



Montessori Primary & Kindergarten Curriculum (Ages three to six)

Montessori education is a development-focused education that doesn't emphasize exams, grades or any other competitive thing that may put pressure on the student. Montessori schools focus on creating socially adept and mature students. Research conducted in the United States revealed that students in Montessori schools outperformed students in traditional schools. While they did better in everything, their social and behavioral skills were especially exceptional when compared to students in regular schools.

The logic behind Montessori education is that children will be more willing to learn when they are allowed to choose what they want. Individuals from different backgrounds and of different ages come together to participate in activities they love. The only reason why the teacher is present is to guide them through these activities. There are many benefits of Montessori education, but there are also some disadvantages. Considering both will give you an idea of how the Montessori system impacts the individual.

So What Is So Special About the Montessori Classroom?

There are four main elements that distinguish it from other traditional classrooms:

1. All equipment is accessible to your child and is always available to the child.
2. Your child has freedom of movement both indoors and out as well as a choice of what to do for much of the day
3. Your child will have personal responsibility for their work; this requires an awareness of the needs of others, avoiding dangerous or hurtful actions, keeping the equipment and resources tidy, putting things away after using them, being good role models for younger children, developing a true social awareness.
4. Beauty and Harmony: This aspect is too often ignored by those who focus too much on the content of learning. Montessori felt strongly that the environment must be aesthetically pleasing to encourage learning and concentration. Too many displays can distract children if they are not properly related to their interests. It reflects the manner in which the Montessori classroom is calm and activities are self-directed.

Language

1. Pre-Reading Skill

- a. Matching
 - Object to object
 - Object to picture
 - Picture to picture
 - Phonetic objects to letter sounds
 - Advanced: picture to word

- Advanced : word to word
- b. Letter and sound recognition and recall
 - Trace sandpaper letters
 - Name letter sounds
 - Recognize beginning consonants
 - Reads short vowel words
 - Recognizes middle vowel sounds: short a, e, i, o, u, and long a, e, i, o, u
 - Reads consonant vowel words
 - Reads words that begin or end with blends
 - Moveable alphabet
- c. Applies sounds in combination
 - Reads words in combination
 - Word build with moveable alphabet
 - Spells short and long vowel words
 - Uses moveable alphabet for simple sentences
 - Reads words with digraphs
 - Reads phonograms with silent e/ai/ay/a-e/ee/ea/y/ee/ie/igh/ i-e/o/oa/ow/o-e/ue
 - Rhyming words
 - Compound words
 - Synonyms
 - Antonyms
- d. Recalls relationships for time
 - Knows days of the week
 - Knows months of the year
 - Knows the seasons
 - Differentiates past, present, and future

2. Speaking Skills

- Participates in group discussions
- Understands ideas expressed by others
- Expresses self logically

3. Listening Skills

- Follows oral instructions:1-2 commands;3-5 commands
- Listens purposefully and responds appropriately
- Answers questions about information or story presented orally
 1. Name main character
 2. Can identify a character's feeling
 3. Summarize plot
 4. Identify chronological order of events
 5. Identify the problem a character faces

6. Identify problem resolution or moral of story
 7. Can make predictions about future events in a story
- Can identify speakers in a dialogue
 - Can identify to whom a pronoun is referring

4. Handwriting Skills

- Develop fine motor control
 1. Metal inserts
 2. Tracing
- Can print lower case letters
- Can print upper case letters
- Spaces letters within a word appropriately
- Combines reading and writing skills
 1. Increasing complexity: words-sentences-stories-reports-journals
 2. Writes name, address, telephone number

5. Reading Skills

- Increases in complexity: reads sentences phonetic readers to non-phonetic readers
- Reads with increasing comprehension
- Summarizes key elements of a story: plot, characters, events, behaviors
- Follows written directions
- Reads for enjoyment, appreciation*

6. Introduction to Grammar, Rules of writing

- Recognizes noun, verb, article, and adjective, preposition, adverb, conjunction, pronoun
- Spelling
- Applies rules for capitalization and punctuation

7. Literature

- Introduction to literature
- Poetry
- Famous authors

8. Guided Research

9. Spanish

* Series books that are used at this level: BOB Books; Phonetic Books, Beginning Chapter Books (such as Magic Tree House), A-Z mystery

Mathematics

Mathematical studies at the preschool level include numeration, decimal system, computation, abstraction and memory work, fractions, money, time, measurement, geometry and mathematical concepts.

