Montessori Mathematics Curriculum

Presentations on Preparation for Math

One-to-One Correspondence
Books – Counting
Songs – 3 Little Speckled Frogs
Sorting/Classification
Sequence/Patterns – Do As I Do
Sequence/Seriation – Bead after Bead

Presentations on Numeration Sets – Number Rods

Introduction – First Period of 3 Period Lesson
Introduction – Second Period of 3 Period Lesson
Memory – Order to Order
Memory – Order to Mixed-Order
Memory Concept of Larger and Smaller
Memory – Concept of One More and One Less
Memory – Concept of Two More and Two Less
Memory – Concept of Greater Than and Less Than
Addition – The Making of 10
Addition – The Making of ?
Subtraction
Counting Backward

Presentations on Numeration Sets – Sandpaper Numerals (0-9)

Introduction – General
Write – Sand
Association to Numeral Cards
Memory – Go Fetch
Memory – Surprise and Go Fetch
Presentations on Numeration Sets – Number Rods and Numerals

Introduction – Association with Numerals – Both Numerals and Rods in Order
Numerals in Order and Rods in Mixed-Order
Numerals in Mixed-Order and Rods in Order
Go Fetch Symbol and Quantity
Memory – Order to Order
Memory – Numerals in Mixed-Order and Rods in Order
Memory – Numerals and Rods in Mixed-Order
Addition – The Making of 10
Addition – The Making of ?
Subtraction

Presentations on Numeration Sets – Spindle Rods

Introduction – General
Different Objects
Number Jumping Game

Presentations on Numeration Sets – Numerals and Counters

Introduction – Numeral Cards
Introduction – Cut-out Numerals
Association – Numeral Cards and Cut-out Numerals
Even and Odd
Pick-up Even and Odd
Quantity – Even or Odd?
Symbol – Even or Odd?
Memory Game
Presentations on Linear Counting – Short Bead Stairs

Introduction – 1 to 9 Short Bead Bars
Bead Design Cards

Presentations on Linear Counting – Snake Game – Search for Ten

Snake Building – Even Number that Equals 10
Snake Building – Random

Presentations on Linear Counting – Teen Boards

Introduction – Quantity
Introduction – Symbols (Order)
Introduction – Symbols (Mixed-Order)
Quantity and Symbol – Order
Quantity and Symbol – Mixed-Order
Random Numeral – Go Fetch Quantity
Random Quantity – Go Fetch Numeral
Making numeral and Quantity Pictures

Presentations on Linear Counting – Number Rods – Teen Presentation

Introduction – Number Rods (Only)
Introduction – Number Rods and Numeral Cards

Presentations on Linear Counting – Ten Boards

Introduction – Quantity
Introduction – Symbols
Introduction – Quantity and Symbols – (10-99 with Unit Beads)
Making Numeral and Quantity Pictures
Presentation on Linear Counting – 100 Chain and Labels

Introduction – 100 Chain and Labels

Presentations on Linear Counting – 1000 Chain and Labels

Introduction – 1000 Chain and Labels

Compare 100 Chain to 1000 Chain

Presentations on Linear Counting – 100 Board and Numerals

Introduction – Order

Introduction – Mixed-Order

Go Fetch – Mixed-Order

Presentations on Linear Counting – Squaring Chains – 1-10

Introduction – Comparison to Squared Chain/Use of Labels

Go Fetch

Presentations on Linear Counting – Cubing Chains – 1-10

Introduction – One through Ten

Complete Layout

Presentations on Base 10 – Decimal System – Quantity (Golden Beads)

Introduction – Unit, Ten Bar, Hundred Square and Thousand Cube

Hide and Go Seek

Relationship of Materials

Complete Layout

Go Fetch

Presentation on Base 10 – Decimal System – Symbol

Introduction – 1-10-100-1000

Complete Layout

Go Fetch
Presentations on Base 10 – Decimal System – Quantity and Symbol

Introduction – General
Birds Eye View Layout
Crisis of Ten
Go Fetch – Symbol
Go Fetch – Quantity

