



Montessori House  
Primary Class Curriculum  
Second Year

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# Practical Life

In this year, children use the skills learned in the first year to engage with their environment in real and useful ways such as cooking food, pouring beverages, sweeping their floors, dressing independently, doing laundry, and preparing one's environment.

Anything that your child can use in their daily lives is practical life work, so you can include anything from snow shoveling to painting a wall in this section. Use the setups and presentation techniques that you learn here to setup new projects in the most streamlined manner for your child.

Use your Montessori journal, see our blog for downloadable templates, to keep track of work that you present as well as your child's response to the presentations. This will help you refine and improve your teaching style, too.

## Grace and Courtesy

Initial grace and courtesy presentations including greeting others, opening/closing doors, how to interrupt a conversation, thank you/please, sneezing, coughing, and yawning were made in the first year.

This second year of work further addresses the development of the whole child as part of the integrative Montessori educational experience that runs through high school and into the early 20s.

As you spend time with your child, make a note of topics that need to be covered, and use this basic presentation list as a template to introduce your own.

At the circle, demonstrate for two or more children, if possible, so that children can role-play.

Introduce the topic and say that you will show them what to do in this situation. For example, with the topic below, "May I please \_\_\_," have two children role play the situation. You can substitute an adult, if needed, but it is best to have children working and practicing with one another. They really enjoy this type of interaction, and it allows them to work on practices that they will carry into their own social lives.

### #1 Greeting Others (review)

People you know -

- "Hello. It is nice to see you."
- "Good morning. How was your weekend?"

People you are meeting for the first time -

- "Hello. It is nice to meet you. My name is \_\_\_."

Now make sure that your child's body language works. Show your child how to walk up to someone, offer a hand, and look in the person's eyes during the conversation.

### #2 Thank You and You are Welcome

In the first year, we instruct parents to use "thank you" and "you are welcome" in a simple role-playing situation.

This year, add to the situation in the role play with "thank you" and "you are welcome" in the same scenario.

# Sensorial

The sensorial materials offer the possibility of the child's making up or discovering possible variations in the exercises. The adult does not show the variations because it is the child's discovery of them that makes them significant/ For example, the broad stairs (also known as the brown stairs) can be built as a tower and that is important for the child who makes the discovery.

The sensorial material *provides a reason, impetus, and opportunity for certain language to be presented and understood*. The language that is presented is that which pertains to the quality isolated by the particular material. It is with language that we attain the ultimate end of the classification process because the ability to express an understood concept symbolically with words and, thereby communicate our experience to others is a most important step along the way of becoming an integral part of the group into which we were born.

It is possible to play games with sensorial materials. Just before the child's interest in the material wanes, he or she is offered games which help to keep his or her interest alive and encourage him or her to repeat the experience with material, so that a firm concept will be carried in his or her memory.

Sensorial materials have a control of error built into their design, therefore enabling the child to see his or her own mistakes and correct them independently of the adult. Some of the controls are mechanical and some are within the child in the sense that they require the child to have developed an internal sense discriminatory power. For example, if the child has misplaced the red rods a definite visual disharmony will exist such that the child will notice the mistake.

Sensorial materials do not have a rigid order of presentation. The interests of the child and the sensitive periods determine what is presented. It is helpful, though, to present those exercises with a mechanical control of error first and it is recommended that the first materials be those that only involve a single sense.

It is important that you do not hover as your child experiments with testing the fit of the wrong insets into various frames, experimenting with various circles in different frames, peek through the frames, or whatever else the child finds useful in exploration. If the equipment is at risk, simply suggest putting it away and redirect your child towards outdoor active play.



The Montessori training course discussion of Sensorial work is quite extensive, so we include here a summary for parents and teachers so that everyone has a bit of preparatory discussion before starting the presentations.

The discussion below is from our initial teacher training in London at Dr. Montessori's own center.

### **The Child**

The Child is brought by nature to classify his environment and to experiment sensorially. His first task is to find out what objects in the environment are (he first is able to distinguish his mother or the adult who cares for him), and what their qualities are. There must be a means by which the child distinguishes so it is obvious that even when the child is in infancy and can explore only passively, that is, with his eyes and ears; he, still, has embarked on the task of classifying his environment. By six months, the child has already developed the power to distinguish one object or one person from another.

Next, the child adds movement to his explorations. When the child can move independently, he or she is no longer content to explore sensorially just using his or her eyes and ears. The child feels a strong inner urge to gain manipulative experience as well as experience from walking and climbing around. In order for the child to build a strong functioning intellect he needs hand exploration.

Parents should take care to provide an environment rich in opportunity for manipulative experience because it is only through such experience that the child gains knowledge of the qualities of objects in the environment and it is only by gaining knowledge of qualities that he or she will be able to develop the intellectual power of classification. The child, of course, also requires all the freedom that is possible to give without endangering him or herself; only with freedom can he or she truly explore and develop the self-reliance that comes from doing for him or herself what he or she is able to do. When the child arrives in the classroom he or she can distinguish and classify will depend on what his or her early environment has offered.

### **Purpose of Sensorial Materials in the Montessori Classroom**

The purpose of the sensorial materials is not to give sensorial impressions, but rather to build on those impressions already gathered and to aid in the process of their classification. They are designed to enable the child to arrive at a clearly conscious level of discrimination rather than a vague one. For example, through the use of language we can visualize what we have not yet seen or experienced and it is one of the characteristics (to be discussed in more detail later) of the sensorial materials that they allow for the learning of language at a time when sufficient experience has been accumulated to make that language fully understood.

