## PRE - SCHOOL <br> TEACHER' GUIDE



APSACS SECRETARIAT

## PRE - SCHOOL TEACHERS GUIDE

It is mandatory for the teachers to read and comprehend the instructions and guidelines given in this guide and consult it on a regular basis to improve their teaching methodologies and class management skills.

At play schools, children are exposed to a lot of basic pre-school learning activities that help them to get independent and develop in children many self-help qualities as well.

## AIMS FOR A PRE-SCHOOL

$>\quad$ Create a friendly and stimulating learning environment in which each child is able to develop skills, concepts, attitudes and gain knowledge.
$>\quad$ Develop the child socially, emotionally and physically.
$>\quad$ Develop the child's ability to communicate and understand.
$>$
Develop an awareness and understanding of the Pre - School environment.
The teacher to develop positive relationship with the parents and community.
The teacher to provide equal opportunities to all children.
The teacher to develop the child's ability to appreciate and respect the views and creations of others.

## CLASSROOM SETTING

A pre-school classroom environment must provide welcoming, safe, warm, and stimulating areas to promote the development of the child, especially to strengthen, expand and deepen learning.
$>\quad$ The decor and set up of the classroom plays a significant role. The classroom must be colourful, with inviting materials designed to encourage children to learn and enjoy at the same time.
$>\quad$ Group seating should be done properly i.e. manageable number of children in each group so that the teacher while attending to a certain group easily handles it.
$>\quad$ Furniture should be of the right size and light enough to be moved easily.
$>\quad$ Corner Settings: The shelves / racks should be low enough for the children to reach for the things.
$>\quad$ Make sure that the children have easy access to the materials e.g. toys, blocks etc.

The book shelves must always be within the reach of children.
Montessori apparatus must be displayed on a separate shelf.

## PRE - SCHOOL DISPLAY

The classroom should be well equipped and well organized, it should also be a welcoming place for children and adults alike. Displays can be used to provide a friendly and stimulating learning environment. There should be an even balance of teacher displays and displays of children's work, all attractively presented, well maintained and at the child's eye level. They can be changed regularly and reflect the activities of the pre-school. A parent's notice board is also useful to keep parents well informed of what is going on in the classroom.

## DISPLAYING CHILDREN'S WORK

Children like to have their work displayed because it shows that you value their efforts. The teacher must select the pictures carefully for the display. If the paper is square or rectangular make sure all the edges are straight and at right angles to each other. By mounting the pictures the teacher can really show the children's work off to their best advantage. The same colour paper for the mounts for all the pictures helps to give unity in display.
Displaying pictures can be done in several ways, for instance you can paste the pictures onto a prepared mount that can be reused.
Prepared mount can be of a single sheet of paper with a line drawn all the way around to give the impression of frame.
Natural materials, e.g. sand, a pebble, shells, twigs can be collected at no cost at all. Many activities can be provided on the floor on a mat / durree; this setting is more flexible and does away with the need for expensive furniture. Shelving can be provided by arranging planks of wood in between building bricks.

## THE TEACHER'S ROLE

The role of a Pre - School teacher is very demanding, she has to make deliberate effort to make her classroom a happy place of learning for a child who is staying away from home for the first time. The teacher should dress up smartly and appropriately, wear comfortable shoes and tie her hair properly. She must take care to make her appearance and behaviour with the child a pleasant experience. She has to be well prepared, yet flexible with her teaching schedule. Teaching young children requires patience, a sense of humour and a lot of hard work. Young children make many demands. They are active, lively, are constantly asking questions and waiting for the teacher's attention. She must ensure to provide equal opportunities to all the children. Pre-school staff has to be happy and pleasant to work with children and relate easily to them to share an equal enthusiasm and interest in their work. The teacher must develop a positive relationship with the parents as well.

## DAILY ROUTINE

Teacher must ensure that each child's day is filled. There should never be a time when either the teacher or the children do not know what to do.

Teachers should establish a daily routine within the first few weeks of pre-school. Establishing a routine is important for the following reasons:
$>\quad$ Children feel comfortable and secure when they know what to expect next. A routine helps children to understand the concept of time passing, of past, present and future, e.g. 'First we will tidy up, then have a snack and afterwards you can go out to play.'

A routine helps children learn about sequencing, that one period of time is followed by another, e.g. 'after singing it will be time to go home'.
> A daily routine should provide a time in the day for the children to be a part of a large group, a small group, interact with each other, interact with the teacher, and work on their own, to have a snack and to play outside.
> A well planned and consistent daily routine helps to create an organized learning environment.

