED

1. The child selects a metal inset and places it in the frame.
2. They trace around the shape with a pencil, keeping the inset in place.
3. The inset is removed and the shape is colored.
4. The process is repeated with additional shapes in the series.
5. As control develops, children may trace smaller insets and progress to more complex forms.

## WHY IT MATTERS

- Builds the muscle control and precision needed for writing
- Supports concentration, patience, and careful work
- Develops hand-eye coordination and fine motor skills
- Prepares the hand for the formation of letters and numbers
- Encourages independence and confidence in written work
- Provides a meaningful, purposeful foundation for all areas of language arts

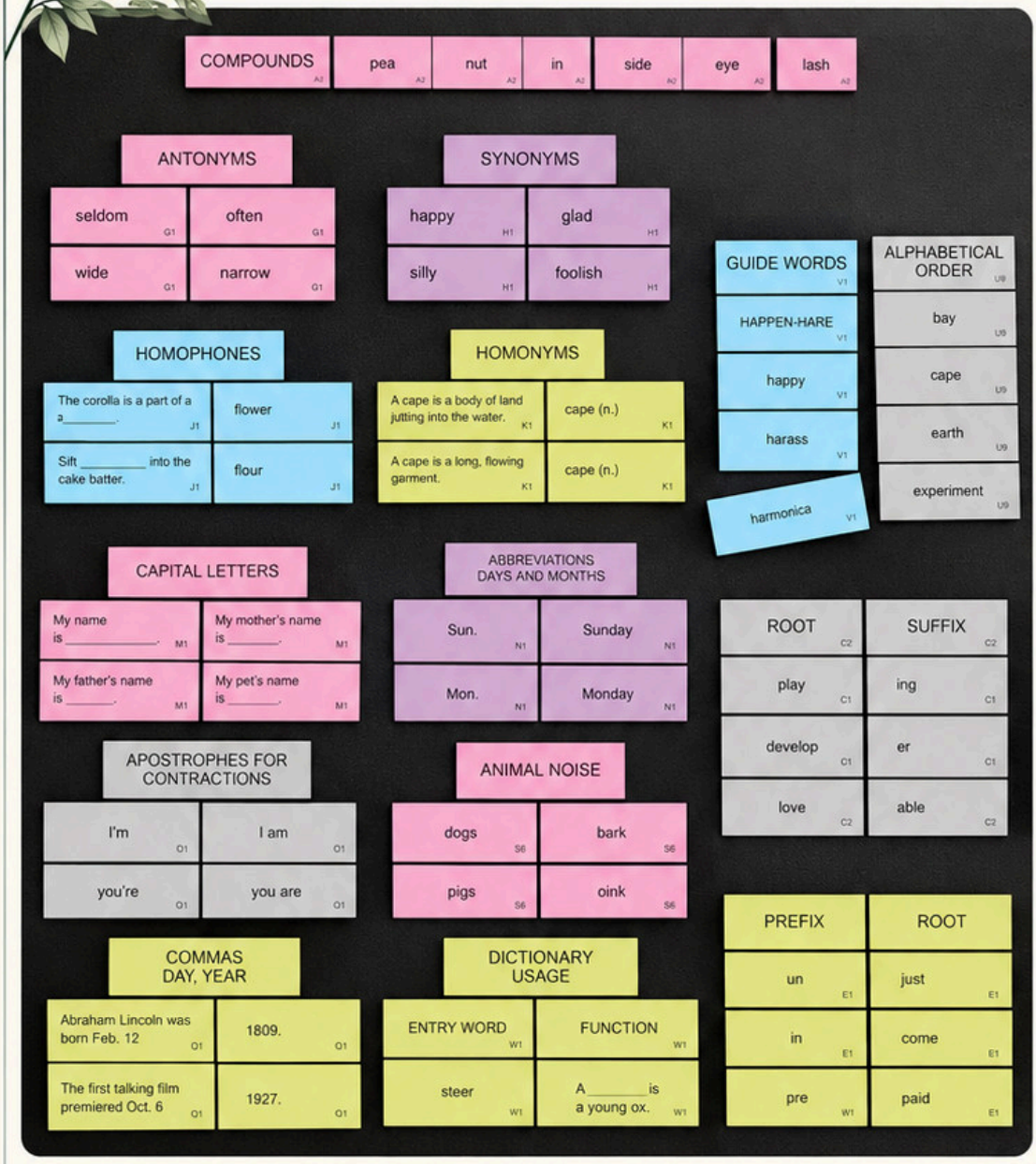
## BEAUTY IN THE BASICS

The metal insets offer children a quiet, focused activity that refines movement and cultivates a sense of order, precision, and care. Through repetition, children develop the control and confidence that support elegant, legible handwriting and creative expression. It is a simple material with a profound impact on a child's ability to communicate through writing.

