During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Practical Life

Care of Environment

Care of animal

Helps to care for classroom pets.

Holds classroom pet appropriately.

Provides fresh water for classroom pet.

Feeds classroom pets.

Care of classroom

Utilizes a variety of tools and skills to actively participate in maintenance of furnishings in classroom.

Actively participates in maintaining floor surfaces by using appropriate methods.

Actively participates in using a washing machine and tumble dryer to maintain classroom items.

Actively participates in sanitizing dishes or loading and operating a dishwasher.

Utilizes a variety of tools and skills to actively participate in maintenance of the classroom materials on the shelves.

Actively participates in monitoring personal property and classroom property for neatness.

Actively participates in maintaining community supplies.

Actively participates in conserving the classroom materials, such as paper, water, and so on.

Actively participates in caring for domestic or non-domestic animals if appropriate.

Actively participates in caring for indoor plants.

Actively participates in arranging flowers for the classroom.

Care of dishes and cooking utensils

Washes crockery (plates, cups, etc.).

Washes silverware/cutlery.

Washes glasses.

Washes china.

Washes pots and pans.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Washes mixed dishes.

Sorts silverware/cutlery.

Stacks dishes.

Washes a mixed collection of dishes.

Washes and dries stainless steel sink.

Loads, sets, and unloads dishwasher.

Care of indoor plants

Waters indoor plants.

Polishes plant leaves.

Repots indoor plants.

Care of outdoor environment

Uses a variety of tools and skills to actively participate in caring for the outside areas of the classroom.

Uses a variety of tools and skills to actively participate in caring for the school campus.

Actively participates in the planting of a vegetable garden.

Actively participates in the planting of a wildlife-friendly garden.

Actively participates in the maintenance of classroom gardens.

Actively participates in harvesting of vegetables from classroom garden.

Care of playground toys

Picks up playground toys and stores correctly.

Cleans playground toys and other equipment.

Notices and alerts staff when playground equipment needs repair.

Care of surfaces

Washes a waterproof surface.

Mops (dusts) a dry floor.

Washes an unpainted surface/scrubs a table.

Washes marks and scuffs from walls.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Erases a	chalkboard	/white	board.
----------	------------	--------	--------

Empties carpet sweeper.

Wipes a large water spill, wringing cloth into pail.

Sweeps classroom floor when necessary.

Washes a vinyl floor.

Mops a wet floor.

Sweeps carpet with carpet sweeper.

Vacuums carpet.

Washes a glass surface.

Wipes feet on doormat when entering a building.

Uses a shoe scraper.

Care of wildlife

Fills bird feeder.

Fills birdbath.

Cleans birdbath.

Decorating

Arranges flowers for classroom.

Cuts flowers for arranging.

Hangs wall decorations (pictures, clock, etc.).

Gardening

Digs garden beds.

Waters the garden using a watering can - demarcated area.

Spreads mulch in garden.

Harvests fruit or vegetable crops as indicated by adult or older child.

Hoes garden beds.

Prepares soil for planting.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Plants seedlings in small garden beds.

Plants seeds in small garden beds.

Rakes lawn or beds.

Removes weeds identified by adult or older child.

Picks up litter, discerning what is litter, and appropriate disposal.

Sweeps outside spaces (e.g., pathways or deck).

Pushes a wheel barrow containing garden waste.

Waters the garden using a watering can - unlimited area.

Harvests fruit or vegetable crops from garden, displaying understanding of when fruits/vegetables are ripe.

Waters the garden using a hose pipe - demarcated area.

Waters the garden as required, displaying judgment as to water needs of various plants.

Identifies weeds and alien plants in school garden and understands why they are a problem.

Laundry

Sorts and folds mixed, dry laundry, and returns to correct places in classroom.

Hangs wet towels and cloths out to dry.

Hand-washes classroom cloths.

Sorts classroom cloths for washing.

Washes classroom cloths in machine.

Rinses clothes that have been washed.

Hangs washed items out to dry.

Irons cloths.

Names and use of plants & animals in garden

Verbalizes (and follows) fundamental safety rules regarding eating of plants: "Don't eat any plant material unless you know exactly what it is and have been told by an adult that it is safe to eat."

Identifies herbs in school garden and understands their use.

Identifies other plants in school garden and understands their use.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Identifies fruits and vegetables in school garden and understands their use.

Identifies various insects found in school garden and understands their role.

Identifies indigenous plants in the school garden and understands how to preserve them.

Polishing & dusting

Dusts a shelf.

Polishes wood.

Polishes metals.

Polishes mirror or glass.

Determines appropriate cleaning materials and methods for different objects.

Preliminary care of environment

Sweeps dry beans on tray using small brush and pan.

Dusts an object.

Clamps clothespins, using Clothespin Activity.

Folds napkins along lines, using Folding Activity.

Wipes a water spill with a cloth.

Squeezes a sponge, using Sponging Activity.

Transfers water, using a Sponging Activity.

Rolls napkins and places in napkin rings, using Napkin-Rolling Activity.

Sweeps sawdust or beans as demonstrated.

Tidying

Folds napkins from laundry and tidies away.

Uses classroom recycling bins correctly.

Hangs a towel on a hook.

Folds classroom clothes.

Tidies shelves.

Opens and closes classroom curtains and blinds.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Empties classroom waste bin.

Care of Person

Care of possessions: additional

Packs a suitcase.

Polishes shoes.

Dressing

Puts on gloves and mittens without assistance.

Manages all own dressing/changing needs without assistance.

Helps other children with dressing/changing needs.

Dressing Frames

Opens and closes Velcro fastening on Dressing Frame.

Opens and closes snappers on Dressing Frame.

Opens and closes zippers on Dressing Frame.

Opens and closes buttons on Dressing Frame.

Opens and closes hooks & eyes on Dressing Frame.

Opens and closes buckles on Dressing Frame.

Unties and ties bows on Dressing Frame.

Unties and ties laces on Dressing Frame.

Opens and closes safety pins on Dressing Frame.

Everyday Dressing of Oneself

Puts on socks without assistance.

Puts on jacket without assistance.

Puts on a sweater without assistance.

Puts on shoes (Velcro or no fastener) without assistance.

Puts on shoes (ties laces) without assistance.

Changes from outside to inside shoes without assistance.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Puts on trousers without assistance.

Puts on an apron without assistance.

First aid

Cleans a wound (minor cut or graze) on self or another.

Puts a Band-Aid[™] on a wound (minor cut or graze on self or another).

Asks for help when caring for an injured person.

Shows empathy and consideration for an injured person.

Takes temperature using a safety thermometer.

Is aware of dangers of touching blood; uses latex gloves whenever helping an injured person.

Cares for a bug bite or sting.

Grooming

Sensitizes fingers for Sensorial activities.

Washes own hands and nails, and applies hand-cream (full activity).

Cares for own nails.

Brushes and combs own hair.

Braids/plaits nylon cords using Braiding Activity.

Braids/plaits hair (own, other child, or hairdresser's dummy).

Uses a clothes brush to remove lint from coat.

Chooses appropriate clothing for various types of outings, as is age appropriate.

Performs manicure on another.

Is aware of and takes pride in own appearance, appropriate to circumstance and occasion.

Hygiene other

Brushes own teeth after meals.

Displays an understanding of necessity for hygiene in classroom and public contexts.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Preliminary care of possessions

Carries bag to cubby.

Places own bag in correct cubby.

Keeps cubby tidy.

Hangs coat on hook or hanger.

Packs a lunch box.

Pairs and rolls socks.

Preliminary hygiene

Uses bathroom under supervision.

Uses bathroom unsupervised.

Lifts seat when using toilet (boys).

Flushes toilet after use.

Uses toilet paper (judges correct quantity) and flushes.

Replaces toilet-paper roll when necessary.

Covers mouth when coughing or sneezing.

Washes hands after using the toilet, handling classroom pet, gardening, playing outside, and before preparing food or eating.

Safety: Crossing the road

Waits to be accompanied by an adult or much older child before crossing a street.

Is able to safely cross a street unaccompanied.

Safely escorts younger child across street.

Safety: General safety and security

Chooses appropriate clothing for varied weather conditions and safety considerations when going out.

Understands and respects school security protocols.

Displays an awareness of the dangers inherent in speaking to strangers.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Safety: Sun sense

Applies sunscreen, when prompted, before going outside.

Applies sunscreen, when unprompted, before going outside.

Wears sun hat or cap when going outside.

Displays an understanding of the dangers of going out in the sun without adequate protection.

Safety: Tools and utensils

Uses goggles & gloves, when appropriate, for safety reasons when engaging in woodwork and science projects.

Carries a knife, pair of scissors, pencil, or other sharp object safely.

Passes a knife, pair of scissors, pencil, or other sharp object safely.

Handles potentially dangerous objects safely, under age-appropriate supervision.

Classroom Skills

Library and media

Handles books carefully, turning pages in a way that will not cause damage.

Arranges books neatly on shelf.

Returns book to shelf, moving other books in order to replace it.

Handles CDs and DVDs carefully, not touching surface.

Plays CDs and DVDs.

Arranges books on the shelf: according to Dewey, alphabetical, or some other classification.

Materials and stationery

Sharpens pencils when necessary.

Handles scissors effectively and safely.

Uses paper clips or bulldog clips effectively and appropriately.

Uses a stapler effectively and appropriately.

Uses tape effectively and appropriately.

Uses glue or paste effectively and appropriately.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Puts a rubber band around a stack of cards.

Refills stapler.

Control of Movement

Carrying, fetching, and using essential classroom items

Carries, unrolls, and rolls a rug.

Works on a rug.

Handles delicate objects with care and precision.

Returns materials to correct place in environment.

Walks slowly and calmly.

Walks avoiding people and objects.

Walks carrying a tray with an object on it without dropping or spilling contents.

Lifts and puts down a chair quietly and with control.

Carries a chair carefully without bumping into people or furniture.

Sits on a chair, upright, with feet on floor.

Lifts, carries and puts down a table together with another person.

Opens and closes a faucet/tap.

Fetches water in a pail.

Fine-motor skills/dexterity

Lifts small items with tweezers: (example: dry peas) /pincer grip.

Uses fingers and moves them individually in various combinations appropriate to object being manipulated.

Uses precise movements of fingers for various activities.

Uses precise movements of fingers to control a pencil for writing.

Uses correct pincer grip when grasping a pencil.

Holds scissors correctly and uses small movements of thumb and middle fingers to control the opening and closing of the blades.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Making choices

Makes choices showing an ability to suppress impulse and follow guidance.

Opening and closing

Opens and shuts various latches on frames.

Matches nuts and bolts.

Matches keys and locks.

Opening and closing

Opens and closes boxes.

Opens and closes tins and jars.

Opens and closes bottles.

Pouring, transferring, and other basic movements

Pours dry ingredients from one pitcher to another.

Pours water between two identical pitchers.

Pours water from one large pitcher into two smaller identical pitchers.

Pours water from one large container into two different-sized containers.

Pours water to a specified level in a graduated container.

Pours water through a funnel into a narrow-necked container.

Sieves dry ingredients to separate: example, rice and flour.

Uses a spoon to transfer dry ingredients from one container to another.

Uses a spoon to transfer liquid from one container to another.

Transfers water using a baster.

Transfers water one drop at a time using a dropper or pipette.

Uses tongs to transfer items from one container to another.

Uses hand whisk to create bubbles in water and soap mixture.

Hammers using Hammer Boards.

Assembles a flashlight.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Refine movement: Gross motor

Walks around a maze built from the Red Rods without touching.

Walks around furniture without bumping.

Ascends and descends stairs safely and gracefully.

Refine movement: open and shut

Opens and shuts all doors and gates, showing awareness of safety implications, checking that all doors and gates are securely latched when necessary.

Opens and shuts classroom door.

Refine movement: Silence

Is silent for brief period during introduction to Silence Game.

Is able to remain silent in relaxed position.

Is able to be silent in response to a signal.

Maintains silence, then responds to name when whispered.

Maintains silence, then acts on commands given in whisper.

Watches someone work, in silence, without touching.

Voluntarily chooses to be silent alone or with a small group.

Refine movement: The line

Walks on the line.