An organized learning environment gives a teacher the opportunity to carry out teacher initiated activities and children the opportunity to make choices and carry out their plans.

A routine helps children realize that an activity has to be completed within a set time frame.

Before the term begins the teacher has to be very clear about the following.

## ENERGY BURNING SESSION

Children of this age group ( $3+$ years) are mostly full of energy, they often remain restless and seldom sit still, therefore it is suggested that after the assembly, make the children burn their energy by physical exercises / jumping / hopping / running etc. (Refer to outdoor play web Physical Development)

## MORNING MEETING

There are four components of the morning meeting.
$>$ Greetings: - Assalamo Alekum, Good morning, How are you?
> News of the day: -Today is Monday. It is cloudy. Are you happy this morning? Today is Sara's Birthday, Ali is absent, he is not well.

## > Sharing: e.g. a poem, song, I went to the park with my parents, I bought a toy, etc.

Show and tell is part of sharing. Allot the children different days of the week. One child daily should bring his / her favourite toy / book etc. he / she should show it to the class and share it with them. She should supervise them from a distance and watch them discover the joys and pains of sharing.

## > Group Lesson / Group Activity

This could be done at any suitable time of the day. The Practical life exercises may be done as a group lesson to help the children develop their gross motor skills, fine motor skills, language, arts, visual discrimination between shapes, sizes directions, memorizing skills and social skills.

At play school, children are exposed to a lot of basic learning activities that help them to get independent faster. The playgroup teacher has to prepare and plan beforehand for the activity and get ready with the required material.

The Section Head must ensure that the Play Group, KG and Prep teachers of all the sections should plan together for the activities and share the materials required.

## STORY TELLING

- Tell stories to the children daily.
- Story telling could be done to the whole class, to smaller groups and if possible share stories with individual children.
- Sit with the children on the carpet or durree so that you are at the same level as them. If you are restricted for space you can move tables and chairs to one side and lay a mat / durree on the floor. When the weather is good and you have a shaded area the children can be taken outside for a story.
- Make sure all the children are sitting quietly before you start and that they can see you and the book or props or puppets.
- Sustain the children's interest by maintaining eye contact, the use of your voice, your facial expressions and gestures.
- Stories can be repeated several times, they become great favourites and the children enjoy them more and more. You can have a 'Story of the Week' and plan related activities, e.g. plant a bean seed after reading 'Jack and the Beanstalk'.

If you are reading a story from a book make sure you have read the story through before reading it to the children and alter the language if it is too difficult for them to understand.

## PROVISION OF A MINI ZOO IN A PRE-SCHOOL

Children need to develop their love for nature at this stage. Animals are a part of nature. It would be great if a mini zoo is provided within the premises. Small animals like rabbits and pigeons or other birds can be kept. Children love to play with them and feed them. This will create love for the animals and create a natural environment for them. The cages can be fixed in the ground. Pictures of animals and birds could be painted or pasted on the walls to give a jungle effect in case real animals / birds are hard to arrange.

## PROVISION FOR OUTDOOR PLAY \& NATURE WALK

If a bigger play area is not available try to utilize any space that is available outside the classroom. Here children can make more noise and more mess! However, it is essential that whenever children are outside there is a responsible adult supervising them.

## Suggestions for Outdoor Activities

- A tree that children can climb up, ropes, tyres, a shaded area, sea-saw, swings, slides, rocking-horse, jungle-gym.
- Provide small sports equipment, such as skipping ropes, balls, and frizbees.
- Bean bags can be made from fabric. Cut out two rectangles, 10 cm x 15 cm , stitch three sides, fill with dal, rice, macaronis, cork pieces etc and then sew up the remaining side. This toy is good for developing ball skills and is safe for young children to handle.
- Trundle toys, e.g. plastic wheel barrows, trolleys, bicycles, tricycles and carts.
- Frames can be covered with old bed sheets to make houses for children to play in.
- Indoor activities can be taken outside for a change, e.g. block play, snack time can be a picnic and messy activities like finger painting, can also be organized outdoors.
- It is preferable to keep the outdoor equipment in a store outside.


## Outdoor Play

Out door Play Web: to show potential learning and development from children's participation in this area.

## Physical Development

The children's gross motor skills are developed with opportunities for running, jumping, hopping, skipping, climbing, balancing, stretching, rolling, twisting and making different body shapes, e.g. a ball, a pin, a star.