MONTESSORI MATERIAL SPOTLIGHT

# Word Study

*Exploring the structure and meaning of words.*




## WHAT IT IS

Word Study is a Montessori language material that helps children investigate the structure, meaning, and usage of words.

It consists of a series of color-coded cards with written prompts and answers, organized by skill. Children work independently, matching sentences, definitions, and word parts to deepen their understanding of how our language works.

## SKILLS AND CONCEPTS

- Compounds (A)
- Antonyms (G)
- Synonyms (H)
- Homophones (J)
- Homonyms (K)
- Guide Words (V)
- Alphabetical Order (U)
- Capital Letters (M)
- Abbreviations: Days & Months (N)
- Apostrophes for Contractions (O)
- Animal Noise (S)
- Commas: Day, Year (Q)
- Dictionary Usage (W)
- Prefixes (E)
- Roots (C)
- Suffixes (C)

## HOW IT'S USED

1. The child selects a set of cards.
2. They read the prompts and think about the language concept.
3. They match the cards independently.
4. They check their work and self-correct.
5. The activity is repeated with different sets as the child gains confidence.

## WHAT CHILDREN LEARN

- Vocabulary and word structure
- Grammar and language conventions
- Meaning, context, and multiple uses of words
- Dictionary skills and alphabetical order
- Critical thinking and problem solving
- Preparation for strong writing and composition

## WHY IT MATTERS

- Builds a deep understanding of the English language
- Supports reading comprehension and written expression
- Encourages careful observation and analysis of words
- Fosters independence, confidence, and a love of language

MONTESSORI MATERIAL SPOTLIGHT

# Instructional Level Spelling

*Discovering spelling patterns through meaningful word study*

## WHAT IT IS

- A developmental spelling and word-study program that meets children at their current instructional level.
- A spelling inventory guides placement and flexible instructional groups.
- Rather than memorizing isolated words, students investigate sounds, patterns, and word structure.

## THE PROGRAM

**Instructional Level Spelling**

| | | | |
|---|---|---|---|
| White | Modified Red | Red | Orange |
| Yellow | Green | Blue | Indigo |

Levels progress from foundational phonetic spelling toward syllables, affixes, and word origins.

## WHAT CHILDREN LEARN

- Recognize and apply spelling patterns.
- Analyze how words are built.
- Transfer spelling knowledge into writing.
- Develop accuracy, independence, and spelling awareness.

## HOW IT'S USED

1. Use a spelling inventory to determine instructional level.
2. Introduce a shared spelling feature and discuss patterns.
3. Sort words and complete guided practice.
4. Practice words in dictation and connected writing.
5. Reassess and adjust instruction as students grow.

## EXTENSIONS

- Word sorts and word hunts.
- Vocabulary and morphology investigations.
- Sentence and paragraph dictation.
- Apply patterns in authentic writing.

MONTESSORI MATERIAL SPOTLIGHT

# The Waseca Reading Program

*A color-coded journey toward confident, independent reading.*






## WHAT IT IS

A sequential phonics program that uses color-coded drawers, picture cards, word cards, and hands-on activities to help children build reading skills from simple words to advanced spelling patterns.