Walks on the line - heel to toe.

Walks on the line with hands at sides.

Walks on the line, hands at sides, head erect.

Walks on the line carrying an object in one hand. (e.g., Pink Tower cubes).

Walks on the line carrying an object in two hands (e.g., a tray).

Walks on the line carrying a bell without ringing it.

Walks on the line carrying a pendulum without swinging it.

Walks on the line carrying a glass filled to the brim with water.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Walks on the line, adjusting tempo to that of group.

Walks on line in step with rhythms played on an instrument.

Walks on a balance beam or low wall.

Going Out

Going Out

Thanks host after trip.

Takes part in trip planned by another person.

Grace and Courtesy

Altruism, kindness, consideration

Displays spontaneous sharing.

Encourages another child or adult.

Compliments another child or adult.

Deals with meanness or conflict assertively and politely.

Avoids hurting feelings.

Courtesy: General

Uses a quiet voice when appropriate.

Makes eye contact when speaking to someone.

Uses appropriate language when passing another in a doorway.

Uses appropriate language when asking for a turn.

Uses appropriate language when asking for something to be passed.

Waits for turn in various circumstances.

Makes a request using "please."

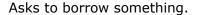
Politely refuses an offer.

Accepts "no" graciously when appropriate.

Picks something up for someone.

Asks for an item.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.



Gives way to another in a doorway.

Holds a door to let someone pass.

Knocks on a door before entering.

Walks around a group.

Covers mouth when yawning.

Apologizes or expresses regret when appropriate.

Asks someone to pass something.

Displays respect for others' workspace.

Asks for assistance when appropriate.

Writes informal notes in appropriate contexts.

Displays polite assertiveness when disagreeing with another person.

Expresses gratitude beyond ritual "thank you."

Expresses needs clearly and assertively.

Owns responsibility and expresses regret.

Expresses own feelings.

Etiquette in a group

Responds appropriately to invitation to join a group.

Joins a group quietly without interrupting.

Interrupts politely and when necessary.

Asks permission to join a group.

Sits in group.

Asks to be excused.

Asks to speak, or waits for turn to speak, as appropriate to context.

Listens with respect while others speak.

Replies appropriately to others in a group.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Shares ideas and feelings as appropriate.

Demonstrates a sensibility to individual and cultural differences.

Stands in a queue.

Stops to listen when bell rings/announcement made.

Participates in conflict resolution processes.

Makes requests.

Participates in discussion.

Questions new suggestions.

Etiquette: Meals

Waits for everyone to be seated at mealtime.

Folds crumbs into a napkin.

Cleans own place before leaving the table.

Conducts pleasant conversation at table.

Cleans a spill at table.

Offers food to another.

Politely asks for food to be passed.

Politely refuses an offer of food.

Asks to be excused from table.

Chews with mouth closed while eating.

Serves others at mealtime.

Waits for turn and helps self in buffet queue.

Greeting and introductions

Shakes hands in greeting.

Judges when to use formal or informal greeting.

Welcomes a guest.

Introduces self to visitor or new child.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Introduces others.

Remembers name of newly introduced person.

Knows names of children in class.

Meals and Food Prep

Practical application: Cooking skills

Prepares a picnic basket for self and one or two others.

Meals and Food Preparation

Classroom snack or lunch

Sets table for informal meal/snack.

Follows procedures for individual snack.

Washes hands before preparing food.

Follows procedures for group snack.

Personal Responsibility

Care of possessions

Actively participates in maintaining clothing through proper hanging, brushing, mending, hemming, button sewing, shoe cleaning, and polishing.

Uses a pattern and cloth to make items by hand or by sewing machine.

Is able to take care of different fabrics and understands how to remove stains.

Understands that different social events have different dress expectations and is able to chose appropriate clothing for these occasions.

Is able to pack appropriately for a trip.

Personal Grooming

Participates in activities that pertain to personal grooming and hygiene.

Safety: General safety and security

Understands the dangers of using electrical implements and handles electrical tools and implements safely - while under adult supervision.

Social Skills

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Etiquette in a group: Meetings

Demonstrates belief in democratic process.

Initiates group discussions.

Follows rules of order depending on method being used.

Suggests agenda items.

Votes on matters in meeting.

Raises points of order.

Considers and suggests amendments to procedures.

Participates in formulating classroom and school rules / guidelines and protocols.

Addresses chair in formal meeting.

Intrapersonal development

Makes responsible choices in varied contexts.

Accepts responsibility for own behavior.

Explains role of planning in solving problems.

Participates as an audience member with respect and courtesy.

Actively participates in upholding the classroom contract and encouraging others to do so.

Actively participates in own work plan and develops according to teacher guidance and own self-interests.

Prioritizes time wisely to meet own and others' needs.

Displays self-reliance when working independently.

Follows through on commitments towards both work and others.

Shows satisfaction in meaningful work.

Respectfully justifies choices made in various contexts.

Uses an objective approach towards problem solving.

Actively participates as a positive team player in small- or large-group settings.

Displays a commitment to ethical behavior.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Time Management

Development of organizational skills

Is able to work within expected guidelines and does so appropriately.

Is able to follow through on directions given one on one.

Is able to work on a short-term project and successfully complete the task, either individually or in a group.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Sensorial

Color 1

Color Box 1

Works with materials as presented, to pair red, yellow, and blue tablets.

Color Box 1: Language

Identifies and describes colors in Color Box 1.

Color 2

Color Box 2

Works with materials as presented, to match primary, secondary, black, white, gray, pink, and brown color tablets to one another.

Color Box 2: Language

Identifies and describes colors in Color Box 2.

Color Box of 32 Pairs

Works with materials as presented, to match various shades of eight colors.

Color 3

Color Box 3

Grades tints and tones of various shades, as presented, one color at a time.

Grades tints and tones of various shades, as presented, multiple or all colors together.

Uses art materials (pencils, paints) to recreate grades of color (e.g., with design insets).

Uses materials to mix tints, tones, and secondary colors.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Color Box 3: Language

Identifies and describes grades of light or dark.

Uses extended language of color in relation to tablets in Color Box 3.

Uses language to describe color in context.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Discrimination of Size 1

Cylinder Blocks

Works with materials as presented, placing cylinders in correct sockets using visual and stereognostic sense: Block 1.

Places cylinders in correct sockets using visual and stereognostic sense: Block 2.

Works with materials as presented, placing cylinders in correct sockets using visual and stereognostic sense: Block 3.

Works with materials as presented, placing cylinders in correct sockets using visual and stereognostic sense: Block 4.

Works with any two blocks together, placing cylinders in correct sockets using visual and stereognostic sense.

Works with any three blocks together, placing cylinders in correct sockets using visual and stereognostic sense.

Works with all four blocks together, placing cylinders in correct sockets using visual and stereognostic sense

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Discrimination of Size 2

Pink Tower

Works with materials as presented, placing cubes in relation to one another to demonstrate visual discrimination of size in three dimensions.

Uses smallest cube to indicate unit of difference.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Pink Tower: Language

Identifies and describes cubes according to size.

Uses language to describe size in context.

Discrimination of Size 3

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Brown Stair

Works with materials as presented, placing prisms in relation to one another to demonstrate visual discrimination of width.

Uses narrowest prism to indicate unit of difference.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Brown Stair: Language

Identifies and describes prisms according to width.

Uses language to describe width context.

Discrimination of Size 4

Pink Tower and Brown Stair

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Discrimination of Size 5

Red Rods

Works with materials as presented, placing prisms in relation to one another to demonstrate visual discrimination of length.

Uses shortest rod to indicate unit of difference.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Red Rods: Language

Identifies and describes rods according to length.

Uses language to describe length in context.

Discrimination of Size 6

Knobless Cylinders

Works with materials as presented, one set at a time, ordering sets of cylinders based on ability to discriminate size in three dimensions: yellow set.

1

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Works with materials as presented, one set at a time, ordering sets of cylinders based on ability to discriminate size in three dimensions: red set.

Works with materials as presented, one set at a time, ordering sets of cylinders based on ability to discriminate size in three dimensions: blue set.

Works with materials as presented, one set at a time, ordering sets of cylinders based on ability to discriminate size in three dimensions: green set.

Combines any two sets of cylinders demonstrating an ability to relate the sets to one another.

Combines any three sets of cylinders demonstrating an ability to relate the sets to one another.

Combines four sets of cylinders demonstrating an ability to relate the sets to one another.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Language of size consolidation

Uses language of size, length, and width correctly in a variety of contexts.

Form & color

Binomial Cube

Constructs Binomial Cube as presented.

Classifies prisms of Binomial Cube, laying prisms to represent the binomial equation.

Trinomial Cube

Classifies prisms of Trinomial Cube, laying prisms to represent the trinomial equation.

Retells the story of *The Kings* to another child using the Binomial or Trinomial Cube.

Shape 1

Images

Pairs identical images.

Shape 2

Geometric Solids

Explores features of Geometric Solid forms using visual and stereognostic senses.

Categorizes Geometric Solids into various sets according to common shapes of their faces.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Geometric Solids & Bases

Matches Geometric Solid forms to plane bases.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Geometric Solids: Language

Identifies and names Geometric Solid forms.

Uses correct vocabulary to name and describe geometric forms in context.

Shape 3

Geometric Cabinet: Presentation Tray

Explores triangle, circle, and square through visual and stereognostic senses.

Geometric Cabinet: Presentation Tray & Cards

Matches geometric figures to solid plane figures.

Matches geometric figures to thick-line figures.

Matches geometric figures to thin-line figures on cards.

Shape 4

Geometric Cabinet: Individual Drawers

Explores circles through through visual and stereognostic senses.

Explores triangles through visual and stereognostic senses.

Explores quadrilaterals through visual and stereognostic senses.

Explores rectangles through visual and stereognostic senses.

Explores regular polygons through visual and stereognostic senses.

Explores curvilinear figures through visual and stereognostic senses.

Geometric Cabinet: Individual Drawerss & Card Sets

Works independently with individual drawers and card sets to demonstrate ability to match plane figures to each level of card.

Shape 5

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Geometric Cabinet: All Drawers

Works with multiple drawers to refine visual and stereognosite discrimination of plane figures.

Works independently with multiple drawers and card sets to demonstrate ability to match plane figures to each level of card.

Matches and sorts geometric figures and cards to form large matrixes classified by shape and type (solid, thick, or thin lines).

Combines and uses material in novel ways.

Classifies shapes according to various categories as represented on Geometric Control Sheet.

Shape 6

Geometric Cabinet: Language

Identifies and names geometric plane figures: Presentation Tray.

Identifies and names geometric plane figures: Regular Polygons.

Identifies and names geometric plane figures: Quadrilaterals.

Identifies and names geometric plane figures: Rectangles (including square).

Identifies and names geometric plane figures: Types of Triangles.

Identifies and names geometric plane figures: Curvilinear Forms.

Uses correct vocabulary to name and describe geometric plane figures in context.

Shape 7

Pattern

Copies repeating patterns - linear.

Constructs own repeating patterns - linear.

Copies repeating patterns - two-dimensional array.

Constructs own repeating patterns - two- dimensional array.

Copies tessellating patterns.

Constructs own tessellating patterns.

Combines and uses material in novel ways.

Shape 8

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Constructive Triangles

Explores congruency, equivalency, and similarity.

Constructs various stars and polygrams.

Constructive Triangles: All Sets

Combines and uses material in novel ways.

Constructive Triangles: Blue Triangles

Freely explores how various triangles combine to make other plane figures.

Constructive Triangles: Large Hexagonal Box

Explores how a hexagon is made up from a combination of obtuse triangles and how these are combined to make different plane figures.

Constructive Triangles: Rectangular box

Explores how various triangles combine to make other plane figures.

Constructive Triangles: Small Hexagonal Box

Explores how various triangles that form a hexagon can be combined to form other plane figures.

Constructive Triangles: Triangular Box

Explores how equilateral triangles can be constructed from other triangles.

Shape 9

Circles, Squares, and Triangles

Explores various permutations of superimposed plane figures.

Inscribed and Concentric Figures

Combines and uses material in novel ways.

Smell

Smelling Bottles

Works with materials as presented to pair bottles according to aroma.

