

# purpose of the montessori activities and equipment

## practical life

walking on the line fosters coordination, control of movement, concentration, perfection of walking, and an increased awareness of various parts of the body.

**pouring** fosters concentration, control of movement, order, coordination, independence, and prepares for math, measuring, writing, muscular control, and reading, and eyehand coordination.

scrubbing the table develops complex order, coordination, control of movement, concentration and independence—a preparation for writing and reading (left to right circular motion).

**polishing silver** develops order, concentration, control of movement, coordination and control.

**cleaning carrots** develops order, coordination, control of movement, concentration, independence, and teaches the proper use of cutting and peeling instruments.

**polishing shoes** develops order concentration, control of movement, coordination, independence, and care of the person.

dressing frames develops order concentration, control of movement, coordination, independence, care of the person, and learning to dress.

#### sensorial

the pink tower is made up of ten cubes used to develop concentration, independence, and a visual discrimination of difference in dimension.

**the brown stair** is made up of ten prisms used to develop visual discrimination of width. It promotes the acquisition of motor control, and coordination of fine muscles, giving tactile awareness of shape and volume.

the red rods are ten rods used to develop concentration, muscular control, coordination and visual discrimination of length.

the cylinder blocks are four blocks each with ten knobbed cylinders used to develop concentration, independence, and visual discrimination of size. Grasping the knobs serves as a preparation for writing (holding a pencil).

**the knobless cylinders** are four boxes of ten cylinders each. They are used to sharpen visual discrimination of size through a series

of discrimination of graduations of thickness and height, and to develop fine motor coordination, and extended concentration through comparisons of the series of graded cylinders.

**The color tablets** are used to develop chromatic sense and an awareness of, and appreciation for, color in the environment.

the sound cylinders are made up of two matching sets of five that are used to train the auditory sense, and to develop concentration and an attitude of quiet.

**the smelling jars** are made up of two matching sets of five designed to develop the olfactory sense, and the ability to make judgments.

the tactile cloths are swatches of fabric used to develop coordination, control of movement, refinement of the tactile sense, appreciation of texture, and language: rough, smooth, fine, course, light, and heavy.

**the bells** are used to develop an appreciation of sound and musical training.

the baric tablets are used to develop concentration, the ability to make judgments, muscular control, language, and to enhance the baric sense.

**the geometric cabinet** is an introduction to plane geometric form. It is used to develop the tactile sense, visual discrimination, and language.

the geometric solids are used to develop the muscular-tactile (stereognastic) sense, to sharpen visual perception of solid figures, to encourage awareness of similarities and differences of forms, and to prepare the child for geometry, and its language.

the construction triangles are used to learn the discrimination and appreciation of geometric form to prepare for geometry, and to develop language.

## language

the land formations are used to develop language (isthmus, strait, peninsula, bay, island, and lake), control of movement, concentration, and an interest in geography.

the metal insets are used to develop free wrist movement, appreciation of design, and control of a pencil for writing (firmness and lightness of touch).

the sandpaper letters are used to develop visual and tactile perception of letters, visual memory, and the auditory perception of initial, medial, and final sounds in words. They are used as a preparation for reading and writing.

the land formations are used to develop language (isthmus, strait, peninsula, bay, island, and lake), control of movement, concentration, and an interest in geography.

the metal insets are used to develop free wrist movement, appreciation of design, and control of a pencil for writing (firmness and lightness of touch). the phonogram exercises are used as a key to reading nonphonetic words and learning to spell.

the sandpaper letters are used to develop visual and tactile perception of letters, visual memory, and the auditory perception of initial, medial, and final sounds in words. They are used as a preparation for reading and writing.

the movable alphabet are used to develop visual and auditory memory and to prepare for reading, writing, and spelling. It refines the auditory perception of simple short vowel words and provides presentation of spoken words in graphic symbols.

the grammar exercises are used to show the different parts of speech, parsing, and learning the names of the parts of speech.

the command cards are used to demonstrate reading comprehension of a child.

### mathematics

the red and blue rods with numerals are ten rods with corresponding number cards. They are used to develop the concept of the linear value of quantity. The child will learn to understand the sequence of number, and to associatie each with its quantity and symbol.

**the spindle box** is a box with forty-five spindles used to provide practice in associating the

quantities and symbols of 0-9, and to develop the idea that each quantity can be made up of loose units taken together as one set.

numerals and counters are made up of ten cards numbered 1-10, and fifty-five counters. They are used to demonstrate a pattern of odd and even numbers, and to verify whether the child knows: the sequence of numbers, the association of a specific symbol and corresponding numeral set, and how many separate units are needed to form each set from 1-10. This activity provides practice in counting, preparation for addition, and an understanding of the divisibility of numbers into multiples.

**the bead stair** is used to learn addition and subtraction.

the seguin boards teach the names and the sequence of the numbers 11-99, and to associate the names with the quantities.

the strip boards are used to present basic addition and subtraction facts in concrete form. They help to prepare the child for addition and subtraction equations in abstract forms. The use of these boards helps to foster concentration, independence, and a sense of accuracy.

the multiplication beads are used to aid in the child's understanding of the basic multiplication tables. Multiplication prepares the child for the understanding of division by developing the concept of the divisibility of numbers.

**the division board** is used to demonstrate the process of division, and to present the basic division equations.

the golden bead material is used to teach the relative values of one, ten, one hundred, and one thousand, and both the oral and written language of the decimal system. The child attains visual perception of the power of numbers and learns to match the quantities and symbols of the decimal system.

the bank game consists of a tray holding unit beads, ten bars, hundred squares, and thousand cubes. Using this, the child develops a concrete understanding of the working of addition, subtraction, multiplication and division using the decimal system.

the thousand chain is an exercise in counting.

**the chains** are used to concretely demonstrate the squaring and cubing of numerals.

the binomial and trinomial cubes are two puzzle-like cubes that foster coordination, control, and appreciation for the beauty of form in three dimensions. The cubes help to prepare the child for the mathematical concepts involved in the trinomial and binomial theories.