1. Numeration

- a. Numeration 0-10
 - Counts to 10

- Utilizes numerical rods
 - Utilizes table top number rods
 - Explores sandpaper numerals
 - Explores spindle boxes
 - Explores cards and counters
 - Can describe short bead stair
 - Plays memory game for identification of numeral to materials
 - Plays shell game for identification of numeral to materials
- b. Numeration 11-19
- Counts from 11-19
 - Explores the teen board: Quantity, Symbol and Association
 - Plays the dice game for numeral identification
- c. Linear counting
- Ordinal (first, second, third) and cardinal (1,2,3) numbers
 - Positive Snake Game: Learning combination of tens
 - Completes and can demonstrate the Ten Board
 - Completes and can demonstrate the 100-Board
 - Counts with bead chains from bead cabinet
 - Identifies and completes the 100 Chain with labels
 - Identifies and completes the 1000 Chain with labels
- d. Skip counting
- Can square numbers 1-10 with bead chains
 - Can cube numbers 1-10 with bead chain

2. Decimal System

- a. Introduced to the Decimal System
- Quantity and symbol (Presentation Tray)
 - Decimal System Layout: 1-9,000
 - Banker's Game (gathering quantities ie. 4,965 from other children)
 - Composition of numbers (5 stacked on 60, on 900, on 4,000)
- b. Decimal System Operations with Golden Beads**
- Static addition
 - Dynamic addition (Regrouping)
 - Multiplication: Static and dynamic
 - Static subtraction
 - Dynamic subtraction (Regrouping)
 - One digit division
 - Decimal System Division

3. Computation

- Static and dynamic addition

- Static and dynamic multiplication
- Static and dynamic subtraction
- Static and dynamic division

4. Abstraction and Memory Work (from concrete materials to abstract computation)

- Addition
 - Snake game
 - Addition strip game
 - Addition charts
- Multiplication
 - Multiplication bead bars
 - Multiplication bead board
 - Multiplication charts
- Subtraction
 - Negative snake game
 - Negative strip board
 - Subtraction charts
 - Introduction to number line with positive and negative numbers
- Division
 - Division board
 - Division charts

5. Fractions

- Introduction to concepts of fractions: Whole to part
- Understands whole, half, thirds, etc. – ninths

6. Money

- Identifies currency by name
- Beginning currency numerical values: Penny, nickel, dime, quarter, half-dollar, dollar

7. Time

- Understands analog time to hour and half-hour
- Understands analog time to quarter-hour
- Understands analog time to five minute increments

8. Measurement

- Understand nomenclature for length, weight, volume, temperature
- Begins to use rulers, yardsticks, scales, solid and liquid measures, thermometers
- Understands simple graphs and charts, with data or pictorially

9. Geometry

- Identifies geometric solids: cube, pyramid, cylinder, sphere, prism
- Recognizes circle, rectangle, triangle, regular polygons, quadrilaterals, and curved figures
- Differentiates between circle, oval, and ellipse

10. Mathematical Concepts

- a. Introduced to inequalities of numbers
- b. Introduced to sets of numbers
- c. Introduced to $>$, 4.00 Beginning word problems at individual level

*Wide variation is expected for math level at this age, exposure is offered following stepped mastery. **Mastery is certainly expected for static activity across addition, subtraction, multiplication, and division

Science

Preschool Science includes the study of zoology, botany, ecology, physical science, astronomy, earth science, and the human body.

1. Zoology

1. Distinguishes between living and non-living
2. Distinguishes between plants and animals
 - Describes basic characteristics of plants and animals
 - Groups animals: forest, farm, common birds, ocean life, by biome
3. Distinguishes between vertebrates and invertebrates
 - Identifies two characteristics of invertebrates and vertebrates
4. Identify five classes of vertebrates
5. Anatomy
 - Identifies external characteristics of animals (fur, hair, skin, scales)
 - Identifies external parts of animals (dorsal fin, lateral line, eye, etc.)
 - Introduced to internal anatomy (heart, skeleton, etc.)
6. Understands basic needs of animals
 - Habitat
 - Food supply
 - Adaptation to environment
 - Cares for classroom pets

2. Botany

1. Identifies plants by size, shape, type
 - Native flowers and trees
 - Basic plants in each biome
 - Parts of plant, flower, tree
 - Introduction to basic leaf shapes
2. Understands plant life cycle
 - Function of light energy for green plants
 1. Photosynthesis
 2. Function of leaves
 - Understands the relationship between soil and plant
 - Uses of plants: foods, shelter, clothing
 - Cares for indoor and outdoor plants

3. Outdoor experiences

- Gardening
 1. Plants seed
 2. Cares for plant in garden
 3. Harvests a plant
 4. Weeds

4. Explores nature through nature walks

3. Ecology

1. Introduced to ecological problems
 - Air pollution
 - Water pollution
 - Deforestation
 - Landfills
 - Global warming
 - Acid rain
 - Ozone and greenhouse effect
2. Introduced to ecological problem solutions
 - Recycling: why and how
 - Energy efficiency and conservation
 - Conservation of natural resources
 - Defines and lists some endangered animals

4. Physical Science

1. Introduced to scientific equipment: scales, hand lens, microscope, batteries, gauges, thermometers
2. Explores properties and principles through senses, jobs and demonstrations
 - Simple machines, simple technology
 - Heat, electricity, magnetism
 - Light and sound
 - Prisms and rainbows
 - Shadows
 - Sound waves
 - Solid/liquid/gas
 - Recognizes physical changes: melting, freezing, etc.
 - Recognizes cause and effect
 - Weight, gravity