The children can discover different ways of moving, e.g. fast, slow, smooth, jerky, high, low, forwards, backwards and sideways. The children's spatial awareness is developed by moving up and down, through and over. Fine motor skills are developed with the provision of balls, bats etc., such as throwing over arm and under arm, one handed and two handed
throwing, catching, bouncing and kicking.

## Social Learning

 There are many opportunities for social interaction and team play where the children have to take turns. Social occasion can be organized,

## Emotional Development

The children are free to be as active and as noisy as they want.

Creativity
The children play imaginatively and are involved in drama role play.

## Environmental Education

The children are exploring and making discoveries about the outdoor environment. They learn to care for natural environment, e.g. by not plucking flowers and by putting litter in a bin.

## PHONICS

English and Urdu alphabets should be taught phonetically. Introduce phonics or letter sounds after the child has had plenty of experience of talking, listening to stories, singing songs, looking for words in the environment, can recognize his / her own name and a few other words. Experience has shown that a combination of phonics, look and say is more successful and satisfying for the child. This will provide the children with a firm base. Before any letter sounds are introduced the child must realize that words are made up of letters that make different sounds. Make sure you only verbalize the initial sound, which is short and soft, way of doing this is through a collection of objects with which the children are already familiar e.g. with 'a' show them real apple, toy aeroplane etc.

## Letter Sounds

This list of English letters and words will help in the pronunciation of letter sound.

## First Term

| a as in | apple | m as in | monkey |
| :--- | :--- | :--- | :--- |
| b as in | ball | n as in | nose |
| c as in | cake | o as in | orange |
| d as in | duck | p as in | pencil |
| e as in | egg | q as in | queen |
| f as in | fish | r as in | rabbit |
| g as in | gun | s as in | sun |
| h as in | hat | t as in | table |
| i as in | ink | u as in | umbrella |
| j as in | jug | v as in | vase |
| k as in | kettle | w as in | window |
| $l$ as in | light | x as in | box |
|  |  | y as in | yoyo |
|  |  | z as in | zip |

صوثّثٌجّا
2nd Term
1st Term


## Use of Junk Materials

This table shows how different junk materials can be used in the pre-school classroom. This table shows how different junk materials can be used in the pre-school classroom.

| Materials | Uses |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Making models | Collage | Printing | Painting | For <br> Storage | For paint, glue or water | A tool for pasting |
| Cardboard Cartons | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| Cardboard boxes | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |
| Inside of tissue rolls | $\checkmark$ |  | $\checkmark$ |  |  |  |  |
| Sweet Wrapping | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| Cloth scraps | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |
| Wool scarp | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| Wrapping paper | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| Pencil shavings | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| Plastic bottles |  |  |  |  | $\checkmark$ | $\checkmark$ |  |
| Lids | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ |  |
| Ice-cream tubs | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| Ice-cream spoons | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ |
| Yogurt pots |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| Jam and coffee jars |  |  |  |  |  | $\checkmark$ |  |
| Old charts | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |
| Calendar Paper | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |
| Egg shells |  | $\checkmark$ |  |  |  |  |  |

## DIFFERENT IDEAS FOR MAKING THE LEARNING MORE

## INTERESTING

## PROVISION FOR BLOCK PLAY

## Description of the Setting

For the block play area you can provide building materials that have been made by the teacher and those that are commercially available. Big empty cartons can be used to store building material in large quantities. Each carton can be clearly labelled and contain only one type of building material. Plastic baskets or storage jars can be used to store materials in small quantities. Provide either one large durree or several small durries for the children
 to sit on.

## Materials:

Construction materials can be made out of empty cartons of different sizes covered with an assortment of coloured papers or different textured paper. Fill the cartons with different materials to make some blocks heavy and some light.
Empty baskets, buckets, bottles, crates, cushions and any other materials that can be easily stacked and are available in large quantities can be used for block play.


Concept of counting can be developed.

## Physical Development

Children's fine motor and manipulative skills are developed with pulling, fitting and linking pieces together.

## Social Learning

There are opportunities for children to share, take turns, interact and work in groups.

## Creativity

Children create their own constructions, are involved in imaginative play and representations of their world.

## Emotional Development

Children achieve a feeling of
satisfaction when they have
constructed something and, if they wish, they can knock it down.

## PROVISION FOR PLAY WITH NATURAL MATERIALS

## Description of the Setting

Natural materials can be provided either in large plastic tubs and metal trays or in small quantities in plastic trays. Large containers may be placed on the floor and all trays either on the floor or on a table. Shelving is ideal for storing smaller of natural materials and all supplementary materials.

a). Clay or dry sand can be provided.