Since any object in the environment can be described with reference to the qualities of size, shape, form, and color it is important that during the stage of the absorbent mind that the child be able to have enough experience to develop a sense of clarity about those

attributes and be exposed to the language that will permit him or her to communicate about them.

For it is through the child's own experience that he will get an understanding of abstract concepts. Maria Montessori found that understanding of abstract qualities could serve the child as keys in his exploration of the environment. So, she designed "materialized abstractions" through which the child could arrive at clear impressions of those abstract concepts, by using his natural form of learning which is sensorial exploration allied to manipulation. It is often possible to observe a child identify an object by feel more effectively than by sight.

But it is not just finer and finer perception that is our goal to help the child attain, but, rather, the real objective is to help the mind achieve an order and clarity which will serve in the acquisition of logical and reasoned thought. Through repeated exercise of the mind in the effort of classification, the child can conquer his environment. In summary, the purpose of the sensorial materials is to enable the child to form clear, conscious ideas of abstractions through which he can classify his environment. (The more relationships you understand and the more clearly you understand them, the more things with which you are able to cope.)

### **Characteristics of the Sensorial Materials**

The Sensorial materials *isolate qualities*. For example, the Red Rods are all alike except in one respect: length. The color tablets do not differ except in color. Such isolation of qualities allows the child to form a really clear impression of a particular quality.

The sensorial materials *attract the child* because they are maintained in good condition, are interesting to a child in the proper stage/period and are consistently available. It is important to remove them for as short a period as possible when repairs are needed.

Sensorial materials require exactness in usage. The child must already be on the way to controlled movement when you present the sensorial materials because unless he or she is reasonably exact, the purpose of the materials will not be apparent. While using the sensorial material the child can refine further his movements, but he cannot make the initial steps at control with them. Presentation must be exact so the child will not be given an easy opportunity for failure.

The materials are designed to be used by one individual at a time because they are designed for trial and error and, in the end, self-correction of errors. The child can repeat the manipulative experience as often as he or she wants to or feels the need to. By means of his or her own work, the child gradually builds up and strengthens his or her understanding of the concept presented by the materials as they are used.

## Gustatory Sense: Tasting



Prepare foods such as the ones above in a beautiful presentation. Your child can work with you to prepare the foods and setup the platter. Children love this tasting platter work. You can include tasting platters as a concept for meals, too. Children can experiment with fermented drinks, infusions, and teas, exploring tastes as they go along.

### Presentation:

Taste the foods as one would do in a regular cheese tasting, savoring each bite and clearing the palate with a neutral flavor such as a bland cracker or a sip of a mild warm beverage.

An early American version of this exercise introduced different types of apples with subtle flavor differences, along with various melons, grapes, and cheeses. Pairings of the fruits with different cheeses can also be made. Original exercises included apples of the Delicious, Jonathan, Pippin, Macintosh varieties, along with cantaloupes, honey dew, and crenshaw melons with cheddar, jack, and gouda cheeses. Fresh herbs such as peppermint, spearmint, basil, and lavender can be used in combination, infused to make tea, or tasted alone.

### Work with Cooking

Your child can work with cooking experiments to augment this work. For example,

- Sauté spinach in butter. Compare the taste before and after cooking. Discuss how bitter greens require moisture and fat to release their water and fat-soluble nutrients.
- Make Indian naan or traditional sourdough bread.
- Cook meat and rice to wrap with seaweed wraps.

Provide fresh herbs and whole dried herbs for your child to prepare. He or she can experiment with various combinations of seasonings for dishes such as guacamole, sautéed vegetables, meat skewers, yogurts, and cheeses.

Use this base of experience to enable your child to prepare meals.

Note that this is the original Montessori exercise that eventually became the tasting bottles exercise for the modern classroom.

## Geometrical Plane Figures Cabinet

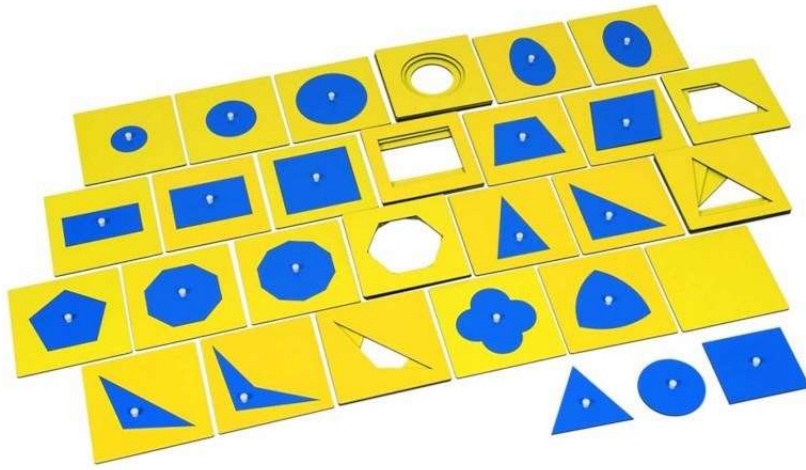


Photo: Nienhuis

### Material:

- Geometric Cabinet with trays that include the shapes shown above (cabinet not shown)
- A green felt floor mat

### Description:

The geometric cabinet includes the material described below. Note that the bottom of the drawers should be the same blue as the insets. This is important for the observation of the empty space left by the frames. Besides the insets and bottoms of the drawers, the rest of the cabinet should be a natural wood color.

### The Presentation Tray:

This is a wooden tray that contains three wooden inset shapes in wooden frames for a square, a circle, and an equilateral triangle. This tray will be used for other shapes later.