## WHAT CHILDREN LEARN

- Sound–symbol relationships
- Blending and decoding words
- Consonant blends and digraphs
- Long-vowel and silent-e patterns
- R-controlled vowels and diphthongs
- Fluency, spelling, and independence

## THE NINE COLOR SETS

*Progressive phonics practice, from simple to complex*

**RED**
Short vowels · CVC

**ORANGE**
Consonant blends

**YELLOW**
Double consonants · digraphs

**GREEN**
-ing, -ink, -ang and more

**AQUA**
Silent-e patterns

**BLUE**
Long-vowel teams

**PURPLE**
R-controlled · diphthongs

**PINK**
Silent letters

**GOLD**
Advanced phonics

## IN THE CLASSROOM

1. Introduce one pattern at a time.
2. Model with picture and word cards.
3. Allow independent repetition.
4. Observe readiness before advancing. *Follow the child's pace.*

## HOW IT'S USED

1. Select a color set that matches the child's phonics readiness.
2. Introduce the sound pattern with the picture and word cards.
3. Invite the child to read, match, sort, and build words.
4. Repeat independently before moving to the next pattern.

## WHY IT MATTERS

- Hands-on, self-correcting practice
- A clear progression of phonics skills
- Confidence through repetition
- Independent work at an individual pace

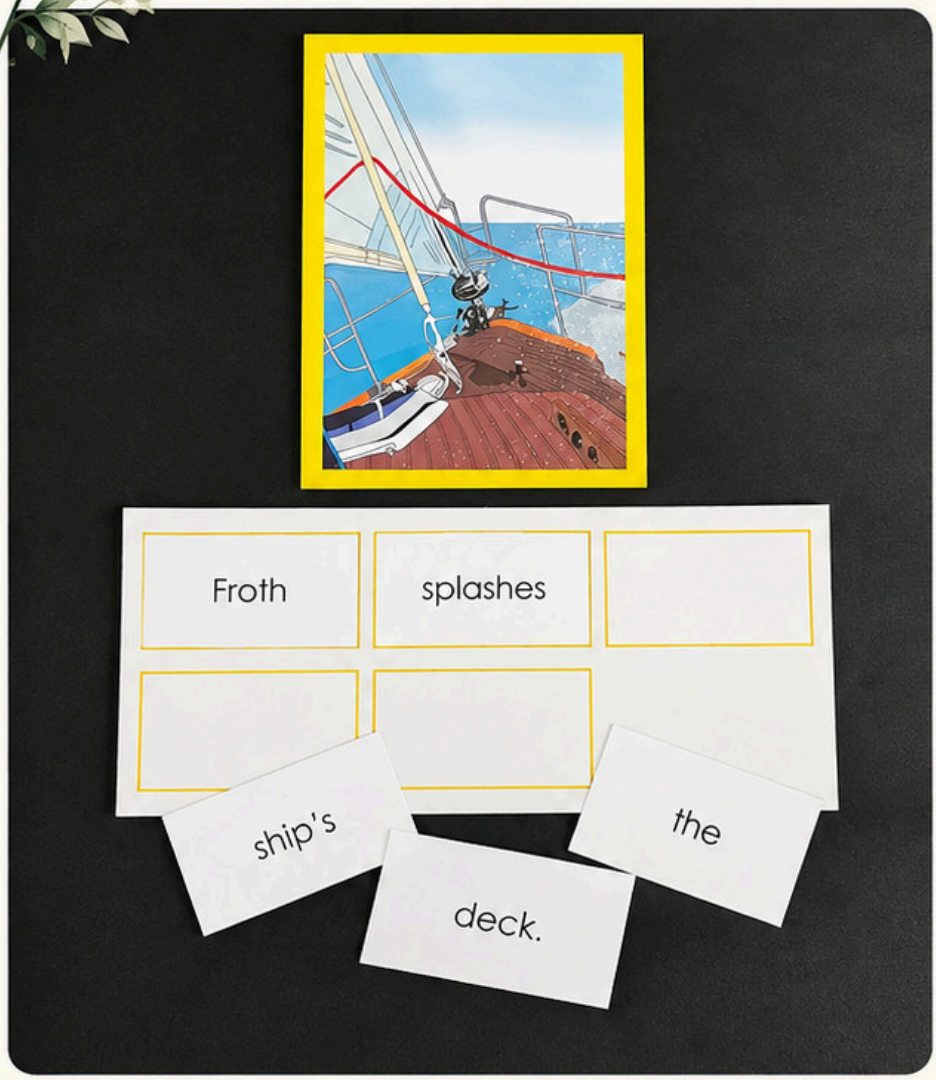
## BEAUTY IN THE BASICS

The Waseca Reading Program brings order and beauty to phonics instruction. Each color builds on earlier learning, giving children a concrete, purposeful path from decoding first words to reading increasingly complex patterns with confidence.