## Provision of a" Sand Pool"

A plastic tub full of sand can be placed in a shady corner outside. Children can practice letter formation on sand. Sand can also be placed for playing about

b). Water can be provided in its liquid or frozen forms. For a change add food colour washing up liquid for blowing bubbles. Provision of water depends on availability. After each session water can be used for watering plants. Don't waste it.

c. When natural materials can be provided, such as shells, pebbles, stones, rocks, leaves, twigs, branches, logs, sawdust, wood shavings, fir cones, feathers and seeds or assortment of dals which can be planted after use.

d). Many of the following supplementary materials can be obtained from the hawker at a very low cost: colander, tea strainer, sieve, jugs of different sizes, funnels, buckets, moulds (jelly mould, pastry trays etc.), a variety of plastic containers, spades, rakes, forks, combs, kitchen utensils, plastic vehicles, people and animals, old constructional material, cardboard boxes of various sizes, etc.

e). When equipping a sand tray or water tub use only one or two different types of objects at a time. Change the supplementary materials regularly, e.g. sand with different types of strainers and containers, or sand with plastic people, vehicles, animals, twigs and branches, coloured water with transparent containers, or water with washing-up liquid and straws.

## Art Play:

Materials can be stored on shelves and the children can ideally work on easels. If easels are unavailable art play activities can be provided

On a table top or on the floor or paper can be attached to the wall with masking tape. In the art area, being also the messy area, the floor and the surfaces can be covered with either plastic sheets or newspapers. Art activities can also be provided outside. A collection of pebbles is useful
 for holding down papers.

Space is needed for the children's work to dry, e.g. on any flat surface, including the floor, or a 'washing line' can be put up from which pictures are hung, or work can be put outside on the ground and held down with pebbles.

Value the children's pictures and models by writing their names on a separate piece of paper, or on the back of the picture. If you have to write it on the front, write it in pencil so it does not detract from the child's creation. Besides writing their names, it is a good idea to write a caption, which has been thought of by the child and dictated to you. This experience shows you value the child's work and gives the child a meaningful example of writing and reading. Older children will be motivated to draw and write about their pictures and models which can be used to make a book for everyone to share.

## Materials

- Many materials can be collected free of cost. You can get into the habit of saving all kinds of junk materials and encourage the children to do the same.
- Different types of paper, e.g. newspaper, art paper, sand paper, card paper. Paper should be available in different shapes and sizes. Waste paper can be collected from offices, e.g. computer paper. Both sides of the paper may be utilized.
- Materials for joining paper, e.g. glue, string, punch machine, different types of thread, scotch tape, paper clips, stapler and pins and scissors for cutting.
- Materials for collage and model making, e.g. wool, cotton wool, cloth scraps, wood and pencil shavings, Styrofoam chips,
 used and washed ice cream sticks and spoons, inside of tissue rolls, empty match boxes, empty biscuit boxes, tooth picks, play dough, sand.
- Materials for painting and mark making, e.g. powder paint can be purchased from hardware shops at a low cost brush, containers for water and mixing trays for paint, toothbrushes, shaving brushes, crayons, colour pencils, markers and chalk.

Old wax crayons can be melted and poured into apiece of piping to make new ones. Different types of brushes can be used to create different textures.

- Materials for printing, e.g. wooden carved blocks, leaves, feathers, vegetables in season, cotton reels, small boxes sponges.
- Plastic or cloth aprons or old shirts are useful for keeping the children's clothes clean. It is useful to have a sink nearby; if this is not possible you can have a tunki and bucket for the children to wash their hands and utensils.
- Materials for model making e.g. play dough, plasticine and clay.


## Play Dough Recipe

2 cups Maida (flour)
1 teaspoon of salt
1 cup cooking oil
Food colouring
Water
Mix the ingredients together and add sufficient water to make dough.


## Emotional Development

The children enjoy art play, achieve a feeling of satisfaction, express their emotions and can work independently by organizing their own materials and creating their own pictures and models. The adult's role is to provide the materials, stimulate activities and value the children's own work.

## Social Learning

Children learn to cooperate, share, tidy-up and appreciate each other's art work.


## Physical Development

Children's fine motor skills are developed, e.g. by using scissors, manipulating a paint brush and playing with dough. Their gross motor skills are developed, e.g. when painting and making large scale pictures and models. Their sensorial skills are developed, particularly their abilities to observe and feel.

## Creativity

The children are given many opportunities for self expression, to develop their imaginations and to create representations of their world.