### Drawer 1: Six Circles

This drawer contains six inset circles arranged in order of size. The circles vary in diameter by 1cm, ranging from 5 cm. to 10 cm.

### Drawer 2: Six Rectangles

This drawer contains six inset rectangles arranged in order of size. The rectangles vary in width by 1cm, ranging from 5x10cm to 10x10 cm.

### Drawer 3: Six Triangles

This drawer contains six inset triangles: Right-angled scalene and isosceles, obtuse-angled scalene and isosceles, acute-angled scalene and isosceles. They are arranged in the

drawer with the three scalene triangles in one row and the three isosceles triangles in the other row. Arrange them by obtuse, right, and acute angles in both rows.

Triangles:

Equilateral triangle:	All angles and sides equal
Obtuse-angled triangle:	One angle greater than 90 degrees
Acute-angled triangle:	Three angles less than 90 degrees
Right-angled triangle:	One angle is 90 degrees

Drawer 4: Six Polygons

There are six inset polygons each inscribed within a 10cm diameter circle. Polygon = many angles

Pentagon:	Five sides and five angles
Hexagon:	Six sides and six angles
Heptagon:	Seven sides and seven angles
Octagon:	Eight sides and eight angles
Nonagon:	Nine sides and nine angles
Decagon:	Ten sides and ten angles

Order the polygons in the drawer from the pentagon at the top left to the decagon on the bottom right.

Drawer 5: Four Quadrilaterals, the Ellipse, and the Oval

This drawer contains four inset quadrilaterals (parallelogram, rhombus, trapezoid, trapezium) and two inset curved figures (ellipse and oval).

Quadrilaterals:

Square:	All sides are equal and all angles are right angles.
Rectangle:	Opposite sides are equal and parallel, and angles are right angles.
Parallelogram:	Opposite sides are equal and parallel (the square, rectangle, and rhombus are all parallelograms).

The cabinet contains all the regular plane figures and enables the child to classify every plane shape they encounter in the environment. Remember to include the figures from the presentation tray for presentations of their relevant shape type. For example, the equilateral triangle should be presented with the triangles.

Presentation of the Presentation Tray:

Bring the tray to the mat. Your child can unroll the mat. Remove one inset. Show the child that the shape of the inset and the blank space of the frame are the same. Hold the knob with your left hand. Trace the exterior of the shape gently with the tips of two fingers. Now trace the outline of the frame in the same way.

Put the inset back into the frame. Repeat for the other shapes. Your child can take his or her turn now. Once your child is familiar with the shapes, you can present their names using the three-period lesson today or another day.

# The Sciences and Humanities

In this second year of material, we expand on the key topics introduced last year, and present new material to help your child build a well-rounded curriculum that develops his or her understanding of new curricular topics.

Plan to have one trip a week to an interesting and compelling destination such as museums, art gallery, national forest, field, garden, beach, riverside, park, or symphony.

In the initial presentation of this section, we suggested wall maps for your home classroom. If you do not have maps yet, look online at such sites as the National Geographic for basic world maps as well as maps of the location in which you live. Other maps such as local national parks or even city road maps make interesting and useful resources as well.

## Evaluation and Review

It is useful to make notes as your child progresses through different types of art, music, science, and other presentations and projects. If you are in a classroom setting, it is helpful to have a formal note template for your student's PTA evaluations.

Having a record of your child's age and presentation type is also useful if there are any signs of developmental problems because you will have specifics to discuss with health care professionals.

The use of language in the reading and writing required in various projects in this section provides you with supplementary feedback on your child's reading level and writing skills. As your child begins to use books for basic research, you can spend time with him or her on reading projects that your child works on independently using you as a resource. During these times, it is useful if you have your own work or project, so that your child needs to seek you out for assistance.

## The Learning Process

This is indeed an inspiration and instructional quote for all parents and adults. We must observe ourselves and focus on helping children discover themselves.

He did not speak until he was three, and when he could talk, choosing words was difficult. His frequent angry outbursts occasionally turned violent. As you might expect, he did poorly in school and his adults predicted that he would amount to "nothing good." But when taught how to make buildings from playing cards, he spent countless hours at it, constructing some structures 14 stories high. He also enjoyed making jigsaw puzzles and constructing buildings from prefabricated blocks. By the age of 10, his skill in building elaborate structures was recognized, and at age 15 he was put into a special school that stressed learning through observation and doing. These early experiences, combined with his unique intellectual gifts, helped this young man--Albert Einstein--to become one of the most creative scientists ever to expand our knowledge of the world.

Peter Rillero in excellent book, *Doing Science with Your Children*.

As you work with your child at home, you will make a certain number of presentations each week, depending on your child's progress and individual interests.

Remember to observe your child, make notes in your Montessori teaching journal (free on our blog), and follow their interests as you figure out what to present for this section. There is no set order here.



## Science: Using a Microscope

This is an introductory exercise for presenting the use of a microscope to your child.

Material:

- Microscope
- Glass slides
- Three types of sample materials on a small plate to put on slides
- Three flat toothpicks
- Small tray

The microscope should come with glass slides for observing samples that you place on the slide. These initial samples can include such items as a bit of strawberry, a leaf, a piece of fabric, a fingernail cutting, human hair, or the wing of a dried bug. The ends of the toothpicks should be flat, not pointy, or you can use a small knife to spread the material. A toothpick is better because the sample will be a better size.