Presentations on Base 10 – Decimal System – Formation of Numerals

Introduction – General

Presentations on Golden Beads

Addition
Introduction (Static)
Introduction Elementary (Static)
Regrouping (Dynamic)
3 or More Addends (Static/Dynamic)
Addition & Multiplication – Regrouping (Dynamic)

Subtraction
Introduction (Static)
2 Subtrahends (Static)
Regrouping (Dynamic)
Remainder of One (Dynamic)
Regrouping – Subtraction & Division – Presentation Order

Multiplication
Introduction (Static)
Multiplication Sign
Regroup or Exchange (Dynamic)
Order of Presentation
Product as Zero
Division

Introduction (Static)
Division Sign
Regroup or Exchange (Dynamic)
Remainders
2-Digit Divisor

Presentations on Stamp Game

Introduction – General
Formation of Quantity (Stamps)
Addition
  Regrouping
  3 Addends
  Checking Work
Subtraction
  Regrouping
  2 Subtrahends
  Checking Work
Multiplication
  Regrouping
  2-Digit Multiplier
Division (1-Digit Division)
  Regrouping
  Division (2-Digit Divisor)
  Zero in Dividend
  Zero in Divisor
  Zero at the Unit of Divisor
  Group Division
Presentations on Addition

Addition Dot Board
  Multiple Addends

Addition Bead Frame
  Golden Beads
  Notation Paper
  Reading & Writing Numbers
  Addition
  Addition – Regrouping Activity
  Addition in Columns Activity
  Subtraction
  Subtraction – Regrouping

Addition Strip Board
  Introduction – General
  Booklet
  Equation Control Chart 1
  Combination of Numbers – Control Chart 1 & 2 – Recording
  Combination of Numbers with Zero
  Addition Control Chart 2 – Doubles of Numbers
  Addition Working Chart 3 – Sum in Each Square
  Addition Working Chart 3 – Doubles of Numbers
  Addition Working Chart 4 – Half Table
  Addition Working Chart 5 – Simplified
  Oral Memorization Game – Equation then Sum
  Oral Memorization Game – Sum and Possible Equations
Addition Snake Game

Addition Colored Bead Bars

Memorization of Addition
Commutative Law
Multiple Addends
Addends Larger Than 10
Exchanges
Associative Law
Parenthesis
Parenthesis in All Positions
Two Parentheses
Three Addends

Formats – Introduction

Story Problems – Introduction

Presentations on Subtraction

Subtraction Strip Board

Booklet
Equation Control Chart 1
Analysis of Number: Unit
Analysis of Number: Teens
Zero
Subtraction Working Chart 2
Bingo Game
Bingo Game 2
Bingo Game 3
Oral Memorization Game – Equation then Remainder
Oral Memorization Game – Remainder and Possible Equations
Formats – Introduction

Story Problems - Introduction

Subtraction Snake Game

Presentations on Multiplication

Multiplication Bead Board

Introduction

Booklet

Prepared Equation Slips

Combinations of Numbers

Working Chart 3

Working Chart 4

Working Chart 5 – Bingo/Blank

Working Chart 5 – Bingo/Blank 2

Stacks of Products (Stamps)

Oral Memorization – Equation then Product

Oral Memorization – Product and possible Equations

Formats – Introduction

Story Problems – Introduction

Multiplication Snake Game

Cubing Chains

Activity 1 – Introduction

Activity 2

Cubing and Squaring Chains

Geometric Forms
Colored Bead Bars

One Multiplicand
Multiplication by Ten
All Factors for One Product
No More than 10
Reverse Factors Same Product
Square of Numbers
Binomial by One Number

Presentations on Division

Division Bead Board

Introduction – General
Recording Division
Booklet
Equations
Control Chart 1
Control Chart 2
Bingo
Stacks of Quotients (Stamps)
Oral Memorization Game – Equation then Quotient
Oral Memorization Game – Quotient and Possible Equations

Formats – Introduction

Story Problems – Introduction

Multiplication and Division – Relationship