Combines and uses material in novel ways.

Identifies aromas.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Names aromas.

Combines and uses material in novel ways.

Uses language to describe aroma in context.

Sound 1

Sound Cylinders: Language

Identifies and describes grades of volume of sound.

Uses correct vocabulary to describe the volume of sounds in context.

Sound Cylinders: Volume

Pairs cylinders according to sound.

Grades one set of cylinders according to sound.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Sound 2

Bells: Pitch

Pairs corresponding bells.

Grades bells according to C-Major Scale.

Pairs corresponding bells.

Grades full set of bells.

Sings notes played on the Montessori Bells - either in a single-syllable, tonic sol-fa or naming notes.

Composes own melody on bells.

Copies a random series of notes played by another.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Identifies and names grades of pitch.

Identifies and names notes on C-Major Scale.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Montessori Bells: Pitch

Identifies and names the notes sounded by the Montessori Bells (tonic sol-fa scale).

Stereognostic

Mystery Bag: Familiar Objects

Works with materials as presented, matching objects using stereognostic sense.

Stereognostic Exercise: All

Combines and uses material in novel ways.

Stereognostic Exercises: All

Combines and uses material in novel ways.

Stereognostic Exercises: Large Objects

Sorts objects, such as large buttons or beans, according to size using stereognostic sense.

Stereognostic Exercises: Small Objects

Sorts objects, such as small buttons or other Sensorial material according to size using with eyes shut or blindfolded (stereognostic sense).

Tactile 1

Rough Gradation Tablets

Works with materials as presented to match various rough textures.

Rough Tablets

Works with materials as presented to grade rough textures.

Smooth Gradation Board

Works with materials as presented, to distinguish gradations of smooth textures.

Smooth Gradation Tablets

Works with materials as presented to match various smooth textures.

Smooth Tablets

Works with materials as presented to grade smooth textures.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Texture Materials: All

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Texture: Language

Identifies and names grades of roughness.

Identifies and names grades of smoothness.

Uses language to describe texture in context.

Touch Boards: Board A

Works with materials as presented, to experience rough and smooth textures.

Touch Boards: Board C

Works with materials as presented, to distinguish gradations of rough textures.

Touch Boards: Boards A & B

Works with materials as presented, to distinguish rough and smooth textures.

Tactile 2

Fabric Box

Works with materials as presented, to pair different types of fabric according to textures.

Fabric Box: Language

Names types of fabric.

Fabric Box:Language

Uses language to name various fabrics.

Uses language to name and describe fabrics in context.

Taste

Taste Bottles

Works with materials as presented to pair bottles of liquid according to taste.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Identifies and describes tastes.

Uses language to describe tastes in context.

Temperature 1

Thermic Tablets

Works with materials as presented to pair tablets made of different materials according to thermic qualities.

Identifies and describes thermic qualities of the different materials.

Temperature 2

Thermic Bottles

Refines thermic sense by pairing bottles of the same temperature.

Grades bottles according to temperature.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Identifies and describes grades of temperature.

Uses language to describe temperature in context.

Weight 1

Baric Tablets

Works with materials as presented, to match tablets of the same weight.

Works with materials, as presented, to grade tablets of the same weight.

Combines and uses material in novel ways.

Combines and uses material in novel ways.

Identifies and describes grades of weight.

Uses language to describe weight in context.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Language Arts

Composition: 1

Large or Medium Moveable Alphabet

Child composes one-word answers with a Moveable Alphabet in response to a question asked by the teacher.

Moveable Alphabets: Correcting

Child composes stories with Moveable Alphabet and asks directress to correct spelling before writing the story on paper.

Printed Alphabet

Composes sentences with punctuation.

Creative Writing

Student driven material

Writes creative poems.

Student-driven material

Writes logical noun phrases.

Writes captions for pictures.

Writes creative short stories.

Writes 'informal' letters to friends and relatives.

Dictation

Phonogram Booklets

Reads words from booklets while another child takes dictation.

Takes dictation from another child reading from the Phonogram Booklets.

Function of Words: 1

Conjunction Game: Farm

Displays an awareness of the use of conjunctions as a means of joining phrases.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Noun Game: Farm

Displays an awareness of words which name things through game involving fetching objects.

Noun-Adjective Game: Farm

Displays an awareness of words that describe things through game involving objects: "Give me the pink pig; move the brown cow."

Noun-Article Game: Farm

Displays an awareness of words that name things through game involving fetching objects: "Pick up a pig; give me the dog."

Preposition Game: Farm

Displays an awareness of the use of prepositions: "Move the cow behind the horse."

Pronoun Game: Farm

Displays an awareness of the use of pronouns through games with the Farm: "There is a pink pig. Please pass it to me."

The Function Games

Participates in Function Games at a verbal (non-written) level.

Verb Game: Farm

Displays an awareness of the use of verbs through games with the Farm: "Show me how the dog runs."

Function of Words: 2

Conjunction Game

Is able to recognize words that are conjunctions and how they function in a sentence.

Noun Game

Is able to recognize words that are nouns and how they function in a sentence.

Noun-Adjective Game

Is able to recognize words that are adjectives and how they function in a sentence.

Noun-Article Game

Is able to recognize the three articles found in the English language and how they function in a sentence.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Preposition Game

Is able to recognize words that are prepositions and how they function in a sentence.

Pronoun Game

Is able to recognize words that are pronouns and how they function in a sentence.

Verb Game

Is able to recognize words that are verbs and how they function in a sentence.

Handwriting: 1

Pencil and Paper

Has mastered the ability to write in the school's chosen font: lower-case letters.

Has mastered the ability to write in the school's chosen font: upper-case letters.

Has mastered the ability to space letters appropriately within a word when writing in the school's chosen font.

Has mastered the ability to leave appropriate space between words when writing in the school's chosen font.

Handwriting: 2

Pencil and Paper

Has mastered the ability to write in cursive form: lower-case letters.

Has mastered the ability to write in cursive form: upper-case letters.

Has mastered the ability to space letters appropriately within a word when writing in cursive form.

Has mastered the ability to leave appropriate space between words when writing in cursive form.

Handwriting: Preparation 1

Sandpaper Letters: Key Sounds

Feels Sandpaper Letters using a light, continuous movement of the index and middle fingers of the dominant hand.

Associates the letter sound with the symbol, which represents it through playing an "I Spy Game" or participating in three-period lessons.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Sensorial Materials

Has developed fine-motor control in preparation for handwriting through the various Sensorial preliminary exercises.

Handwriting: Preparation 2

Metal Insets

Works with Metal Insets as presented, drawing an outline with the metal frame, then placing the inset over the outline and drawing another identical outline in a different color.

Fills in outline drawn with either frame or inset, using a zigzag pattern or colors.

Draws a design by rotating the inset or frame and shades.

Draws more advanced designs using two or more frames or insets.

Designs a longer pattern with repeating shapes and shades.

Draws a design by rotating the inset or frame on the diagonal.

Creates various shades of colors when shading designs.

Demonstrates control of the pencil when tracing an object and creating designs.

Handwriting: Preparation 3

Large Moveable Alphabet:

Returns letters to correct space in the box (this is a preparatory exercise that is simply an exercise in visual discrimination).

Large Moveable Alphabet: Choosing Letters

Uses Large Moveable Alphabet: to build (encode) words he thinks of himself.

Uses Large Moveable Alphabet: to build (encode) phrases or sentences he thinks of himself.

Medium Moveable Alphabet: Building Words

Encodes words, phrases, and sentences.

Small Moveable Alphabet: Building Paragraphs

Encodes words, phrases, sentences, paragraphs, and short stories.

Handwriting: Preparation 4

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Blank green board: First writing - letter families

Writes families of letters with similar shapes, first tracing the sandpaper symbols.

Blank green board: First writing - letters

Practices writing individual numbers and letters, first tracing the sandpaper symbols.

Pencil and paper - letters

Writes individual letters with pencil and paper, first tracing the sandpaper symbol.

Handwriting: Preparation 5

Green board with double lines: Positioning letters of the Small

Places letters of the Small Moveable Alphabet between double lines, correctly positioning ascenders and descenders.

Practices writing individual numbers and letters with correct placement of ascenders and descenders.

Handwriting: Preparation 6

Consolidation

Sorts letters of the Small Moveable Alphabet into three groups according to ascenders and descenders; checks own work by placing the letters in rows on the lined board.

Sorts the single-letter Sandpaper Letters into three groups according to ascenders and descenders, then writes the letters on lined paper after tracing each letter.

Writes, on lined paper, all twenty-six single letters after tracing the corresponding Sandpaper Letters.

Handwriting: Preparation 7

Sandpaper Capitals

Traces each of the twenty-six capital letters, associating the letter with the sound it represents.

Traces each of the twenty-six capital letters, associating the letter with its name.

Sandpaper Capitals and Lower-Case Letters

Pairs the Sandpaper Capitals with the corresponding lower-case letters.

Language Enrichment: Speech

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

News

Shares observations, news, and ideas with the group or individually.

Questioning

Engages in verbal question-and-answer games of increasing complexity.

Rhymes and songs

Participates in singing rhymes and song.

Storytelling

Tells short stories in group time.

Word and sound games

Participates in word and sound games (rhymes, word play, riddles, etc.).

Language Enrichment: Vocabulary Development

Classified pictures

Views and discusses cards with adult or another child.

Learns the names of the items depicted by the images by means of a three-period lesson.

Sorts image cards underneath corresponding scene images.

Objects or images

Expands vocabulary through three-period lessons given by adult or through conversation with other children.

Literature Appreciation

Reading materials/

Reads independently with enjoyment and appreciation, selecting titles of personal interest.

Phonemic Awareness

I Spy Game: Objects in environment

Isolates sounds in words, demonstrating an ability to isolate the initial sound (40/44 key sounds): one object in hand.

Isolates sounds in words, demonstrating an ability to isolate the initial sound (40/44 key sounds): more than one sound, limited space.

1

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Isolates sounds in words, demonstrating an ability to isolate the initial sound (40/44 key sounds): larger unlimited area.

Isolates sounds in words, demonstrating an ability to isolate the initial sound (40/44 key sounds): entire visible area.

Isolates sounds in words, demonstrating an ability to isolate the initial and ending sounds (40/44 key sounds): limited area.

Isolates sounds in words, demonstrating an ability to isolate the internal sounds in words (40/44 key sounds): in entire visible area.

Isolates sounds in words, demonstrating an ability to isolate any sound (40/44 key sounds): entire visible area.

Reading

Classified Nomenclature

Reads words using multiple sets of cards, sorted into different categories.

Reads definitions using multiple sets of cards, sorted into different categories.

Command Cards

Reads simple sentences (Command Cards).

Reading Comprehension

Appropriate-Level Books

Summarizes the plot of a story.

Names the characters in a story.

Identifies a character's traits or behaviors.

Identifies the cause of an event.

Identifies the speakers in a dialogue.

Reading of Words: 4

Nouns Game: Immoveable Objects

Reads words and places the labels next to objects in the environment.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Nouns Game: Moveable Objects

Reads words in Noun Box and brings related objects to the work mat.

Prepositions

Reads words and moves to place own body in relation to an object (e.g., card reads "over" - child stands on mat; card reads "under" - child goes under a table, etc.).

Verbs

Reads words and performs the actions.

Reading: Alphabet

Sandpaper Letters, Moveable Alphabet, or Alphabet Strip

Can say the names of the letters of the alphabet in order.

Names a letter of the alphabet when shown the corresponding symbol.

Reading: Alphabet

Sandpaper Letters, Moveable Alphabet, or Alphabet Strip

Displays a knowledge of the names of the letters of the alphabet.

Reading: Books

Handmade Books

Silently reads little handmade books.

Reading: Key Sounds

Key Sound Folders

Recognizes symbols on outside of Key Sound Folders as being represented by Sandpaper Letters and double letters; can say corresponding sounds.

Reads booklets in Key Sound Folders.

Sorts card from any two folders to show that he has memorized the various families of phonograms.

Sorts cards from all fourteen folders to show that he has memorized the various families of phonograms.