Presentation:

1. Invite your child to join you.
2. Walk with your child to the shelf where you keep the microscope.
3. Show him or her how to carry it. Place your dominant hand on the neck of the microscope and the other hand underneath the base. Tell your child that this is how you hold a microscope. Walk to the table and put the microscope down.
4. Your child can bring the tray to the table.
5. Sit down at the table.
6. Pick up a slide using one hand on each end in a three-fingered grip (you could hold it with a single hand, but your child's hands are too small).
7. Prepare the first slide by picking up a toothpick, taking a small sample of the strawberry, and putting it on the slide.
8. Invite your child to look at the slide.
9. Put this slide into the holder on the microscope.
10. Look through the microscope.
11. Invite your child to look through the microscope.
12. Discuss the features of the strawberry that are now visible through the microscope.
13. Let your child prepare the next slides and examine them through the microscope.
14. At the end of the exercise, let your child carry the microscope back to the shelf. He or she can wash the slides in a plastic basin in the sink.

After this initial presentation, your child will probably expand on the project independently by searching for various types of items to examine under the microscope.

# Political Geography

As the physical features of the Earth give way to borders made by human beings, the study of Geography turns to political definitions to further study life on the surface of the planet.

This area of study begins slowly in the child's first year of the Primary class, proceeding at an individual pace for each child. The very youngest of pupils will learn about flags, countries, and maps, as the older ones expand their reading and writing practice for in-depth study.

# Continents and Countries

## Flags of the World

The work with flags made of fabric provides children with the opportunity to practice a wide array of skills, ranging from an introduction to visual pattern identification and reading to music and dance.

### Identification of Flags

#### Exercise 1: Introduction

##### Material

- A set of fabric flags of the countries of the world in stands.
- A box with extra stands.
- A series of cards printed with the flags of the different countries
- A set of labels
- Control chart using printed flags

##### Presentation

This presentation is given to a small group of students. The adult selects the flag of the United States, France, and England for the first presentation. Ask the children to pick out our flag and identify the colors in it. Compare and contrast the colors and patterns in the flags of England and France. As the adult speaks, the children handle the flags. If the level of interest remains high, introduce another group of three similar flags. Select groups according to color patterns or symbols.

##### Exercise 1

Children can work with the fabric flags, printed flags, and labels. They check their own work with a control chart.

##### Exercise 2

The child does the same work as above, but with three-part matching cards for flags that are not in the classroom.

# Measuring the Passage of Time

The concept of time is indistinct and fuzzy for young children, so we include a range of work to help make it concrete.

The timeline below and the calendar work can be done in parallel in the curriculum.

## Timeline of Life on Earth



Work by Emily Counts, Etsy shop RhymeReasonAcademy

The timelines of life on Earth are presented in the Great Lessons during Junior class, but we display a timeline on the wall or in a folder for the Primary class. It can also be a useful project for older children in the Primary class who struggles with reading.

### Exercise

The adult builds the timeline from the individual era pages. The children can use the timeline as a reference to build their own timelines on the blank master timelines or eras.

# Botany

During the Primary class years, the most important aspect of the natural world is that time spent outdoors as children walk, observe, and engage with the world around them. Time spent indoors should bridge the gap between the tangible, touchable world of nature and the material representing the details of plants and animals.

During outdoor exploration, let the children guide the process whenever possible, encouraging them to stop to observe whatever captures their interest. An afternoon spent outdoors is considered time well-spent.

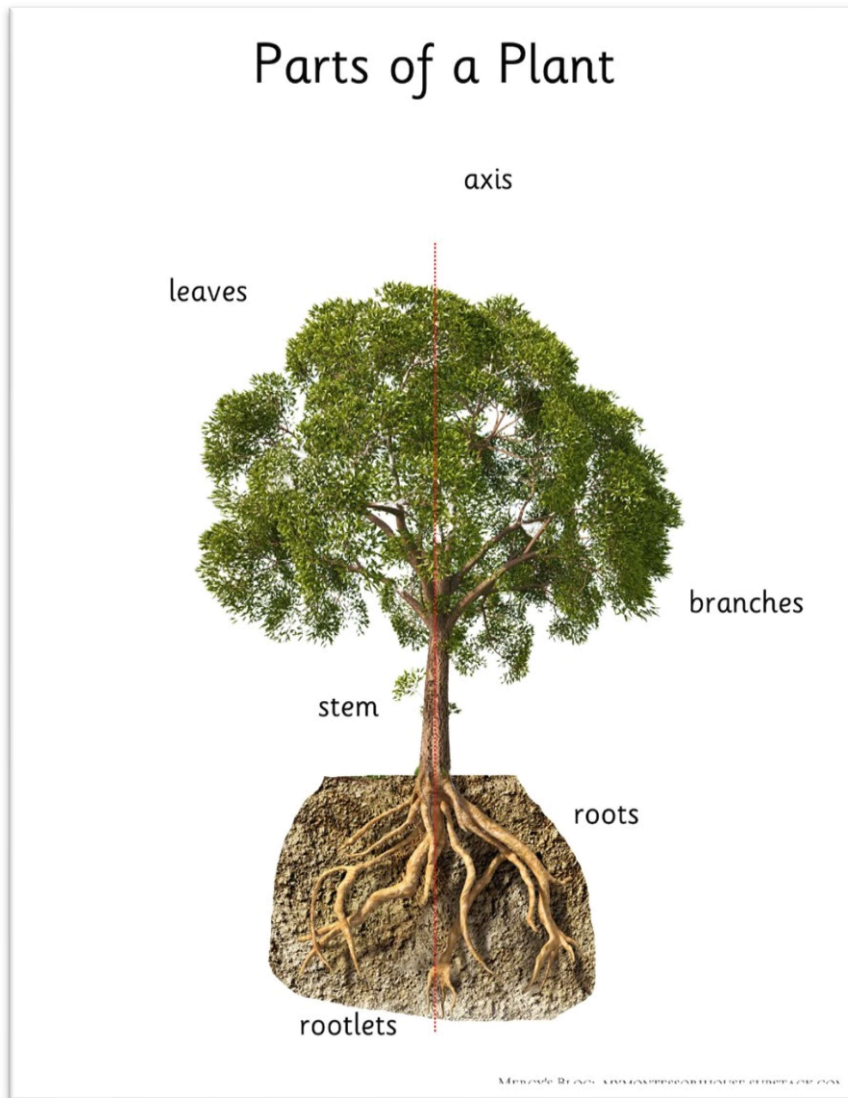
The adult and children can search for items with which to stock the nature shelf in the classroom, a treasured Montessori tradition. Items of interest include such items as dried bugs, abandoned bird's nests, feathers, pinecones, leaves, seeds, shells, and shed snakeskin. The adult is available to answer children's questions about the material they find during these nature walks.

