



## Developed by Dr. Maria Montessori,

Montessori is a child-centered educational approach based on scientific observations of children from birth to adolescence.

## Unique Aspects of Montessori

### Freedom Within Limits

The Montessori classroom balances freedom with responsibility.

### The Prepared Environment

The Montessori classroom is warm, inviting, aesthetically pleasing and student-focused.

### Multi-age Classrooms

The multi-aged groupings provide opportunities for broad social development and meaningful friendships which are often lifelong.

### Intrinsically motivated learners

The Montessori teacher guides and empowers students with challenging, authentic, and meaningful work. As students begin to make independent choices they become actively engaged in an in-depth exploration of topics and skills, gain a deeper understanding of new concepts in an integrated fashion, and become better critical thinkers. There is no ceiling on what can be discovered and students are internally driven toward mastery.

### Life-long learners

Each learning environment is organized to respect the diversity of learners and to support the natural developmental needs of the age-group it serves. The self-correcting materials facilitate self-directed learning and allow students to reflect on their own learning. This student-centered approach is enriched with real world experiences designed to provide conceptual context of how the natural and human-designed worlds are organized, interrelate, communicate and change.

### Compassionate Global Citizens

A shared and profound respect for one another and the environment fosters a collaborative environment focused on shared values and peaceful discourse. The range of ages, abilities, and cultures builds acceptance and appreciation of individual differences as students form a diverse and cohesive community.



## MATH

Concept of zero as a place holder

Association of quantities and numerals to 1,000,000

Four operations with regrouping

Long multiplication with two-, three- and four-digit multiplier

Division with two- and three-digit divisor

Fractions: concept, equivalence, improper fractions, operations

Exploration of multiples, factors, least common multiple, greatest common factor

Memorization of math facts

Rounding numbers

Problem solving using the four operations

Money: names, values, making change

Understanding and reading time

Measurement: length, weight, volume, temperature

Roman numerals

Ordinal numbers

Graphs: bar, line

Greater than, less than, equal to

Introduction to powers of numbers

Estimation

Geometry studies: nomenclature for geometric shapes, study of polygons, quadrilaterals, triangles, irregular figures

Nomenclature of lines, circles

Introduction to angles: concept, measurement, and operation

Introduction to area, perimeter

Explore concepts of similarity, congruence, equivalence

## SCIENCE

Solar system: formation of the universe

Zoology: scientific classification of animals, animal kingdom, native

and world animal identification, Study of vertebrates and invertebrates, food chain

Basic needs: herbivore, carnivore, omnivore

Botany: study of the plant kingdom, parts of a plant, scientific classification of plants, basic needs of plants

Botany experiments

Independent research of plants and animals

Geology: introduction to minerals, formation of rocks, fossils

Weather: work of wind and water

Sun and Earth: rotation, revolution

Seasons

Study of magnetism

Study of the elements

Earth science: composition of the earth, parts and formation of mountains, parts and formation of rivers

## LANGUAGE ARTS

Oral language and listening comprehension skills: poems, stories, plays, presentations

Reading skills: sight word recognition, decoding and word attack skills, reading comprehension

Oral reading: fluency and expression

Spelling rules

Dictation

Vocabulary enrichment

Alphabetical order

Dictionary skills

Refinement of cursive writing

Word Study: grammar, punctuation and capitalization, antonyms, synonyms, homonyms, compound words, contractions, homophones, abbreviations, verb tenses

Function of words

Written expression, writing mechanics and sentence structure

Book reports, journal

writing, report writing, short stories, composition

Research skills: use of reference sources

## CULTURAL STUDIES

Concept of time: calendar, months, seasons, clock

Child's own personal timeline

Study of history: concept of B.C. and A.D.

Fundamental needs of man

Timeline of humans

Cosmic view of humans in the universe

U.S. History: presidents, Native Americans, colonial times

Pre-History: creation myths, big bang theory, formation of the earth- atmosphere, hydrosphere

Weathering: erosion

Geography: mapping skills, reading maps, longitude and latitude

Study of land formations

Major land and water features of the world

Study of geographical areas, continents, countries, states, capitals

Study of flags: identification of flags of various countries

Climates and environments: biomes

Introduction to economic geography

History of writing

History of math

## WORLD LANGUAGE —SPANISH

Spanish alphabet, emphasis on vowel sounds

Greetings and expressions

Vocabulary: names of common objects, people, family, foods, colors, numbers, etc.

Simple reading

Writing numbers

Ordinal numbers

Definite article

Gender exercises

Singular and plural

Agreement of number and gender exercises

Days of the week

Months of the year

Seasons

Telling time

Verbs: to be, to have, to like

## ART

Use of tools: sponges, brushes, charcoal, clay

Use of a variety of media

Weaving

Drawing, painting, collage, modeling and carving

Construction

Printmaking

Crafts: puppets, ceramics, masks, jewelry, murals

Elements of design

Art history and appreciation of artists

Curriculum integration: projects related to classroom studies

## LIBRARY

Familiarity with a variety of prominent authors and illustrators

Awareness of story elements including character, plot, setting, conflict, solution, and author's purpose

Identify and locate fiction titles in alphabetical order

Locate non-fiction books in numerical order

Introduce simple research projects using a variety of sources

### Technology Essentials:

Use sequential steps for simple research

Introduce and use print and electronic resources

Understand general computer operation

Introduce and use word processing, databases, spreadsheets, and graphics

Understand and use a

variety of multimedia programs to present projects

Understand the application of Internet safety standards for personal and educational use.

## PRACTICAL LIFE

Effective & responsible communication

Problem-solving skills/strategies

Organization/time management

Independent/collaborative work

Personal responsibility

Care of the environment

Care of the materials

Care of self

Care of others

Field trip skills

Money management

Safety and transportation rules

## PHYSICAL EDUCATION

Exploration of spatial concepts

Balance activities

Laterality

Directionality

Hand-eye coordination

Hand-foot coordination

Analyze locomotor skills and practice basic elements

Practice bouncing, throwing, striking

Cardiovascular activities

Developmental gymnastics

Health: introduction to body systems

## MOVEMENT & MUSIC

Rhythmic concepts

Melodic concepts

Movement

Instruments

Vocal exercises and singing

Music appreciation