Key Sound Folders:

Writes all fourteen key sounds and corresponding phonograms.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Phonogram Dictionary

Uses Dictionary of Phonograms when he encounters unknown words in parallel reading activities.

Reading: Words 1

Activity Words: Double-Letter Phonograms -Prepared Word Cards

Silently reads words containing twelve key sounds, as they are written by the directress, and performs the appropriate action.

Silently reads words containing double- letter phonograms and performs the appropriate actions.

Activity Words: Set 1

Works independently with Activity Words Set 1, reading the words and performing the actions.

Activity Words: Written

Silently reads words as they are written by directress and performs the correct action.

Beginning to decode words

Begins to decipher words that have been built with the Large Moveable Alphabet or in a book, etc.

Object box 1:

Silently reads word as they are written by directress and places them next to the correct object.

Object box 1: Prepared Word Cards

Works independently with Object Box 1, reading simple words, which are phonetically spelled with sounds represented by only one letter.

Object Box 2: Double-Letter Phonograms -Prepared Word Cards

Works independently with Object Box 2; silently reads words containing twelve key sounds and places them next to the correct object or picture.

Object box 2: Reading written words

Silently reads words containing twelve key sounds, as they are written by the directress, and places them next to the correct object or picture.

Puzzle Words: 1

Silently reads Puzzle Words after receiving three-period lesson.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Puzzle Words: 2

Silently reads Puzzle Words after receiving three-period lesson and being made aware of especially interesting aspects; demonstrates interest in and awareness of these points of interest.

Research Skills

Teacher-made Materials • Prepared Task Cards and Student-Driven

Correctly applies rules of alphabetization: by first letter only.

Speaking and Listening Skills

Individual Expression

Is able to express ideas logically, succinctly, and politely.

Recites short poems, songs, and rhymes from memory.

Tells stories in logical sequence.

Participates in informal dialogue.

Reads a dramatic part in a play.

Individual Understanding

Follows oral instructions.

Follows simple one- to two-step commands.

Follows complex three- to five-step commands.

Individual Understanding and Response

Listens purposefully and responds appropriately in conversation.

Listens for details and answers questions about information presented orally or in a story.

Names the characters in a story.

Identifies a character's traits or behaviors.

Identifies a character's feelings.

Retells a story or restates directions.

Indicates the chronological order of events.

Identifies the cause of an event.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Explains the problem that a character faces and how he/she resolves it.

Makes reasonable predictions about what will happen next in a story.

Identifies the speakers in a dialogue.

Identifies to whom a pronoun is referring.

Word Study: 1

Animals and their homes

Reads and matches the names of animals with their homes.

Animals and their sounds

Reads and matches the names of animals with their sounds.

Animals and their young

Reads and matches the names of animals with their young.

Collective Nouns: General

Reads and pairs collective nouns with the corresponding noun.

Compound Words

Reads and matches words to create compound words.

Masculine and Feminine

Reads and categorizes words according to masculine and feminine.

Positive, Comparative, and Superlative

Reads and sorts words into corresponding sets of positive, comparative, and superlative.

Singular and Plural

Demonstrates an understanding of concept of singular and plural.

Reads and categorizes words according to singular and plural.

Word Study: 2

Teacher-made Materials • Prepared Task Cards and Student-Driven

Identifies and uses compound words.

Identifies and uses suffixes.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Identifies and uses antonyms.

Identifies and uses synonyms.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Mathematics

Associative and Commutative Properties of Addition

Bead Bars

Using the Bead Bars, demonstrates that, when adding any two numbers, the order of the addends can be changed and the total remains the same (2 + 4 = 6 or 4 + 2 = 6).

Decimal System: Introduction to Place Value: 1

Color-Coded Number Cards

Identifies and names numerals for 1, 10, 100, 1,000 using the Color-Coded Number Cards.

Identifies and names numerals from one to 9 999 using the Color-Coded Number Cards according to place value.

Golden Beads

Identifies and names quantities from 1 to 9,999 using the Golden Beads.

Golden Beads and Number Cards

Associates numeral to quantity 1, 10, 100, 1,000.

Associates numeral and quantity one to 9,999 using the Golden Beads and Color -Coded Number Cards.

Demonstrates awareness and understanding of Zero as a place holder.

Decimal System: Introduction to Place Value: 2

Constructing Quantities with the Golden Beads and Number Cards

Constructs, identifies, and names the quantity (naming correctly from left to right), up to 9,999, represented by an assembly of Golden Beads.

Reading Quantities Constructed with the Golden Beads and Number

Constructs, identifies, and names the numerals (naming correctly from left to right), up to 9,999, represented by the Colored Numeral Cards.

Decimal System: Number Concepts

Red and Blue Number Rods and Sandpaper Numerals

Associates the numeral to the quantity using the Red and Blue Number Rods and Numeral Cards.

Decimal System: Number Concepts

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Red and Blue Number Rods

Counts to 10 by units using the Red and Blue Number Rods.

Sandpaper Numerals

Recognizes numerals from 0 - 9 using the Sandpaper Numerals.

Exercises Leading to the Memorization of Math Facts: Addition: 1 Snake Game

Demonstrates knowledge of addition facts for two addends between 1-10, using the Snake Game.

Exercises Leading to the Memorization of Math Facts: Addition: 2 Colored Bead Bars

Demonstrates knowledge of addition facts for two addends between 1-10, using the Colored Bead Bars.

Exercises Leading to the Memorization of Math Facts: Addition: 3 Addition Strip Board

Demonstrates knowledge of addition facts for two addends, the sum of which is no larger than 10, using the Addition Strip Board.

Exercises Leading to the Memorization of Math Facts: Addition: 4 Addition Charts

Demonstrates knowledge of addition facts for two addends between 1-10, using the Addition Charts.

Exercises Leading to the Memorization of Math Facts: Subtraction: Subtraction Strip Board

Demonstrates knowledge of subtraction facts for two quantities between 1-18, using the Subtraction Strip Board.

Exercises Leading to the Memorization of Math Facts: Subtraction: Subtraction Charts

Demonstrates knowledge of subtraction facts for two quantities between 1-18, using the Subtraction Charts.

Exercises Leading to the Understanding of Fractions: 1

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Fraction Circles and Symbols

Recognizes fractions using Fraction Circles and Symbols.

Exercises Leading to the Understanding of Fractions: 2

Concrete materials such as pizzas, chocolate bars, and the like

Recognizes fractions using concrete materials other than the Fraction Circles and Symbols.

Exercises Leading to the Understanding of Fractions: 3

Fraction Circles

Recognizes equivalent fractions equaling one whole, using the Fraction Circles.

Fraction Operations: Common Denominator: 1

Fraction Circles

Adds fractions that share a common denominator, using the Fraction Circles.

Fundamentals

Introduction to the Golden Beads Set

Identifies and names quantities 1, 10, 100 and 1,000 using the Golden Beads.

Fundamentals of the Decimal System: Number Concepts: 1

Cards and Counters

Counts to 10 by units using the Cards and Counters.

Lays out counters to indicate the concept of odd and even.

Identifies and names odd and even quantities.

Sequencing Numeral Cards

Lays out loose numeral cards 1-9 in correct sequence without the use of a control.

Spindle Boxes

Counts to 9 units using separate units with the Spindle Boxes.

Demonstrates an understanding of Zero as an empty set using the Spindle Boxes.

Represents individual spindles as sets by binding each quantity together with green ribbon, tied in a bow, to form a set of 2, 3, 4, 5 . . . 9 spindles.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Fundamentals of the Decimal System: Number Concepts: 2

Colored Bead Stair

Associates quantities 1 - 9 with the bars of the Colored Bead Stair.

Golden Bead Materials

Constructs, identifies, and names the quantities from 11 to 99 (using correct names eleven, twelve, etc.) by using the Golden Bead Ten Bars and the Golden Unit Beads.

Demonstrates an understanding of the concept of change between hierarchies, using additive quantities with Golden Bead Materials.

Teen Board

Constructs, identifies and names the numerals from 11 to 19 by units using the Teen Board.

Teen Board, Ten Bead Bars and Colored Bead Stair

Associates quantities and numerals 11 - 19 using the Teen Boards, Golden Bead Ten Bars, and Colored Bead Stair.

Ten Bead Bars and Colored Bead Stair

Constructs, identifies, and names the quantities from 11 to 19 (using correct names eleven, twelve, etc.) by using the Golden Bead Ten Bars, and the Colored Bead Stair.

Ten Board and Golden Beads

Identifies that one more than nine takes the number to the next ten.

Ten Board, Ten Bead Bars, and Unit Beads

Associates quantity with numerals, using correct names, 11 to 99 by using the Ten Boards, Golden Bead Ten Bars, and the Golden Unit Beads.

Fundamentals of the Decimal System: Number Concepts: 3

Counting the Bead Chains by Units

Counts linearly by units, using the Bead Chains of the squares of the numbers 2, 3, 4, 5, 6, 7, 8, 9, and 10.

Skip Counting by 2's, 5's, and 10's using the Bead Chains and

Skip counts by 2's, 5's, and 10's using the Bead Chains.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Skip Counting by 3's, 4's, and 6's using the Bead Chains and

Skip counts by 3's, 4's, and 6's using the Bead Chains.

Skip Counting by 7's, 8's, and 9's using the Bead Chains and

Skip counts by 7's, 8's, and 9's using the Bead Chains.

The Hundred Board

Counts from 1 to 100 by units, recognizing the printed numerals, using the Hundred Board.

Recognizes patterns in numbers that are not in linear formation.

The Hundred Chain and Arrows

Counts from 1 to 100 by units, recognizing the printed numerals on the Number Srrows, using the 100 Chain.

Recognizes that 100 is the square of 10.

The Thousand Chain and Arrows

Counts from 1 to 1,000 by units, recognizing the printed numerals on the Number Arrows, using the 1,000 Chain.

Geometry: Construction of Various Figures

Materials that Demonstrate the Concept of Symmetry

Demonstrates line symmetry in a given shape by folding along its center line.

Geometry: Constructive Triangle Boxes

Constructive Triangle Box

Identifies congruent, similar shapes by matching sensorially.

Geometry: Geometric Solids

Geometric Solids

Identifies a cube, sphere, cylinder, pyramid, and cone.

Identifies a rectangular prism, triangular prism, ovoid, and ellipsoid.

Identifies the faces, edges, and surfaces of solid geometric objects.

Geometry: Lines

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Any Material that Demonstrates Straight, Curved and Broken Lines

Identifies types of lines.

Geometry: Plane Geometric Shapes

Geometric Cabinet

Introduction to recognition and nomenclature of geometric figures using the first presentation tray of geometric shapes.

Identifies basic geometric shapes using the shapes in the Geometric Cabinet.

Identifies types of triangles by their sides using the shapes in the Geometric Cabinet.

Identifies all of the quadrilaterals using the shapes in the Geometric Cabinet.

Identifies irregular polygons through the decagon using the shapes in the Geometric Cabinet.

Identifies circles using the shapes in the Geometric Cabinet.

Identifies the curved-edged shapes using the shapes in the Geometric Cabinet.

Differentiates between a circle, ellipse, and oval using the shapes in the Geometric Cabinet.

Geometric Cabinet & Matching Card Set

Matches shapes from the Geometric Cabinet to geometric cards with completely colored interior.

Matches shapes from the Geometric Cabinet to geometric cards with thick colored outline.

Matches shapes from the Geometric Cabinet to geometric cards with thin colored outline.

Math Operations: Dynamic Addition: 3

Dot Board

Adds quantities of up to four-digit addends, with exchanging, using the Dot Board, where the sum is less than 9,999.

Math Operations: Dynamic Subtraction: 1

Golden Bead Materials

Subtracts two four-digit numbers, with exchanging, using the Golden Beads.

Math Operations: Static Addition: 3

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Small Bead Frame

Adds quantities of up to four-digit addends, without exchanging, using the Small Bead Frame.

Math Operations: Static Subtraction: 1

Golden Bead Materials

Subtracts two four-digit numbers, without exchanging, using the Golden Beads .

Math Operations: Static Subtraction: 2

Stamp Game

Subtracts two four-digit numbers, without exchanging, using the Stamp Game.