The books for this section of the classroom supplement the formal material, as well as the nature shelf collection, created a foundation of understanding that will underpin the entire curriculum.

For the adult, the "Nature in Education" chapter from *Discovery of the Child* remains a classic reference for this section.

The most important thing in the Children's House is to not impinge upon the child's enthusiasm for anything. Not a plant, not a book, not language. At any point, if the adult feels the child's enthusiasm or interest might waver shortly, the adult must focus on the plant, encouraging the child to stroke its parts, smell the leaves, and return it gently to the water. Once the plant is in the water, the child can take it back to its place in the classroom.

## Botany Introduction: The Plant



### Material

- A plant with green leaf, a woody-colored stem, defined branches, no flowers, and all its roots in a jar of water
- A magnifying glass
- A tray

The format of the reading booklets and wall chart has the same sequence of presentation of parts as the cars. The relevant parts should be colored in when labeled, avoiding the use of other colors such as red to highlight them.

## Types of Leaves

### Material

- Real examples of compound (walnut tree) and simple (maple tree) leaves.
- A set of three-part cards with examples of both
- A wall chart for the wall and folder rotation

Add dried or fresh examples of the leaves to the nature shelf.

### Presentation

The child handles and examines the two samples as the adult points out the differences between the two types. The adult points out the attachment of the compound leaf, how each leaflet looks like a complete leaf. She shows how there are two stipules at the base of the compound leaf, telling us that it is a compound leaf. She points out the single leaflet at the tip. For the simple leaf, she traces with her finger the margin, explaining that this leaf is a single piece. The margin never reaches the central vein. She uses the Botany nomenclature presentation.

### Exercise

The adult brings a collection of compound and simple leaves into the classroom for the children to examine. Alternatively, the adult takes the children for a nature walk or trip to a nursery.

### Exercise 2

Children draw the different leaves. They may label them and make booklets, if they wish.

### Exercise 3

The child can put a carnation and a stalk of celery into a jar with blue food coloring added to the water. They can see how the dye is drawn into the flowers and leaves. Discuss how we only use this dye for the science experiment, but this celery cannot be eaten because the blue dye is unhealthy when it goes into our own bodies.

Alternatively, the child can make a natural dye (without mordants), using this dye for the water. Boiled avocado seeds and red cabbage both make a good red.

## Parts of a Seed

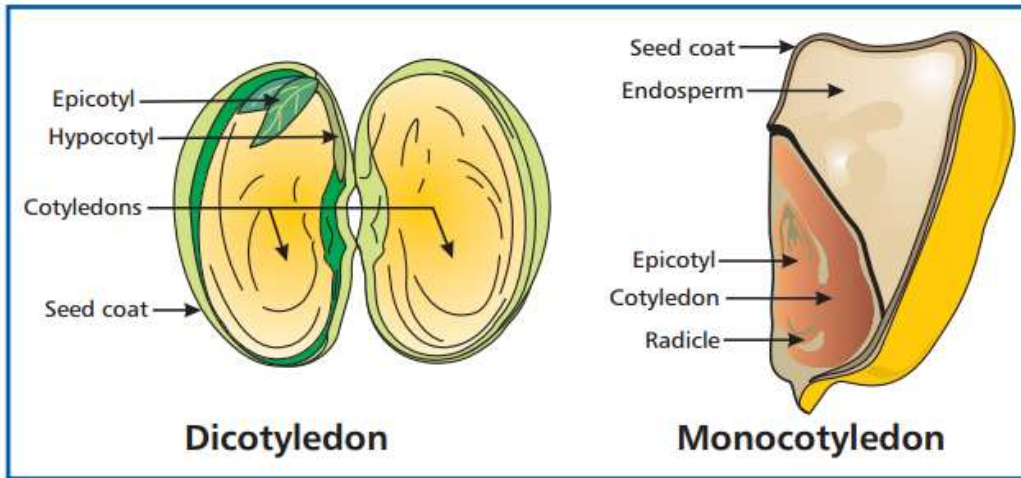


Photo: societynatureo.blogspot

The children should sprout and grow a range of both dicotyledons and monocotyledons. Beans, peas, apples, roses, and oaks are examples of dicotyledons with their two cotyledons. Garlic, onion, corn, and bulbs such as daffodils all have one cotyledon, so they are monocotyledons. Daffodils are toxic to mammals including humans, providing a teachable moment.