MONTESSORI MATERIAL SPOTLIGHT

# Waseca Sentence Building

*A hands-on material for constructing, reading, and writing meaningful sentences.*




## WHAT IT IS

Waseca Sentence Building is a language material that helps children construct and read meaningful, grammatically correct sentences. It includes a set of beautiful, engaging picture cards, a sentence frame with spaces, and word cards. Children select word cards to create sentences that match the picture, developing reading, writing, grammar, and composition skills.

## WHAT CHILDREN LEARN

- How words work together in a sentence
- Sentence structure and grammar
- Reading and comprehension
- Vocabulary development
- Capitalization, punctuation, and conventions of written language
- Independence and self-correction
- Preparation for free writing and composition

## HOW IT'S USED

1. The child chooses a picture card and places it above the sentence frame.
2. They select word cards and read them.
3. The child arranges the word cards in the spaces to make a sentence that matches the picture.
4. They check that the sentence makes sense and is complete.
5. The sentence can be copied for further practice or expanded with additional details.

## EXAMPLE



| | | |
|---|---|---|
| Froth | splashes | on |
| the | ship's | deck. |

## WHY IT MATTERS

- Builds a strong foundation in grammar and written expression
- Connects reading, writing, and meaning
- Encourages careful word choice and sentence construction
- Engages children with beautiful, real-world images
- Supports confidence and joy in writing

MONTESSORI MATERIAL SPOTLIGHT

# The Grammar Boxes

*Exploring parts of speech through symbols, word analysis, and sentence study*

## WHAT IT IS

- The Grammar Boxes are Montessori language materials used to introduce and practice the parts of speech.
- Children read phrases or sentences, identify the function of each word, and match words to grammar symbols.
- The work helps children move from concrete language experiences toward deeper understanding of sentence structure and grammar.

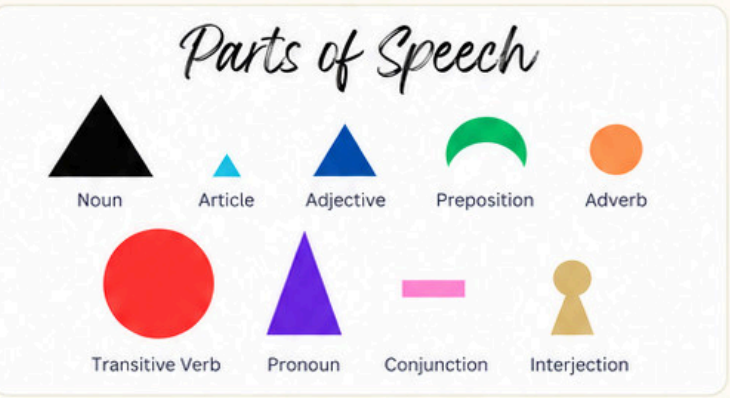
## WHAT CHILDREN LEARN

- The names and functions of the parts of speech.
- How words work together to create meaning.
- Grammar symbols and visual sentence analysis.
- Careful reading, classification, and precise language.
- Foundations for sentence analysis and written expression.

## THE MATERIAL




Grammar Boxes in Use




Parts of Speech Symbols

## HOW IT'S USED

1. Invite the child to read the phrase or sentence.
2. Isolate one word at a time and discuss its function.
3. Match each word to the correct grammar symbol.
4. Analyze the full sentence by placing the symbols in order.
5. Continue with new phrases, sentence building, and follow-up work.

## EXTENSIONS

- Sort word cards by part of speech.
- Build original sentences and symbolize them.
- Analyze longer or more complex sentences.
- Connect the work to sentence analysis and writing.
- Use oral language games to reinforce grammar concepts.

MONTESSORI MATERIAL SPOTLIGHT

# The Geometry Cabinet

*Exploring two-dimensional shapes and their properties*

## WHAT IT IS

- The Geometry Cabinet is a Montessori sensorial material used to isolate and explore two-dimensional geometric shapes.
- It consists of six drawers, each containing a set of shapes in a specific category.
- Each shape is a solid blue inset with a knob, set in a yellow tray with a wooden frame.
- The material allows children to visualize, classify, and internalize the characteristics of geometric figures through hands-on exploration.