Math Operations: Multiplication: 1

Golden Bead Materials

Multiplies a quantity using a single-digit multiplier, using the Golden Beads.

Math Operations: Multiplication: 2

Stamp Game

Multiplies a quantity using a single-digit multiplier, using the Stamp Game.

Math Operations: Static Addition: 1

Golden Bead Materials

Adds quantities of up to four-digit addends, without exchanging, using the Golden Beads.

Adds quantities of up to four-digit addends, with exchanging, using the Golden Beads.

Red and Blue Number Rods

Adds two single-digit numbers, where the sum is less than 11, using the Red and Blue Number Rods.

Math Operations: Static Addition: 2

Stamp Game

Adds quantities of up to four-digit addends, without exchanging, using the Stamp Game.

Measurement: Length: 1

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Straight Edge with Demarcations in Imperial or Metric

Is able to recognize units of measure on a straight edge.

Working with Money: 1

Coins and Bills Reflecting Specific Currency

Identifies and names units of currency.

Is able to count units of currency.

Is able to make change with money.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Geography

Climates and Environments

Biome Study: Grasslands

Describes the climate and environment of grassland regions around the world.

Describes and names some examples of plants that are typically found in grassland regions around the world.

Describes and names some examples of animals that are typically found in grassland regions around the world.

Describes and names some examples of how people dress in grassland regions around the world.

Describes and names some examples of shelter and housing typically found in grassland regions around the world.

Describes and names some examples of traditional modes of transportation in grassland regions around the world.

Describes the lives of children who live in grassland regions around the world.

Biome Study: Mountainous Regions

Describes the climate and environment of mountainous regions around the world.

Describes and names some examples of plants that are typically found in mountainous regions around the world.

Describes and names some examples of animals that are typically found in mountainous regions around the world.

Describes and names some examples of how people dress in mountainous regions around the world.

Describes and names some examples of shelter and housing typically found in mountainous regions around the world.

Describes and names some examples of traditional modes of transportation in mountainous regions around the world.

Describes the lives of children who live in mountainous regions around the world.

Biome Study: Temperate Forests

Describes the climate and environment of temperate forest regions around the world.

Describes and names some examples of plants that are typically found in temperate forest regions around the world.

1

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Describes and names some examples of animals that are typically found in temperate forest regions around the world.

Describes and names some examples of how people dress in temperate forest regions around the world.

Describes and names some examples of shelter and housing typically found in temperate forest regions around the world.

Describes and names some examples of traditional modes of transportation in temperate forest regions around the world.

Describes the lives of children who live in temperate forest regions around the world.

Biome Study: The Desert

Describes the climate and environment of desert regions around the world.

Describes and names some examples of plants that are typically found in the desert.

Describes and names some examples of animals that are typically found in the desert.

Describes how people dress in the desert.

Describes and names some examples of shelter and housing typically found in desert regions.

Describes and names some examples of traditional modes of transportation in the desert.

Describes the lives of children who live in desert regions.

Biome Study: The Rain Forest

Describes the climate and environment of rain forest regions around the world.

Describes and names some examples of plants that are typically found in the rain forest.

Describes and names some examples of animals that are typically found in the rain forest.

Describes and names some examples of how people dress in the rain forest.

Describes and names some examples of shelter and housing typically found in rain forests.

Describes and names some examples of traditional modes of transportation in the rain forest.

Describes the lives of children who live in rain forest regions.

Biome Study: Tundra and Polar Regions

Describes the climate and environment of tundra regions around the world.

Describes and names some examples of plants that are typically found in tundra regions around the world.

1

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Describes and names some examples of animals that are typically found in tundra regions around the world.

Describes and names some examples of how people dress in tundra regions around the world.

Describes and names housing typically found in tundra regions around the world.

Describes and names some examples of traditional modes of transportation in tundra regions around the world.

Describe the lives of children who live in tundra regions around the world.

Biome Study: Wetlands

Describes the climate and environment of wetland regions around the world.

Describes and names some examples of plants that are typically found in wetland regions around the world.

Describes and names some examples of animals that are typically found in wetland regions around the world.

Describes and names some examples of how people dress in wetland regions around the world.

Describes and names some examples of shelter and housing typically found in wetland regions around the world.

Describes and names some examples of traditional modes of transportation in wetland regions around the world.

Describes the lives of children who live in wetland regions around the world.

Cultural geography 1

Flags

Identifies flag of own country.

Matches pictures of flags of various countries.

Matches the countries of North America with their flags, using the corresponding Puzzle Map, Pin Map, or blank outline map.

Matches the countries of South America with their flags, using the corresponding Puzzle Map, Pin Map, or blank outline map.

Matches the countries of Europe with their flags, using the corresponding Puzzle Map, Pin Map, or blank outline map.

Matches the countries of Africa with their flags, using the corresponding Puzzle Map, Pin Map, or blank outline map.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Matches the countries of Africa with their flags, using the corresponding Puzzle Map, Pin Map, or blank outline map.

Matches the countries of Oceania with their flags, using the corresponding Puzzle Map, Pin Map, or blank outline map.

Identifies and matches the flags of the states or provinces of the country in which he or she lives with the corresponding Puzzle Map or blank outline map of the country.

Cultural Geography 2

Continent Studies

Explores contents of the various Treasure Boxes containing artifacts.

Identifies different styles of dress, housing, transport, and foods as belonging to a specific country of study.

Mapping 1

Continents Globe

Identifies and names the continents on the Continents Globe.

Globe and Flat Maps

Demonstrates a beginning understanding that the flat maps represent the same land and water features as a globe, using a globe, a flattened rubber ball, and the World Puzzle Map.

Globe and Globe Projection Map

Demonstrates a deepening understanding that the flat maps represent the same land and water features as a globe using a globe projection map.

World Puzzle Map

Sensorially explores the World Puzzle Map, removing and replacing the pieces.

World Puzzle Map - Continents

Identifies and names the continents using the World Puzzle Map.

World Puzzle Map - Oceans

Identifies and names the oceans using the World Puzzle Map.

Mapping 2

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Puzzle Map of Africa and Outline Control Map

Using the Puzzle Map of Africa matches the pieces from the Puzzle Map to their outline shapes on the corresponding Outline Control Map.

Puzzle Map of Asia and Outline Control Map

Using the Puzzle Map of Asia matches the pieces from the Puzzle Map to their outline shapes on the corresponding Outline Control Map.

Puzzle Map of Europe and Outline Control Map

Using the Puzzle Map of Europe, matches the pieces from the Puzzle Map to their outline shapes on the corresponding Outline Control Map.

Puzzle Map of North America and Outline Control Map

Using the Puzzle Map of North America, matches the pieces from the Puzzle Map to their outline shapes on the corresponding Outline Control Map.

Puzzle Map of Oceania and Outline Control Map

Using the Puzzle Map of Oceania matches the pieces from the Puzzle Map to their outline shapes on the corresponding Outline Control Map.

Puzzle Map of South America and Outline Control Map

Using the Puzzle Map of South America, matches the pieces from the Puzzle Map to their outline shapes on the corresponding Outline Control Map.

Puzzle Map of the United States - Identifes the State they live in

Can identity the puzzle piece for the State in which they live on the Puzzle Map of the United States.

Puzzle Map of the World and the Puzzle Maps of Each Continent

Given a continent puzzle pieces from the World Puzzle Map, can find the corresponding Puzzle Map for each continent.

World Puzzle Map - Tracing pieces to make a map

Makes own map of the continents tracing the pieces of the World Puzzle Map

World Puzzle Map and Outline Control Map

Using the World Puzzle Map, matches the pieces from the Puzzle Map to their outline shapes on the corresponding Outline Control Map.

Mapping 3

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Puzzle Map of Africa - Names of the Countries

Using the Puzzle Map of Africa identifies and names the countries.

Puzzle Map of Africa - Tracing pieces to make a map

Makes own map of Africa using the pieces of the corresponding Puzzle Map to trace each country.

Puzzle Map of Africa without Outline Control Map

Constructs the Puzzle Map of Africa without using the Outline Control Map.

Puzzle Map of Asia - Names of the Countries

Using the Puzzle Map of Asia identifies and names the countries.

Puzzle Map of Asia - Tracing pieces to make a map

Makes own map of Asia using the pieces of the corresponding Puzzle Map to trace each country.

Puzzle Map of Asia without Outline Control Map

Constructs the Puzzle Map of Asia without using the Outline Control Map.

Puzzle Map of Europe - Names of the Countries

Using the Puzzle Map of Europe, identifies and names the countries.

Puzzle Map of Europe - Tracing pieces to make a map

Makes own map of Europe, using the pieces of the corresponding Puzzle Map to trace each country.

Puzzle Map of Europe without Outline Control Map

Constructs the Puzzle Map of Europe without using the Outline Control Map.

Puzzle Map of North America - Names of the Countries

Using the Puzzle Map of North America, identifies and names the countries.

Puzzle Map of North America - Tracing pieces to make a map

Makes own map of North America, using the pieces of the corresponding Puzzle Map to trace each country.

Puzzle Map of North America without Outline Control Map

Constructs the Puzzle Map of North America without using the Outline Control Map.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Puzzle Map of Oceania - Names of the Countries

Using the Puzzle Map of Oceania identifies and names the countries.

Puzzle Map of Oceania - Tracing pieces to make a map

Makes own map of Oceania using the pieces of the corresponding Puzzle Map to trace each country.

Puzzle Map of Oceania without Outline Control Map

Constructs the Puzzle Map of Oceania without using the Outline Control Map.

Puzzle Map of South America - Names of the Countries

Using the Puzzle Map of South America, identifies and names the countries.

Puzzle Map of South America - Tracing pieces to make a map

Makes own map of South America, using the pieces of the corresponding Puzzle Map to trace each country.

Puzzle Map of South America without Outline Control Map

Constructs the Puzzle Map of South America without using the Outline Control Map.

Puzzle Map of the United States and Outline Control Map

Constructs the Puzzle Map of the United States without the use of the Outline Control Map.

Mapping 4

Booklet of countries of Africa

Makes own booklets with outlines of countries traced from the Puzzle Map of Africa and adds their printed names.

Booklet of countries of Asia

Makes own booklets with outlines of countries traced from the Puzzle Map of Asia and adds their printed names.

Booklet of countries of Europe

Makes own booklets with outlines of countries traced from the Puzzle Map of Europe and adds their printed names.

Booklet of countries of North America

Makes own booklets with outlines of countries traced from the Puzzle Map of North America and adds their printed names.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Booklet of countries of Oceania

Makes own booklets with outlines of countries traced from the Puzzle Map of Oceania and adds their printed names.

Booklet of countries of South America

Makes own booklets with outlines of countries traced from the Puzzle Map of South America and adds their printed names.

Puzzle Map of Africa - Reading Names of the Countries

Using the Puzzle Map of Africa reads country names and relates them to the corresponding puzzle pieces.

Puzzle Map of Asia - Reading Names of the Countries

Using the Puzzle Map of Asia, reads country names and relates them to the corresponding puzzle pieces.

Puzzle Map of Europe - Reading Names of the Countries

Using the Puzzle Map of Europe, reads country names and relates them to the corresponding puzzle pieces.

Puzzle Map of North America - Reading Names of the Countries

Using the Puzzle Map of North America, reads country names and relates them to the corresponding puzzle pieces.

Puzzle Map of Oceania - Reading Names of the Countries

Using the Puzzle Map of Oceania reads country names and relates them to the corresponding puzzle pieces.

Puzzle Map of South America - Reading Names of the Countries

Using the Puzzle Map of South America, reads country names and relates them to the corresponding puzzle pieces.

Mapping Skills - Introduction to Compass Directions 1

Map and Compass - Introduction

Identifies the North and South Poles on the Continent Globe and distinguishes between 'movement' on the globe in a northerly or southerly direction.

Identifies the north, south, east, and west walls of the classroom.

On 'command,' the child moves X-steps north, east, south, or west in the classroom.

Identifies the directions north, east, south, and west outside on the playground.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Mapping Skills - Introduction to Compass Directions 2

Map and Compass

Understands and demonstrates the concept of moving to the north, south, east, and west on a map.