### Material

- Real examples of each type of seed (containing the intact parts)
- A strong magnifying glass
- Cards with pictures and labels
- A wall chart for wall/folder rotation

### Presentation

The adult sits at the table where the children are examining the seed types. The children look at the different seeds, opening them carefully to observe their parts. The children use a strong magnifying glass to compare and contrast the parts on the two types of seeds, touching and handling everything. The adult uses a pencil to indicate the parts, if her fingers are too big for the seed samples.



## **Parts of Animals: List for Primary Class**

The animals listed here are the basic types introduced during this year and the next.

The parts of the animals are introduced in a logical order, according to the structure of the animal, usually beginning at the head or topmost part.

The adult discusses the distinctive aspects of each, she shows that most of them have common parts as well.

1. Fish: fish, scales, lateral line, dorsal fin, pectoral fin, pelvic fin, anal fin, caudal fin, operculum
2. Frog: frog, nostrils, eyes, tympanic membrane, forelimbs, hind legs, webbed feet
3. Turtle: turtle, shell, carapace, plastron
4. Bird: bird, beak, breast, wing, tail, legs, feet
5. Snail: snail, shell, tentacles, eyes, foot
6. Spider: spider, cephalothorax, abdomen, legs, spinnerets
7. Insect (introduce two types to cover all the parts): insect, antennae, head, spiracles, compound eyes, ocelli, thorax, wings, legs, abdomen, cerci
8. Caterpillar: caterpillar, head, mouth, thorax, abdomen, true legs, prolegs, clasper, spiracles.
9. Butterfly: butterfly, antennae, eyes, head, proboscis, palps, legs, forewings, hindwings, abdomen, thorax

# Language: Reading & Writing

This year, your child will begin to build intermediate reading and overall language proficiency skills, based on the foundation created in the first year of the program.

When you make material for yourself, it is easy to find pictures online to use in cards. For example, you can find photos of all the animal names we use for vocabulary skill building -- this is a fabulous learn-to-read project as children learn intriguing facts as they work on reading.

As you move from short vowel phonetic words to phonogram work, it will become apparent how valuable your earlier communication and discussion exercises were with your child during the first year of Primary class. Your child will already have an extensive vocabulary and solid grasp of the language, so the transition to reading and writing these new words will be easy.

Avoid asking children to read aloud the words they make with the movable alphabet or via writing because we are waiting for the children to want to share aloud. It is hard to want to share something aloud when one is still learning it. Remember to discipline other adults who might pester your child during this phase of development.

If your child has any pronunciation problems, please begin using the free therapy chart on Mercy's blog, <https://mymontessorihouse.substack.com>. Problems are almost always due to their teeth being too tight, so it is crucial to do myofunctional exercises and add nutrients to coax the jaw into growing properly. Work with singing and singing drills (see the music section) is even more important than usual in this case.

To those of you who are Montessori teachers, please do remember that the numbers assigned to the sounds in your teaching courses are NOT the presentation order for these sounds.

Remember not to mix fonts between different pieces of equipment. There has long been confusion over the fact that Dr. Montessori used cursive for some material because people forget that she used European cursive, and that she provided reading material in European cursive. We use Sassoon font in print because it provides a smooth transition to the linked Sassoon cursive for writing. This is the closest to an old-style European cursive that is easy for children to recognize from the print.

You can introduce a calligraphic pen for calligraphy for children who would enjoy experimenting with it.

Wait to introduce capital letters until your child can read reasonably well. You can explain the capital letter at the beginning of sentences, if asked, but avoid teaching the capital letters for now. You will see the specific lesson in this section.

## Vocabulary and Grammar Preparation - The Farm



The farm setup provides a setting for many language and grammar presentations. We encourage you to make the farm buildings and fences on your own, moving away from plastic. Unfortunately, many of the expensive animal models still use plastic, so we encourage you to get animals made from wood, glass, ceramic, or paper to avoid having children handle endocrine-disrupting materials. Children spend a lot of time holding small animal figures in their warm hands, so it is especially important to choose a clean material here.

Materials:

- A farm with animals and farm-related items such as trucks
- Labels for the objects

Presentation:

1. Invite your child to join you at the farm display.
2. As you look at the farm together, the two of you can discuss what you see.
3. The two of you can carry the setup to the floor mat or work with it on a table.
4. Bring the box of labels to the workspace.
5. Spread the labels out on the mat.
6. Pick up an animal. For example, pick up the cow. Say, "Here is the cow." "Let's find the label for "cow."
7. Find the label. Read it aloud. Place it in front of the cow.
8. Repeat for the other labels. Hang back a bit, allowing your child to take the lead.

Presentation #2:

For this second stage, play a game with one child or, even better, two or more children. Use the sentences from the third presentation. Read a whole sentence aloud, "The dogs are under the fence," and your child places the objects accordingly. If you are working

with more than one child, the children can take turns until the whole farm is fully equipped with animals and other objects.

#### Presentation #3:

Select the short vowel objects and use them in the Movable Alphabet presentation. You can use them with 1) objects and word formation, and 2) label and word formation (your child looks at the labels and forms that word with the Movable Alphabet). If you refer to the Movable Alphabet exercises, you will see these presentations.

Your child can use the other objects with the Movable Alphabet whenever he or she wishes to do so.

#### Presentation #4:

Add new objects and labels to the farm, including a set of vehicles such as a dump truck, backhoe, cement mixer, motorcycle, and front-end loader. The objective is to add new and challenging vocabulary. You can also add other sets with good vocabulary, such as tools or new animals. Expand the area of the farm as needed with additional green spaces.