## WHAT CHILDREN LEARN

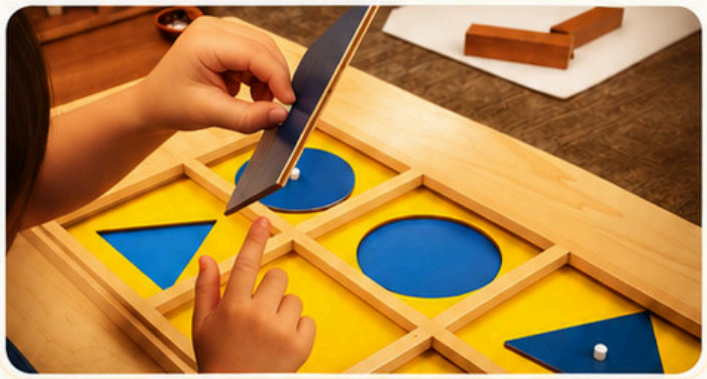
- Recognition and names of geometric shapes (circle, triangle, square, rectangle, oval, etc.).
- Key attributes such as number of sides, corners, and curved or straight lines.
- Visual discrimination and careful observation.
- Classification and comparison of shapes.
- Preparation for later work in geometry, symbols, and mathematical reasoning.
- Development of concentration, independence, and a refined sense of form.

## HOW IT'S USED

1. Invite the child to choose a drawer and carry it to a work space.
2. Take out the shapes one at a time, tracing the inset with two fingers.
3. Name the shape and identify its attributes (e.g., number of sides and corners).
4. Compare shapes and notice similarities and differences.
5. Extend the work by drawing the shapes or finding them in the environment.

## EXAMPLES





## THE DRAWERS

1. Circles
2. Triangles
3. Quadrilaterals
4. Polygons
5. Curved Figures
6. Miscellaneous Figures

## EXTENSIONS

- Use the shapes with the metal inset frames or constructive triangles.
- Create shape booklets with drawings and names.
- Find and identify shapes in the environment (indoor and outdoor).
- Compare and sort shapes by attributes (sides, corners, curved/straight).
- Introduce geometry nomenclature and symbols.
- Design artwork or patterns using the shapes.

MONTESSORI MATERIAL SPOTLIGHT

# Geography Puzzle Maps

*Building a sense of place, global awareness, and cultural understanding*

## WHAT IT IS

- A set of wooden puzzle maps used to introduce the geography of the United States and the world.
- Each piece is a cut-out shape with a knob for easy handling and control of error.
- The maps include a United States puzzle map, world continents puzzle maps, and a world continents and oceans control chart.
- Puzzle maps are available for all continents — North America, South America, Europe, Africa, Asia, Australia, and Antarctica.

## WHAT CHILDREN LEARN

- The names, shapes, and relative locations of the United States and its states.
- The names, shapes, and relative locations of all seven continents and the five oceans.
- Spatial awareness and the relationship between land and water.
- Geography vocabulary and precise language.
- Cultural awareness and a sense of the larger world and its people.
- Independence, concentration, and problem-solving skills.

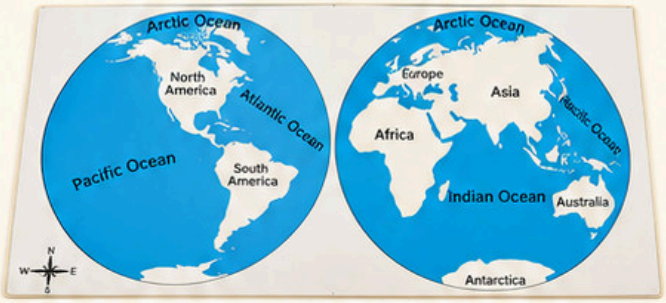
## THE MATERIAL



United States Puzzle Map



World Continents Puzzle Map




World Continents and Oceans Control Chart

## HOW IT'S USED

1. Invite the child to the work and name the material.
2. Demonstrate how to lift a piece by the knob and place it in the correct location.
3. Remove a piece and name it, then invite the child to replace it.
4. Continue with several pieces, working from left to right and top to bottom.
5. Allow the child to work independently, repeating the presentation and extending as interest grows.