Mapping skills - Introduction to compass directions 3

Map and Compass

Uses a simple compass to identify the directions north, east, south, and west.

Mapping Skills - The Town Game 1

Map and Compass: The Town Game

Using the Town Game, the child places specific model buildings on a model layout of a small village in which all streets have been named, using commands that refer only to their placement on a given street:

Mapping Skills - The Town Game 2

Map and Compass: The Town Game

Using the Town Game, the child places specific model buildings on the model town, using commands that refer only to their placement at the intersection of two streets.

Mapping Skills - Using a Compass 1

Map and Compass

Using a simple compass, on command, the child can move X-steps north, east, south, or west in the classroom or outside.

Mapping Skills 4

Flag of the state or province in which one lives

Identifies and matches the flag of the state or province in which he or she lives with a corresponding Puzzle Map or blank outline map of the country.

Model Town or Farm: Matching the layout of model building on two

Duplicates a layout from one map board to another, with both boards placed side by side and oriented in the same direction.

Using the Model Town or Farm, the child duplicates a layout from one board to another, with the two boards separated and oriented in opposite directions.

Using the Model Town or Farm, the child duplicates a layout on one board when given a photograph of a layout of the buildings set up on a duplicate board.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Mapping Skills 5

Mapping

Using a scale model of the classroom, the child duplicates the layout of the furniture in the classroom on a simple scale model.

Model Town or Farm: Matching the layout of model building on two

Using the Model Town or Farm, the child duplicates a layout from one board to another, using drawings of each of the buildings to represent the three-dimensional model buildings found on the other.

Position and Direction

Initial experience: Position

Explores position in space and direction through bodily movement and in the context of the classroom, garden, and playground.

Explores the school, garden, playground, and neighborhood by means of short walks, where he/she develops an awareness of various features (landmarks) and their position in relation to one another.

Demonstrates understanding of the basic terms used to describe an object's position in the environment: top, bottom, low, high, lower, higher, in front of, behind, right, left, etc.

Describes own position and movement with increasing confidence.

Uses the names of points of interest in their environment with increasing confidence and accuracy.

Views various objects (such as Geometric Solids, historical artifacts) from different angles to begin to develop an awareness that objects look very different from different angles; comments on what he/she notices.

Draws solid objects (e.g., Geometric Solids) from different angles.

Looks at an arrangement of simple objects in a limited space and draws them from above, creating a simple map or plan of their relationship to one another.

Regions of the Country in Which We Live

Investigating the Regions of the Country in Which We Live

Investigates and gathers, from many resources, information about the region of the country in which we live.

The Earth: 1

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Land and water forms

Looks at albums showing classic images of various land and water forms, discussing obvious features and exploring relevant language.

Sensorially explores the various land and water forms through work with the Land Forms materials.

Matches the Land Form trays to the corresponding graphic representations and images of land forms.

Identifies and names the following major land and water forms: island, lake, bay, cape, peninsula, isthmus, strait, archipelago, and system of lakes using either the three-dimensional trays or the cards which correspond with them.

Locates examples of each of the land and water forms on the Land and Water Globe.

Reads names of Land and Water Forms and places cards next to the models or corresponding cards.

Reads definitions of Land and Water Forms and pairs with the corresponding vocabulary labels.

Reads simple Command Cards relating to the Land and Water Forms and demonstrates understanding by carrying out the instruction.

Makes own models of land and water forms using papier maché or clay.

Notices (in pictures, videos, or while traveling) that there are other land forms and features in the landscape and wants to know their names; develops an interest in the physical features of the Earth.

Land, Air and Water

Works with the Land, Air, and Water activity to develop an understanding that the Earth is comprised of three major constituents (air, land, and water); matches images to corresponding containers.

Reads the labels associated with the Land, Air, and Water activity and places them in relation to corresponding containers and/or images.

Explores the Land and Water Globe to gain an understanding that the Earth is comprised of large bodies of land and water surrounded by a shallow blanket of air.

Distinguish between the representations of land masses and the oceans on the Land and Water Globe.

Explains that the Earth is shaped like a sphere and is represented in a much smaller scale by a globe, using the Land and Water Globe, the Continent Globe, or a standard school globe.

Traditional American and International Holidays and Celebrations Abraham Lincoln's Birthday

Participates in and describes in increasing detail the origins and meaning of the traditional American celebration of Abraham Lincoln's Birthday (February 12). Observed annually.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Arbor Day

Participates in and describes in increasing detail the origins and meaning of the traditional American celebration of Arbor Day. Observed annually.

Canadian

Participates in and describes in increasing detail the origins and meaning of the traditional Canadian Heritage Day. Heritage Day is celebrated in Canada on the third Monday of every February. Observed in Year A.

Carnival/Mardi Gras

Participates in and describes in increasing detail the origins and meaning of the traditional Brazilian celebrations of Carnival/Mardi Gras (February/March). Celebrated annually or in Year A.

Chinese New Year

Participates in and describes in increasing detail the origins and meaning of the traditional celebration of Chinese New Year. (January or February) Celebrated annually in some schools or in Year C.

Cinco de Mayo

Participates in and describes in increasing detail the origins and meaning of the traditional Mexican/American celebration of Cinço de Mayo (May 5). Observed annually / Observed in Year A as part of a unit on Mexico.

Columbus Day

Participates in and describes in increasing detail the origins and meaning of the traditional Italian-American holiday, Columbus Day. (Mid-October) Optional/Observed Annually in the USA.

Diwali

Participates in and describes in increasing detail the origins and meaning of the traditional Indian celebration of Diwali. Celebrated in Year C.

Earth Day

Participates in celebration and discussion of Earth Day. Montessori schools often celebrate Earth Day and Arbor Day together as one festival. Celebrated annually in April

Easter

Participates in and describes in increasing detail the origins and meaning of the traditional Christian/American celebration of Easter (March/April). Observed annually.

Election Day

Participates in and describes in increasing detail the origins and meaning of Election Day (first Tuesday in November in election years in USA).

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

European Christmas traditions

Describes the origins and meaning of the traditional ways Christmas is celebrated in the Europe. Year B.

Father's Day

Participates in and describes in increasing detail the origins and meaning of the traditional American celebration of Father's Day (June). Observed annually.

Flag Day

Participates in and describes in increasing detail the origins and meaning of the traditional American celebration of Flag Day (June). Observed annually.

George Washington's Birthday

Participates in and describes in increasing detail the origins and meaning of the traditional American celebration of George Washington's Birthday (February 22). Observed annually.

Ground Hog Day

Participates in and describes in increasing detail the origins and meaning of the traditional American celebration of Ground Hog Day (February). Observed annually.

Halloween

Participates in and describes in increasing detail the origins and meaning of the traditional American celebration of Halloween. (October 31). Some schools celebrate International Children's Festival instead of Halloween. Optional or observed annually.

Hanukkah

Describes in increasing detail the origins and meaning of the traditional Jewish/American holiday, Hanukkah (November or December). Observed annually.

Inauguration Day

Participates in and describes in increasing detail the origins and meaning of the American celebration of Inauguration Day (every four years after a Presidential election; occurs in January).

International Cultural Festival

Participates in celebration and discussion of International Children's Day. Celebrated annually (normally in October)

International Day of Peace

Participates in celebration and discussion of the International Day of Peace. Celebrated annually

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Japanese celebration of Boys' and Girls' Days

Participates in and describes in increasing detail the origins and meaning of the traditional Japanese celebration of Boys' and Girls' Days. Celebrated in Year C.

Kwanzaa

Describes in increasing detail the origins and meaning of the traditional African/American celebration of Kwanzaa. Observed annually.

Martin Luther King's Day and Black History Month

Participates in and describes in increasing detail the origins and meaning of the traditional American holiday, Martin Luther King's Day (January 15) and Black History Month (February). Celebrated annually.

Montessori Week

Participates in celebration and discussion of Montessori Education Week: The story of Maria Montessori. Observed annually in late February.

Mother's Day

Participates in and describes in increasing detail the origins and meaning of the traditional American celebration of Mother's Day (May). Observed annually.

Native / Indian Heritage Day

Participates in and describes in increasing detail the origins and meaning of Native American / Indian Heritage Day. It is celebrated on the day after Thanksgiving Day in the USA. Observed annually.

Oktoberfest

Participates in and describes in increasing detail the origins and meaning of the traditional German celebration of Oktoberfest. Celebrated in Year B.

Passover

Participates in and describes in increasing detail the origins and meaning of the traditional Jewish/American holiday of Passover. (March/April). Observed annually.

Rosh Hashanah

Participates in and describes in increasing detail the origins and meaning of the traditional Jewish/American holiday of Rosh Hashanah. (Falls between September 5 and October 5) Observed Annually.

Sham El Nessim, which means "Smelling of the Breeze"

Participates in and describes in increasing detail the origins and meaning of the traditional spring Egyptian celebration of Sham El Nessim, which means "Smelling of the Breeze." Celebrated in Year C.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

St. Patrick's Day

Participates in and describes in increasing detail the origins and meaning of the traditional Irish/American celebration of St. Patrick's Day (March). Celebrated annually/Celebrated as part of a unit on Ireland in Year B

Succos

Participates in and describes in increasing detail the origins and meaning of the traditional Israeli celebration of Succos. (Falls between late September and late October) Observed Annually /Celebrated as part of a unit on Israel in Year B

Thanksgiving

Participates in and describes in increasing detail the origins and meaning of the traditional American holiday, Thanksgiving. (3rd Thursday in November). Celebrated annually.

Three Kings Day

Describes the origins and meaning of the traditional Mexican celebration of Three Kings Day (January). Observed in Year A.

Traditional American Christmas

Participates in and describes in increasing detail the origins and meaning of the traditional Christian/American celebration of Christmas. (December 25). Observed annually.

Valentine's Day

Participates in and describes in increasing detail the origins and meaning of the traditional American celebration of Valentine's Day (February 14). Celebrated annually.

Veteran's Day

Participates in and describes in increasing detail the origins and meaning of the traditional American holiday, Veteran's Day (November). Observed annually

West African Harvest Festivals

Participates in and describes in increasing detail the origins and meaning of traditional West African Harvest Festivals. Celebrated annually or in Year C.

Yom Kippur

Describes in increasing detail the origins and meaning of the Jewish High Holy Day of Atonement, Yom Kippur. (Falls between September 15 and October 15) Observed Annually.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

History

American Historical Holidays

Abraham Lincoln's Birthday

Participates in celebration and discussion of Abraham Lincoln's Birthday. Year A/annually in the USA

George Washington's Birthday

Participates in celebration and discussion of George Washington's Birthday. Year A/annually in the USA

Martin Luther King's Day and African-American History Month

Participates in celebration and discussion of Martin Luther King's Day and African-American History month. Year A/annually in the USA

American Historical Holidays

Columbus Day

Participates in celebration and discussion of Columbus Day. Year A/annually in the USA

Native American Indian Heritage Day

Participates in celebration and discussion of Native American Indian Heritage Day. Year A/annually in the USA

Veteran's Day

Participates in celebration and discussion of Veteran's Day. Year A/annually in the USA

Calendars

Linear Calendar 1

Uses a Linear (day-by-day) Calendar to record a simple history of the class's year: daily temperature, weather, birthdays, special events. At the end of each month and at the end of the year, they are laid out as a timeline and reviewed.

Standard Calendar

Uses a standard calendar to plan and record activities.

Day and Night

Initial experiences: Time

Is able to explain the basic concepts of day and night.

Digital Clock

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

A digital clock

Uses a digital clock or watch to tell time.

Does this exist today?

Timeline of History

Explores and discusses images of transport, homes, clothing, etc. from different periods (relating to fundamental needs).

Historical Holidays

Renaissance Fair

Participates in celebration and discussion of a Renaissance Fair. Year B

Initial Experiences with Time

Days of a Week

Begins to use the names of the days of the week in daily conversation.

How long is a year?

Displays an understanding of concept of a year as the time if takes for the Earth to revolve around the Sun through participation in the traditional Montessori Birthday Ceremony.

How long is a year? 1

Displays an understanding that a year is the time that it takes the Earth to go around the Sun one time.

How long is a year? 2

Displays knowledge that a year comprises 12 months, or 365 1/4 days.