Create a control sheet by taking pictures of the items and writing the names next to the photos. If you print this out, your child can check his or her work independently.

#### Presentation #5:

Create a different setting for a topic that your child enjoys. For example, you can prepare a set of realistic dinosaurs, so that your child can learn the names of the dinosaurs. You can repeat this exercise with exotic animals from different countries and so forth. Any theme you select must be real, not fictional, so no fairies or goblins. There will be space for fairy tales later in the lower elementary work.

#### Presentation #6:

Create the following phrase cards:

Set 1:

the dog is

the dogs are

the cow is

the cows are

the chicken is

the chickens are

## Triangle Games: Multiple Adjectives with Geometry

Use this once you have worked with nouns, adjectives, and the triangles. These triangles can be made from cardstock, construction paper, or any stiff material.

Material:

63 triangles:

- One set each of red, blue, and yellow triangles in small, medium, and large sizes for each of the seven types:
- Equilateral Triangle, Right-Angled Isosceles Triangle, Obtuse-Angled Isosceles Triangle,
- Acute-Angled Isosceles Triangle, Right-Angled Scalene Triangle, Acute-Angled Scalene Triangle, Obtuse-Angled Scalene Triangle

Exercise 1

This group game is the same as the adjective game, except that there are multiple adjectives for the nouns. The triangles can be spread out on a large table or smooth rug. The adult plays the same role as in the prior adjective game. She asks a child, "Hand me a triangle," and she will refuse the triangles the children give her, naming each triangle that she refuses. For example, "No, I did not want the red, obtuse-angled isosceles triangle." The children may have caught on to the game a little bit, asking her what color or shape of triangle she wants. Next, the adult includes one adjective in her request, but that is not enough, so she continues to refuse the triangles. Not until all the final adjectives are used will the triangle be the correct one. She describes it using all its adjectives: "Yes! That is the triangle I wanted! I wanted the small, red, obtuse-angled scalene triangle!" This game is tremendously popular with the children until they realize from the beginning of the game that the adult should use all the adjectives at once.

Exercise 2

When children learn enough to request all the adjectives from the start, the adult shifts to this exercise. She uses all the adjectives to describe a specific triangle, and the children search for it.

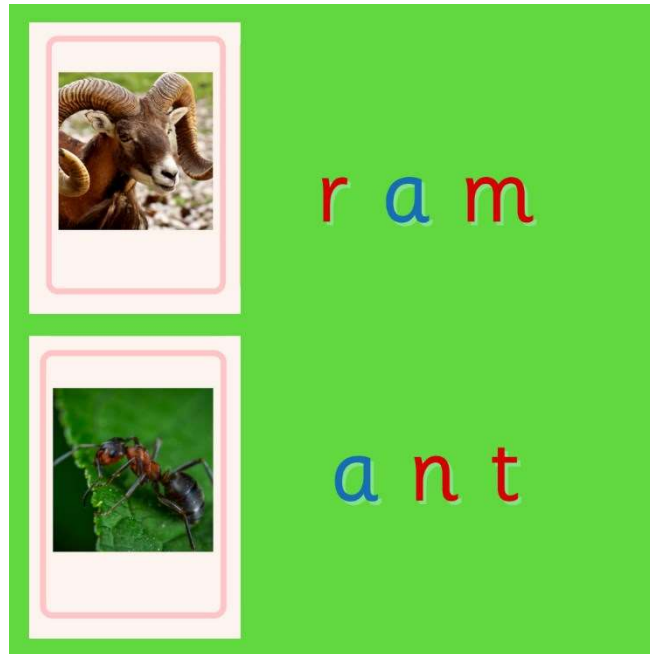
Exercise 3

This exercise may follow immediately after the prior one, if the children's interest remains high. The adult directs a child to ask for request specific triangles.

Exercise 4

Children play the triangle game among themselves without the adult.

## Movable Alphabet –Picture Cards



Our pink series cards, [etsy.com/shop/MontessoriHouse](https://etsy.com/shop/MontessoriHouse)

This exercise is the same as the one for the Movable Alphabet set and objects. Begin with the pink series cards and continue through the blue series. Note that we do not use objects or pictures with most of the green series work.

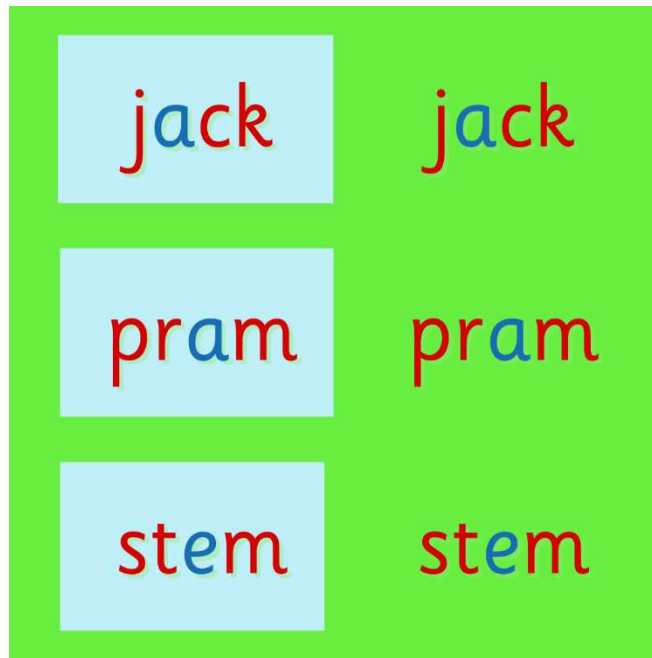
Material:

- Movable Alphabet set
- Picture cards from the three-part card set
- Box
- Mat for floor work

Put together a set of picture cards that represent short vowel phonetic words, consonant blends, and multi-syllable words. On the back of the pictures, write or type the name in black letters. For example, on the back of the "clip" picture, write the word "clip." This allows your child to check his or her work instantly.