## EXTENSIONS

- Name and locate all 50 states and their capitals.
- Name and locate all seven continents and five oceans.
- Use a blank map for tracing and labeling.
- Explore regions (Northeast, Southeast, Midwest, Southwest, West).
- Match puzzle pieces to control charts or label a blank map.
- Research countries, landmarks, people, and cultures.
- Create continent booklets or reports.
- Compare sizes, shapes, and locations using globes and maps.
- Incorporate geography into art, writing, and cultural studies.

MONTESSORI MATERIAL SPOTLIGHT

# The Biome Puzzles

*Exploring Earth's biomes and natural environments.*

## WHAT IT IS

- The Biome Puzzles are wooden puzzles of each continent whose pieces represent the different biomes that can be found there.
- A biome is defined as a large region of Earth that has a certain climate or certain types of living things.
- The goal of the Biome Puzzles is for children to understand that the Earth is made of different climate regions and different habitats.

## EXAMPLES



## WHAT CHILDREN LEARN

- The names and locations of the world's different biomes.
- That Earth is made of different climate regions and habitats.
- Geography and environmental awareness.
- An understanding of how living things and the environment are connected.
- Vocabulary related to biomes, climate, and natural habitats.

## MAJOR BIOMES INCLUDED

- Ocean
- Polar region
- Temperate forest
- Desert
- Grasslands
- Mountains
- Tropical forest
- Wetlands

## HOW IT'S USED

1. Introduce the continent puzzle and the names of the biomes.
2. Children remove the pieces and study them.
3. They match each piece to the control map, naming the biome as they go.
4. Children then place the pieces back onto the puzzle board.

## EXTENSIONS

- Research the plants and animals that live in each biome.
- Explore how climate affects living things.
- Compare biomes across different continents.
- Use with continent maps, nature studies, or books about biomes and ecosystems.
- Discuss the importance of biomes and how humans can care for the Earth.

MONTESSORI MATERIAL SPOTLIGHT

# The Cosmic Nesting Boxes

*Discovering our place in the universe*

## WHAT IT IS

- The Cosmic Nesting Boxes are a Montessori material from the Cosmic Education curriculum.
- It consists of ten wooden boxes that nest inside one another, each representing a larger place in our universe.
- The boxes show the child's place within increasingly larger and more inclusive places.
- Each box is a concrete representation of an important level in the geographic and cosmic hierarchy.

## EXAMPLE



## WHAT CHILDREN LEARN

- The geographic hierarchy from the largest place to the smallest place.
- A sense of place and belonging in the universe.
- The interconnectedness of all living and non-living things.
- Spatial relationships and relative size.
- A cosmic perspective and appreciation for the beauty and order of our universe.

## THE COSMIC ADDRESS

1. Milky Way Galaxy
2. Solar System
3. Earth
4. Continent
5. Country
6. State or Province
7. City or Town
8. School
9. Child
10. Energy within the child

## HOW IT'S USED

1. Invite the child to imagine traveling out into deep space.
2. Show the largest box and name it (Milky Way Galaxy).
3. Open each successive box, moving closer to the child's daily world, naming each place.
4. Discuss the child's own cosmic address and how each place is part of a greater whole.
5. Allow the child to explore the boxes, then carefully nest and restack them in order.