Linear Calendar

Collaborates in compiling a linear calendar for the class, which includes points of interest, such as the weather and special events.

Months of the Year

Can sing the Months-of-the-Year song.

Names of the Months

Begins to use the names of the months of the year in daily conversation.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Personal Timeline

Makes a Personal Timeline, placing pictures of events from his, or her, own life in correct order.

Reading words relating to time

Reads cards that list the days of the week and places them in correct order.

Reads cards that list the months of the year and places them in correct order, either in a column or in radial format around a central 'sun.'

Sensorial exploration of time

Explores the language and measurement of time through various timers and clocks.

Teaching Calendars

Works with the Teaching Calendar, placing month names, days of the week, and numerals in sequence.

Tell the Days of a Week

Names the days of the week.

Timeline of a Day

Places pictures representing the events in a typical school day in correct order on a Timeline of a Day.

Timeline of a Year

Places pictures representing events throughout the year onto the Timeline of the Year.

Timeline of People's Ages

Places cards representing individuals of various ages in numbered spaces on a timeline showing how humans age.

Tomorrow, today, and yesterday

Explores concepts of tomorrow, today, and yesterday.

Year and Seasons

Sorts pictures of outdoor scenes into the different seasons that they represent.

Year and Seasons with the Timeline of a Year

Relates seasons to months of the year using the Timeline of a Year.

Matching Pictures of Daily Activities to the Timeline of a Day

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

The Timeline

Lays out pictures of activities in a typical day and matches them to the times indicated on a timeline.

Past and Present Chart

Understanding the Past

Places pictures on a Past and Present Chart to develop an understanding of the past.

Personal Timelines

Personal Timeline 1

Creates a personal history by placing photos of him/herself at various ages on the Personal Time Line.

Telling Time on a Clock

Introduction to the Montessori Teaching Clock

Places number pieces in the face of the Montessori Teaching Clock

Tells time to the half-hour

Tells time to the half-hour using using the Montessori Teaching Clock.

Tells time to the hour

Tells time to the hour using the Montessori Teaching Clock.

Tells time to the quarter-hour

Tells time to the guarter-hour using the Montessori Teaching Clock.

Tells time to within five minute

Tells time to within five minutes using the Montessori Teaching Clock.

Telling Time on a Clock

Tells time to the minute

Tells time to the minute using the Montessori Teaching Clock.

Timeline of a year

Year and Seasons

Discusses how the community in which he, or she, lives typically changes during each of the seasons, including: weather, appropriate dress, traditional activities, and major holidays.

1

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Places a series of seasonal pictures depicting typical outdoor scenes and activities on the Timeline of a Year according to season.

Timeline of History

Family tree

Collaborates in producing a personal family tree.

Traditional American and International Holidays and Celebrations Winter Solstice / Winterfest

Participates in celebration and discussion of the Winter Solstice (NOTE: Some schools adopt simple celebrations of the other seasonal solstices as well.) annually.

Understanding the Past

Comparing ages of people we know

Compares the ages of people in his/her own family using the Golden Bead 100 Chain.

What came first?

Listens to stories about people who lived long ago and shows an awareness and interest in what/who came before or after some other event or person.

Understanding the past

Artifacts from the Past

Explores and discusses images and artifacts from the past.

Does this exist today?

Sorts objects or images of animals according to whether they exist today or are from a time in the distant past.

Tell me about when you were a child ...

Has conversations with older people; listens to stories about what life was like when they were children.

Vocabulary of Time

Initial experiences: Time

Uses vocabulary of time in daily conversation.

What came first?

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Activities in a Typical Day

Looks at and discusses pictures of activities in a typical day, discussing which happen in the morning, afternoon, and evening; and discusses which comes before and after, etc.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Cosmic Studies

Fundamental Needs of People

The Needs of People

Expresses own needs.

Displays an awareness of needs of others.

Uses vocabulary of needs confidently and appropriately.

Participates meaningfully in discussions relating to needs (both in class context and in relation to events outside of class).

Categorizes common needs of humans using appropriate materials.

Timelines

Dating Historical Events

Explores different ways of recording the dates on which events occurred (e.g., "Two years before I was born, etc.").

Is able to identify given centuries along the Timeline of History.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Science

Being a Scientist 1

Learning to investigate 1

Uses various books, media, and other classroom resources to learn more about topics explored in class.

Setting up classroom science activities and experiments

Collaborates in finding and setting up temporary classroom science activities and experiments.

Being a Scientist 2

Applying principles to practical situations 1

Applies principles to practical situations: e.g., sorts iron filings from another material (such as sand or rice) using a magnet.

Applying principles to practical situations 2

Works on projects which apply principles: e.g., builds a simple circuit (such as making a flashlight or model lighthouse) using an AA cell, flashlight bulb, and a switch.

Introduction to recording results of simple experiments

Displays an interest in recording findings in various ways (see "recording" for more details).

Setting up simple experiments

Sets up experiments and tests hypotheses using a variety of materials and in different scenarios.

Simple experiments: hypothesis and results

Communicates reasons for hypotheses and displays an interest in exploring why hypotheses were supported or disproved by experiments.

Botany 1

The parts of a flower

Identifies and explains (in different ways) the parts of a flower.

The parts of a leaf

Identifies and explains (in different ways) the parts of a leaf.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

The parts of a tree

Identifies and explains (in different ways) the parts of a tree.

Care of Plants

Caring for indoor plants

Actively participates in the appropriate care of indoor classroom plants.

Classifying:

Classifying Plants: major groups of plant kingdom

Sorts images according to major lineages of the plant kingdom.

Classifying Plants: simple branching diagram

Sorts images of plants according to branching diagram, showing lineage.

Classifying Vertebrates: Simple branching diagram

Relates vertebrate groups to a simple branching diagram, showing lineage.

Classifying Vertebrates: Simple nesting diagram

Relates vertebrate groups to a simple nesting diagram, showing derived characteristics.

Sorts images of plants according to nesting diagram of five important characteristics (lives on land, vascular tissues, true leaves, seeds, flowers, and fruit).

Classifying: Living and nonliving

Sorts images into sets of living and non-living.

Sorting: Families of vertibrates

Sorts images of vertebrates into five major groups: ray-finned fish, amphibians, mammals, squamates, and birds.

Sorting: Plant, fungus, and animal

Sorts images into sets of plant, fungus, and animal.

Sorting: Vertebrates and non-vertebrates

Sorts images of animals into sets of vertebrates and non-vertebrates.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Sorts and classifies specimens in class nature center

Sorts objects in Discovery Basket according to various observed characteristics and communicates the criteria for grouping.

Classifying: First Classifications

Describing specimens in class nature center

Explores natural objects in Discovery Basket or on Nature Table, describes their characteristics, and communicates findings with others.

Classifying: Knowledge of Animals

Classified Card Material: Learning names of kinds of plants within

Works with Classified Card Materials to discover and learn the names of kinds of plants within each of the major lineages (e.g., kinds of flowering plants).

Classified Card Material: Matching labels to descriptions

Works with Classified Card Materials, matching labels to corresponding descriptions.

Classified Card Material: Names of animals within major groups of

Works with Classified Card materials to discover and learn the names of animals within each of the five major groups of vertebrates (e.g., types of fish; types of reptiles, etc.).

Classified Card Material: Names of species or breeds

Works with Classified Card materials to discover and learn the names of species or breeds within the larger classifications (e.g., types of ungulates or breeds of dog).

Classified Card Material: Reading names of animals within major

Works with Classified Card Materials to read the names of animals within each of the five major groups (e.g., types of fish; types of reptiles; etc.).

Classified Card Material: Reading names of species or breeds within

Works with Classified Card Materials to read the names of species or breeds within the larger classifications (e.g., types of ungulates or breeds of dog).

Classifying: Knowledge of Plants

Classified Card Material: Learning names of kinds of plants grouped

Works with Classified Card Materials to discover and learn the names of kinds of plants grouped by important characteristics (e.g., kinds of trees, herbs, etc.).

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Classified Card Material: Reading names of kinds of plants within

Works with Classified Card Materials to read the names of plants within each of the major lineages of flowering plants.

Classified Card Material: Reading names of plants grouped by

Works with Classified Card Materials to read the names of plants grouped by important characteristics (e.g., kinds of trees; kinds of herbs; etc.).

Classified Card Materials: Matching labels and descriptions.

Works with Classified Card Materials, matching labels to corresponding descriptions.

Exploring Nature

Further investigations into specimens found for the class nature

Uses a variety of classroom resources to learn more about specimens that are brought into the classroom.

Introduction to life cycles in the garden

Observes and discusses life cycles of plants and animals in school garden, noticing how living things grow, reproduce, die, and decay in a continues cycle of life.

Life Science: Collecting for the class nature center

Collects various natural items, which are added to classroom collections; discusses and explores, either alone or in a small group; uses scientific instruments, such as magnifiers, microscopes, etc., as well as various measuring tools; observes live animals and then releases them back into the place where they

Observing the garden over the seasons

Observes and discusses changes in school garden over the seasons.

Measuring: Life Science

Initial exploration with binoculars

Uses binoculars carefully and appropriately to make observations in relation to life science explorations (e.g., watches birds in school garden).

Life Science: Initial exploration with simple microscope

Uses a microscope carefully and appropriately to make observations in relation to Life science Explorations

(e.g., life in pond water).

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Life Science: Introduction to a Scientific Scale

Uses scientific scales (and other instruments for measuring mass) carefully and appropriately.

Life Science: Rulers and measuring tapes

Uses various simple rulers and measuring tapes carefully and appropriately to make observations in relation to physical sciences explorations.

Life Science: Using a thermometer in life science 2

Uses a thermometer carefully and appropriately in classroom experiments.

Uses a magnifying glass

Uses a magnifying glass carefully and appropriately to make observations in relation to Life Science explorations

(e.g., insects, seeds etc.).

Measuring: Physical Science

Initial exploration with binoculars

Uses binoculars carefully and appropriately to make observations in relation to physical science explorations.

Observing with magnifying glass

Uses a magnifying glass carefully and appropriately to make observations in relation to physical science explorations.

Physical Science: Using a Thermometer in Life Science 1

Uses a thermometer carefully and appropriately in classroom experiments.

Physical Science: Initial exploration with simple microscope

Uses a microscope carefully and appropriately to make observations in relation to physical science explorations.

Physical Science: Introduction to a Scientific Scale

Uses scientific scales (and other instruments for measuring mass) carefully and appropriately.

Physical Science: Rulers and Measuring Tapes

Uses various simple rulers and measuring tapes carefully and appropriately to make observations in relation to physical science explorations.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Using a dropper or pipette to transfer one drop

Uses a dropper or pipette to transfer liquid one drop at a time.

Observing and Recording: Life Science 1

Describing what we have observed 1

Verbally communicates observations using common vocabulary.

Describing what we have observed 2

Verbally communicates observations using increasingly sophisticated scientific vocabulary.

Recording observations by drawings

Records observations using drawings.

Recording observations using art

Records observations from light and color experiments using various art media.

Observing and Recording: Life Science 2

Recording observation in writing 1

Records observations in writing.

Recording observations using a computer or digital device

Records observations using digital media (text or image).

Using graphs to describe what has been observed

Records observations using various graphing techniques.

Observing and Recording: Physical Science 1

Describing what we have observed 1

Verbally communicates observations using common vocabulary.

Describing what we have observed 2

Verbally communicates observations using increasingly accurate scientific vocabulary.

Observing and Recording: Physical Science 2

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Cards that name scientific instruments

Reads cards relating to the various instruments used and places labels next to the corresponding instrument.

Recording observations by drawings

Records observations using drawings.

Recording observations using paint and other media

Records observations from light and color experiments using various art media.

Three-part cards that illustrate, name, and define scientific

Reads definitions of various instruments used and pairs with corresponding vocabulary labels.

Using graphs to describe what has been observed

Records observations using various graphing techniques.

Written descriptions of what has been observed - hand writing

Records observations in writing.

Written descriptions of what has been observed - using a

Records observations using digital media (text or image).

Parts of Animals 1

External body parts of vertebrates: Animal puzzles

Explores the external body parts of vertebrates by working with the Animal Puzzles.