The picture cards should be an assortment of short vowel words in different lengths because your child has already worked with the stages of short vowel words earlier. You can also put together basic phonogram words in this set when your child has been introduced to them.

## Movable Alphabet – Blue Series Word Cards



Our blue series cards on a green mat, [etsy.com/shop/MontessoriHouse](https://etsy.com/shop/MontessoriHouse)

Material:

- Movable alphabet
- Box of blue series word cards
- Green mat for floor work

This presentation uses the original box of letters. If you have the black and red letters, you can make these cards in those colors, or just have your child do this work with the word lists and no cards.

These cards use the same presentation as the ones for the pink series.

These are large-format cards, which are about four inches high and proportionally as long as the word.

Presentation:

1. Bring the Movable Alphabet and the box of cards to the mat.
2. Put the lid under the box and take a card out of the box.
3. Sound out the first word, and make it with the Movable Alphabet letters.
4. Let your child try the next one.
5. Let your child read them aloud when he or she is finished.

## Addition Chart

0	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	10
2	3	4	5	6	7	8	9	10	11
3	4	5	6	7	8	9	10	11	12
4	5	6	7	8	9	10	11	12	13
5	6	7	8	9	10	11	12	13	14
6	7	8	9	10	11	12	13	14	15
7	8	9	10	11	12	13	14	15	16
8	9	10	11	12	13	14	15	16	17
9	10	11	12	13	14	15	16	17	18

Present this control chart: left finger on the red side, right finger on the blue side, fingers meet at the sum. It is used for checking addition work and answering addition problem cards for this category (1-9).

Materials:

- Addition Finger Board
- Problem cards and sums separated

The problem cards need sums. You can create all of the equations and clip off the sums.

What to do:

1. Sit with your child.
2. Pick a problem card.
3. Your child reads it aloud.



4. Take your right hand and move it along the blue line until you get to the first number in the equation. Read the number aloud. Repeat with the red line and the second number in the equation.
5. Move your hands together as you say the equation aloud, “seven plus two equals...”
6. “Nine” as your fingers meet on the 9.
7. Ask your child to please hand you the 9 card.
8. Place it to the right of the “=” sign on the problem card.
9. Ask your child if he or she would like to try. If your child declines, you go again.
10. When your child is ready to try, you reverse roles.

#### Exercise 1.

One or two children work with the problem cards, using the addition strip chart and control chart to complete them.

#### Exercise 2.

One or two children work with the addition strip chart and control chart to complete the booklets, make their own booklets, or make problem cards with answers.

## Introduction to the Decimal System



This decimal system presentations should be presented in the order of the pages, but you can introduce other works in parallel. For example, the counting of chains or chart work can be introduced in the same week as you present a decimal system work.

The Golden Beads are a staple piece of material in the Montessori classroom. Much of the advanced math work uses these beads, so gaining a thorough basic understanding of the quantities that the beads represent is crucial to the next stages of math. Authentic glass beads are nicer and healthier than plastic. Dr. Montessori specified “opalescent glass” for the beads.

### Material:

- Golden Beads: one unit, one ten bar, one hundred square
- Long tray (as shown) with spaces for everything and a holder for the unit bead
- Use a table or mat on the floor

### Presentation:

1. Invite your child to join you in this exercise.
2. Your child can take the mat out and unroll it on the floor.
3. Bring the material to the floor. Put the felt pad on the mat. Sit down next to your child for the presentation.
4. Using your thumb, index, and pointer fingers, grasp the unit bead and pick it up, saying "This is one unit."
5. Ask your child "Would you like to hold the unit?"
6. Place the unit bead in your child's palm. Let your child examine the unit.
7. Your child hands the unit bead back to you, using the same grip you used.
8. Place the unit on the felt pad.
9. Using the same grasp on each end of the ten-bar, pick it up and say, "This is a ten-bar. It has ten beads."
10. Ask your child, "Would you like to hold the ten-bar?"
11. Transfer the bar into your child's fingers, so that he or she can hold it with the same grip.
12. Your child examines the ten-bar, counts the beads, and hands it back to you using the same grip.
13. Place it on the felt pad to the right of the unit.

## Decimal System -- Association in the Decimal Layout



This exercise builds on the Nine Tray Cards and Golden Beads presentation introduced earlier.

Material:

- Tray with nine unit beads, nine ten-bars, nine hundred-squares, and nine thousand cubes
- Box of large number cards 1-9, 10-90, 100-900, and 1000
- Mat for floor work

Put the number cards 2000 through 9000 away for now, and present them later. This exercise is continued through next year, so your child has time to work on this with the smaller numbers, so that he or she can thoroughly internalize the association between the beads and the numbers.

Presentation:

1. Invite your child to join you as you go to the math shelf to select the bead material and numeral cards. Carry the tray with the bead material and your child can carry the numeral card box. Go to the mat and put everything down.
2. Point to each category, naming the units, tens, hundreds, and thousands.
3. With your child, count all of the units, tens, hundreds, and thousands on the tray. For example, as you count the units, "one unit, two units, three units..."