5. Astronomy

1. Identifies major elements of our solar system: sun, stars, planets, moons
 - Orders planets
2. Introduced to relationship between earth and sun

- Seasons
 - Day and night
3. Introduced to relationship between the earth and moon: months

6. Earth Sciences

1. Introduced to basic landforms:
2. Characteristics of a volcano
3. Introduction to earthquakes
4. Rock/minerals
 - Basic classification: igneous, sedimentary and metamorphic
 - Fossils
5. Weather
 - Basic cloud types: stratus, cumulonimbus, cirrus
 - Introduced to weather systems: rain, thunderstorms, tornadoes, hurricanes blizzards
 - Knows the difference between climate and weather
 - Water cycle
 - Different types of clouds

7. Human Body

1. Anatomy
 - Introduction to external parts
 - Introduction to internal organs
 - Introduction to systems
 - Introduction to five senses
2. Health, food and nutrition
 - Understands and demonstrates good hygiene
 1. Germ prevention and disease
 2. Oral hygiene
 3. Preventing spread of germs: cover mouth, wash hands, etc.
 - Introduced to relationship among health, fitness, exercise and nutrition
3. Food
 - Purpose of food for life and growth
 - Understands that food has nutrients
 - Introduced to food groups and nutrition pyramid
 - Begins to make good food choices: snack and lunchtime

Geography

1. Physical Geography Works

- Introduction to the Universe
- Planets of the Solar System
- Constellations

- Layers of the Sun
- Layers of the Earth
- Phases of the Moon
- Land, Air, & Water
- Land & Water Globe
- Land & Water Forms
- Biomes & Habitats
- Continent Globe
- Globe to Map (“The Earth is a Sphere” lesson)
- Puzzle Maps
- Making Maps with Puzzle Maps
- Cardinal Direction / Compass Rose
- Introducing Scales & Measurement

2. Cultural Geography

- State – Where We Live State Study (and Map Making)
- City/Community – Where We Live City Study (and Map Making)
- Home – Where We Live Study (and Map Making)
- Anti-Bias Work (e.g. What is a Family?, Peace Flag Activities)
- Flags of the World (Make Your Own Map Activity)
- Parts of the Flag
- Continent Boxes
- Different seasons
- Different types of weather/clothing

Sensorial Skills

1. Visual sense

1. Experience and order for size, shape and form
 - Pink Tower
 - Solid cylinders
 - Brown stair
 - Red rods
 - Knobless cylinders
 - Geometric solids and cards
 - Botany cabinet and cards
 - Tangrams
2. Exposure for naming and observing relationship of lines and angles
 - Constructive triangles
 - Superimposed geometric figures
 - Monomial cube
 - Binomial cube

- Trinomial cube
- 3. Experience and order color, hue, and pattern
 - Color tablets (box I)
 - Color tablets (box II)
 - Color tablets (box III)
 - Fabric matching
- 4. Exposed to art of various time periods

2. Tactile sense

1. Experience tactile quality of texture, density and temperature
 - Touch boards and tablets
 - Mystery bag
 - Thermic bottle
 - Thermic tablets
 - Hard and soft
 - Treasure chest

3. Auditory sense

1. Experience and order pitch and tone
 - Sound cylinders
 - Sound bells
2. Silence game
3. Music
 - Gross and fine motor rhythmic movement
 - Introduction to reading music
4. Olfactory sense
 - Experience and qualify smell
 - Tasting jar
 - Smelling jars
5. Gustatory sense
 - Experience and qualify taste
 - Baric tablets

Practical Life

1. Respect of Environment

- Cleaning skills: sweeping, mopping, vacuuming, and dusting
- Washing skills: cloth, table, and dishes
- Returns mats, jobs, and chairs to appropriate location
- Care of the outdoor environment
- Window washing
- Table washing
- Gardening

- Recycling
- Polishing activities

2. Respect of Materials

- Protects books and all papers
- Uses pencils, crayons, marks, paints without breakage
- Uses materials only after receiving instruction

3. Completes Cycle of Activity

- Can lay out a mat
- Can carry a tray
- Completes a task
- Returns elements to tray in an orderly manner
- Returns tray to shelf
- Returns mat to storage area

4. Selects jobs reinforcing eye-hand-body coordination

- Manages solids and liquids without spillage
- Spooning activities
- Locking and screwing activities
- Flower arranging
- Food preparation
- Cloth folding
- Pouring activities
- Transferring activities
- Tonging activities

5. Table setting with dishes and utensils

6. Respect for Self

- Personal care
- Hand washing
- Dressing frames
- Performs exercises and dance
- Fingerplays

7. Respect for Others

- Grace, courtesy, and manners
- Uses a quiet voice
- Listens
- Can wait a turn
- Can walk on the line
- Shares with others

Art, Music, Spanish, General knowledge and much more in the classroom environment.

Thank You!