## EXTENSIONS

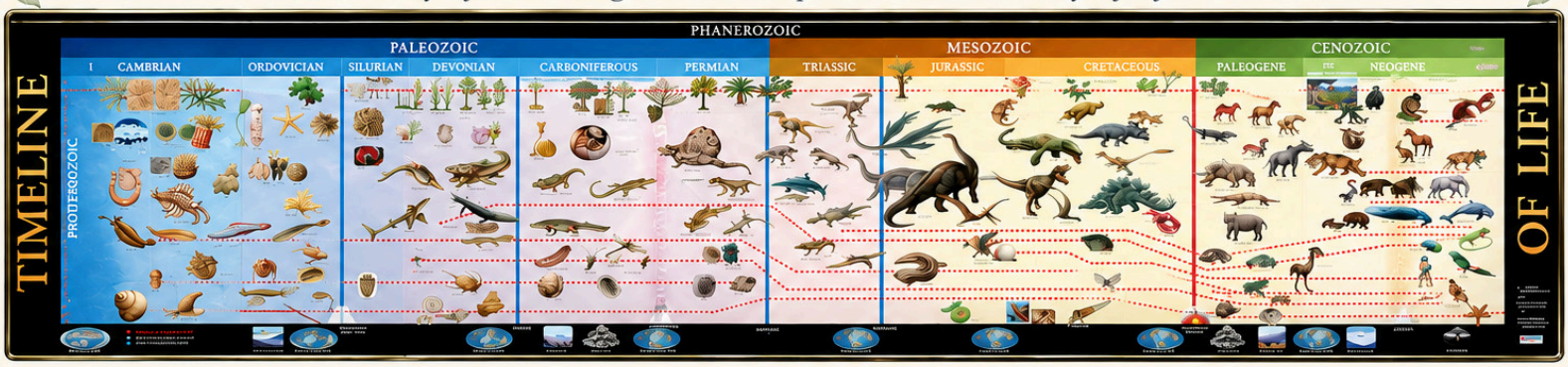
- Create a "My Cosmic Address" booklet with drawings or images for each level.
- Use maps and labels to further explore each place.
- Research and learn interesting facts about each level in the hierarchy.
- Write a story of a journey through space, from the largest place to the child's own place.
- Connect with other cosmic education materials such as the timeline or great stories.

MONTESSORI MATERIAL SPOTLIGHT

# The Timeline of Life

## THE SECOND GREAT LESSON: THE COMING OF LIFE

*A visual story of the emergence, development, and diversity of life on Earth.*




### WHAT IT IS

The Timeline of Life is a key visual material for Montessori's Second Great Lesson, The Coming of Life. It follows the emergence and development of living things across geologic time.

### THE BIG IDEA

The story awakens wonder at the diversity of life and the important jobs living things perform in the interconnected web of life on Earth.

### WHAT CHILDREN LEARN

- Major groups of organisms (plants, animals, and other life forms)
- Geologic eras and ancient life
- Adaptation, evolution, extinction, and fossils
- Interdependence and ecological relationships
- The continuity and diversity of life on Earth

### HOW IT'S USED

1. Tell the Second Great Lesson as an imaginative, scientifically grounded story.
2. Explore the timeline to locate organisms and observe changes through time.
3. Ask questions about organisms' needs, adaptations, and contributions.
4. Follow children's interests into independent research, classification, and observation.

### FOLLOW-UP STUDIES

- Biology and cells
- Botany and plant parts
- Habitats and food webs
- Ancient life and fossils
- Animal classification
- Fungi and microorganisms

### WHY IT MATTERS

Connects cosmic education to scientific inquiry, appreciation of biodiversity, and stewardship of life on Earth.

# The Spindle Box

*Building number sense, quantity, and the concept of zero.*

## WHAT IT IS

The Spindle Box is a Montessori math material that helps children connect the numerals 0–9 with their corresponding quantities.

It typically includes two wooden boxes labeled 0–4 and 5–9, along with 45 wooden spindles.

Children count out the correct quantity for each numeral and place the spindles in the matching compartment.

The empty zero compartment gives the child a concrete experience of the concept of zero.

## THE MATERIAL




Spindle Box with compartments labeled 0–9 and wooden spindles.

## WHAT CHILDREN LEARN

- Recognition of numerals 0–9
- One-to-one correspondence
- Association between symbol and quantity
- The concept of zero as an empty set
- Sequencing and careful counting
- Independence, order, and concentration

## HOW IT'S USED

1. Invite the child to the work and identify the numerals on the boxes.
2. Begin with 1, counting out one spindle and placing it in the correct compartment.
3. Continue with 2 through 9, counting carefully and placing each quantity in its matching section.
4. Explain that 0 means none, so no spindles are placed in the zero compartment.
5. When the work is complete, check that all 45 spindles have been used as a control of error.

## EXTENSIONS

- Practice a three-period lesson for numerals and quantities.
- Mix numeral cards and match them to quantities.
- Use the material for counting games and oral number practice.
- Reinforce the idea of zero with other classroom materials.
- Connect the work to sandpaper numerals or number rods.
- Invite the child to build quantities from memory.