Introduction to the names of the external body parts of animals

Examines the external body parts of a real animal.

Naming the external body parts of familiar animals

Identifies and names the external body parts of familiar animals.

Parts of Animals 2

External body parts of animals: Matching labels to images

Reads labels relating to various animals, and matches the labels to the corresponding images.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

External body parts of vertebrates: Nomenclature Cards

Identifies and names the external body parts of various animals by means of separate sets of Nomenclature Cards.

Parts of Plants 1

Botany Puzzles

Explores the parts of a plant by working with the Botany Puzzles.

Introduction to parts of a plant

Examines the parts of a living plant.

Parts of a plant

Identifies and names the parts of a plant.

Parts of Plants 2

Botany Cabinet: Leaf shapes as puzzles

Traces the borders of the leaf shapes in the Botany Cabinet and replaces them in the corresponding frames to learn the various leaf shapes.

Botany Cabinet: Matching leaf shapes to cards

Matches the insets from the Botany Cabinet to the three series of cards that correspond to the leaf shapes.

Botany Cabinet: Matching leaf shapes to plants outside

Finds leaves around the school grounds that correspond to the shapes in the Botany Cabinet.

Botany Cabinet: Names of the leaf shapes

Identifies and names leaf shapes.

Botany Cabinet: Reading and matching labels of leaf shapes to

Reads labels relating to leaf shapes and matches the labels to the corresponding images.

Parts of Plants 3

First series of Botany Cards: Naming parts of a plant

Identifies parts of a plant by means of first series of Botany Cards (tree, leaf, flower, root).

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

First series of Botany Cards:Labeling the parts of a plant

Reads labels relating to parts of a plant and matches the labels to the corresponding images.

Physical Principles 1

Introduction to Bridges

Explores types of forces by building "bridges" with straight, arched ,and corrugated card materials and testing the load-bearing capacities of each; forms and communicates hypotheses.

Introduction to Density and Buoyancy

Notices and comments on the effects of density and buoyancy in different contexts and asks relevant questions (e.g., "Why does ice float?").

Introduction to Friction

Creates heat by means of friction, rubbing hands together, and practices using the appropriate vocabulary.

Introduction to Magnetic Polarity

Explores magnetic polarity working with two bar magnets with N and S clearly marked.

Introduction to Ring Magnets

Explores magnetic force working with Ring Magnets on a dowel.

Introduction to Simple Circuits

Explores electrical current through work with a simple circuit, either closing the circuit using a switch or by closing the circuit using various conductive and non-conductive materials.

Introduction to Static Electricity

Explores static electricity by rubbing an inflated balloon against own hair; creating static electricity by rubbing a balloon on a wooly sweater; noticing and commenting on static electricity sparks, which occur naturally in cold, dry weather.

Introduction to Structural Integrity

Explores structural integrity of structures built with triangular or rectangular shapes.

Introduction to Viscosity 3

Explores how different liquids do not mix but form distinct layers through placing syrup, oil, and water in a jar and observing how they always settle into different layers; extending experiment by dropping different objects (berries, pasta, small stones) into the container, observing where they settle; forms

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Physical Science: Introduction to Thermometer

Uses a safety thermometer to measure the temperature of hands before and after rubbing together.

Sink and Float

Explores effects of density on buoyancy through working with the Sink and Float activity.

Physical Principles 2

Introduction to Viscosity 2

Explores how oil and water will not mix by making a simple "lava lamp" with colored water and cooking oil.

Physical Principles 3

Color Paddles

Uses Color Paddles, held up to a light source, to explore color mixing.

Introduction to Light and Shadow

Notices and comments on the effects of light and shadow in different contexts and asks relevant questions.

Introduction to Reflection

Uses a safety mirror to explore reflection and the related concepts of symmetry.

Introduction to Refraction

Explores concept of refraction through placing a stick in a bowl of water and observing from different angles to notice that the stick appears broken and/or placing an object in a bowl that is first empty and then filled with water to observe refraction.

Introduction to Refraction

Notices and comments on the effects of looking through a goldfish bowl; why magnifying glasses make things appear larger, etc.

Prisms

Uses a glass prism to split a beam of white light.

Physical Principles 4

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Introduction to Sound Waves 1

Uses a "singing bowl" or bell to explore the idea that sound is a wave and relates to the movement of air (child rings bell or sets up vibration in the bowl and feels the vibration with fingers), continues exploration through experiments.

Introduction to Sound Waves 2

Explores types of waves using a rope (longitudinal wave) and a slinky (transverse wave).

Observing different types of waves: sound, light, ripples in water,

Notices and comments on different types of waves and begins to ask which kind of wave it is (e.g., child may notice ripples in a pond or the sound of thunder being heard after a lightening bolt is seen).

Physical Properties of Substances 1

Sorting Objects

Sorts objects according to self-chosen criteria.

Sorting Objects by Material

Sorts objects according to the materials from which they are made (e.g., wood, metal and plastic).

Sorting: Hard or Soft

Sorts objects according to whether they are hard or soft.

Sorting: Natural or Manufactured

Sorts objects according to whether they are natural or manufactured.

Sorting: Vocabulary

Talks with adult or other children about sorting activities and practices appropriate vocabulary.

Physical Properties of Substances 2

Conservation of Volume

Explores conservation of volume by pouring a constant volume of water into different-shaped containers.

Exploring

Explores how something can be changed by adding something else. After observing and discussing the experiment, the child is able to either replicate the process alone or present it to another child (mixing ingredients [e.g,. water and corn starch]) that results in notable change of state).

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Introduction to Rigidity and Elasticity

Explores properties of rigidity and elasticity by working with and classifying according to rigidity and elasticity. After observing and discussing the experiment, the child is able to either replicate the process alone or present it to another child.

Introduction to Temperature and Different States of Matter

Explores how something can be changed by changing the temperature. After observing and discussing the experiment, the child is able to either replicate the process alone or present it to another child (freezing water, watching ice melt, etc.).

Introduction to Viscosity

Explores viscosity by dropping a marble into jars containing syrup, vegetable oil, and water: After observing and discussing the experiment, the child is able to either replicate the process alone or present it to another child.

Magnetic/Non-Magnetic

Explores the effects of magnetism on various materials through working with the Magnets Activity.

Observation of Physical Properties of Substances

Notices and comments on the physical properties of substances in various contexts.

Pouring Air

Explores one of the properties of air by immersing an apparently empty pitcher upside down into a tank of water and then gently tilting to release the air.

Properties of Substances: Command Cards

Reads simple Command Cards relating to various properties of substances, carries out the experiments, and places the adjective cards to correspond with the substance/ material that corresponds to the word.

Solid, Liquid, Gas

Explores properties of matter by working with and classifying materials according to solid/liquid/gas.

Vocabulary of Properties of Substances 2

Reads cards relating to the various properties explored and places cards next to objects, images, or materials that represent the property.

Reads definitions of various properties of substances and pairs with corresponding vocabulary labels.

Study of Animals 6

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Introduction to human anatomy 1

Explains, in simple terms, the functions of the major organs of our bodies: brain, heart, lungs, stomach, intestines.

Explains, in simple terms, the functions of the major organs of our bodies: brain, heart, lungs, stomach, intestines, as well as our skin.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Visual Arts

Art History

Abstract

Works with pairing and sorting cards of abstract art.

Studies and discusses representative works from abstract period.

Creates work in style of abstract period using similar techniques.

Developmental Stages in Visual Art

Stages

Explores media through uncontrolled or poorly controlled scribbles.

Scribbles become controlled with evidence of composition and intentional use of shapes.

Combines shapes with lines and outlines to build individual line formations.

Uses lines to create designs.

Uses symbols (such as mandalas, suns, and radials), as child moves between non-representative exploration and representative art.

Begins to name elements in art work (sun, mommy, me, etc.).

Begins to draw recognizable human figures, plants, and objects.

Combines symbols to make pictures.

Creates early representative artworks; sky and ground appear.

Creates a picture that tells a story.

Draws from an object - still-life.

Draws a person - portrait.

Draws a landscape using perspective and shading.

Combines media and techniques to produce original work.

Elements of Visual Art

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Color

Explores primary colors using various media.

Explores mixing primary colors to produce secondary colors using various media.

Names all primary and secondary colors in context of art media.

Uses more advanced language of color in context of art media.

Explores color value with various media.

Explores effects of contrasting color.

Explores tints and shades with black and white.

Explores tints and shades by adding black or white to a hue.

Produces own color wheel - six part.

Produces own color wheel - twelve part.

Light and shadow

Explores negative and positive images with various media.

Uses shading to represent shadow and dimension.

Becomes aware of shadow and effects of light direction.

Explores shadow/light and shade with various media.

Line

Explores types of lines using different media.

Uses words to describe different types of lines: thick, thin, diagonal, horizontal, vertical, straight, curly, wavy, scalloped zigzag, long and short.

Explores lines using different pencils ranging through HB, H, and B types.

Explores types of lines using different media: strips of paper; thin and thick felt markers; crayons; and paint with different brushes.

Alternates thin and thick stripes with different media.

Creates line designs (complexity increases with age and ability).

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Patterning

Explores repeat patterns using various stamps (e.g., vegetable stamps).

Explores making square patterns with various media.

Explores making half-drop patterns with various media.

Explores making alternative motifs with a half-drop pattern with various media.

Explores making complex net patterns with various media.

Explores symmetrical and mirror images with various media.

Explores patterns and designs from various cultures and attempts to replicate those styles.

Shape

Explores types of shapes using different media.

Uses words to describe different types of shapes: *blob, outline,* geometrical names where appropriate.

Space and composition

Explores composition in art with various media.

Fills space with various shapes and line combinations.

Textures

Explores textures by making rubbings using different media.

Uses artistic rubbing techniques.

Explores various media to create texture in artwork.

Makes a collage with rubbings.

Photography

Photography

Uses digital camera to take photos in classroom.

Begins to explore composition in own photos.

Using Art Materials and Media

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Cutting

Uses scissors to perform initial cutting exercises: one snip.

Uses scissors to perform initial cutting exercises: on a diagonal.

Uses scissors to perform initial cutting exercises: two or more snips.

Uses scissors to perform initial cutting exercises: zigzag lines.

Uses scissors to perform initial cutting exercises: cutting on a curved line.

Cuts out a square or rectangle.

Cuts a free-form shape.

Cuts a shape from the middle of a page.

Cuts spirals.

Cuts corners.

Cuts folded paper.

Cuts chain links.

Applies cutting on lines and free hand to produce various items.

Gluing

Glues mosaics.

Glues super-imposed forms.

Glues patterns with various media and with increasing complexity.

Creates a collage with different media.

Uses edge-gluing techniques to create three-dimensional structures.

Makes paper chains.

Modeling

Explores kneading, stretching, squeezing, and rolling clay.

Makes simple pinch pot with clay.

Makes coil pot with clay.

Makes simple slab constructions with clay.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Adds decoration to clay constructions.

Makes plaster of Paris molds.

Uses vocabulary such as wedging, slip, and names of tools.

Mixes salt dough.

Makes salt-dough figures.

Painting

Explores texture, line, and form with one color at a time.

Uses two colors together without mixing (keeping brush clean).

Uses three primaries to mix other colors.

Paints with tempera.

Paints with water colors.

Paints with transparent water colors.

Explores crayon resist painting techniques.

Explores textured painting techniques.

Explores wet-on-wet painting.

Paper Folding and Cutting

Explores elementary origami folds (valley and mountain folds).

Explores various uses of paper to create texture.

Makes paper snowflakes.

Uses double-sided paper to create interesting textures.

Follows simple origami patterns to create objects.

Follows more complex origami patterns to create objects.

Printing and stamping

Uses stamping materials effectively.

Explores different media for printing and stamping.

During the years from age 3 to 6, students in Montessori programs will normally work toward developing the following skills, knowledge, and understanding. Many skills are introduced initially at this level, and studies continue at the next level.

Threading

Makes chains with various media.

Explores repeating patterns with various media.

Wax Crayon Techniques

Creates batik effect with wax crayons and ink.

Explores sgraffito/etching with wax crayons.

Explores melted-wax techniques.