## Ideas for Activities:

Here are four activities to provide in the art area:

## a. Bubble Printing

Things You Need: Small container, soapy water, straws, food colour, and paper.
Method: Mix a few drops of food colour into the soapy water and pour it into the container. Give each child a turn to blow into the container and let the bubbles rise over the top. Press the bubbles down with a piece of paper and notice the pattern formed by the bursting bubbles. If the activity is to be done with a large number of children use several containers so each child does not have to wait too long to get a turn

## b. Wax Resist

Things You Need: Candles, paper, water paint, thick brushes, and container for the paint.

Method: The children use candles to draw a picture. Then they paint over it and, like magic, the candle drawing shows up through the paint.


## c. Leaf Printing

Things You Need: Assortment of leaves, Pieces of sponge, paint, water, glue, paper.


Method: Mix the paint with a little water and glue. The children can use a piece of sponge to cover one side of the leaf with paint. Press the leaf down onto the paper, remove the leaf and see the print it leaves behind. Encourage the children to use their imagination and creativity to print different types of leaves in different colours to create interesting patterns. Wooden blocks, sliced vegetables and fruits can also be used for printing.

## d. Finger Painting

Things You Need: Water, cup of corn flour, paint or food colour, plastic sheet, paper.


How to make: Bring the water to the boil. Meanwhile dissolve the corn flour in a little cold water and mix it into the boiling water along with a little paint or food colour. Cook over a low flame for two minutes. Allow to cool before use.

## Natural Materials

Play with Natural Material: to show potential learning and development from children's participation in this area.

## Physical Development

## Mathematical Learning

Children will experience and understand quantities, how to make comparisons, e.g. 'more than' and 'less than'; measurement of capacity, e.g. 'full', 'empty', 'half-full'; size, e.g. weight, e.g. 'heavy' and 'light'.

## Environmental Education

Children learn to appreciate and are encouraged to preserve their natural world.


## Social Learning

Social interaction between children is easily developed in this area. Children learn to share, cooperate and tidy-up.

## Emotional Development

Children gain a feeling of satisfaction, they enjoy play with natural materials and this area of play fulfills the child's 'natural' urge to play, to investigate and to imagine.

## ASSESSMENT POLICY FOR PRE-SCHOOL

## 1. PLAYGROUP

(No Consolidated Result Sheet is required)

- No Formal Examinations or Continuous Assessments for Playgroup.
- Assessments will be totally informal based on the teacher's :
(i). Observations.
(ii). Recordings. (iii). Reporting.
- No Bimonthly or End of Term written Tests.


## Reports:

I. Playgroup Child Development Bimonthly Report
II. Student Profile (Narrative Report)

- First Term
- Final Term


## Child Development Bimonthly Record \& Report Writing

An informal observation report of the child is to be maintained by PG / KG /PREP teachers in order to give a pen picture of the child. This report is marked on the basis of teacher's observation of the student during lessons, activities and play time. The teacher must make a record of her observations on a register. These observations will be recorded time to time. That would make it convenient for the teacher to mark the "Child Development Bimonthly Record" accordingly. Child's profile is to be written after the completion of the first term and the final term only. It has two aspects Academic Developing \& personality Development. On the basis of the observations recorded earlier, the teacher will be able to assess the child and give an authentic pen picture of the student. The teacher must consult the Sample Report Comments sent by the Department of Assessments \& Examination.

## EARLY PRACTICAL LIFE EXERCISES (EPLE)

The practical life exercises are the beginning point in a Montessori environment. These exercises are real, not make-believe so the teacher must become convinced that the Practical Life Exercises are vastly important to the child. These exercises must be available to the child to do independently. Time is not lost when it is spent on Practical Life Exercises, children must have freedom to perform them at any time. These activities bring about normalization, without the Practical Life Exercises the child will not be ready for sensorial development and may have problems in the academic areas.

There must be one set of the materials used for each of the exercises of practical life in the classroom / activity room. Materials, e.g. brushes, dusters, etc. should be of a size which the children can really use, they must be neither play things nor too big. All the materials must be pretty and attractive and easily manageable. The children are shown how to perform each exercise. There are endless opportunities for these practical exercises. Give those which the child would see in his own culture. The purpose throughout is to enable the children to acquire, an independence, control of their movements and to enable them to understand the functioning of their immediate environment.
A). Exercises for Elementary Body Movements and Hand Dexterity.
1). Rolling and unrolling (workmats and carpets)
2). Sitting down and standing up from chairs or floor
3). Walking quietly in the classroom
4). Picking up and putting down objects
a). rolled objects, b). folded objects, c). trays (empty at first holding objects later)
d). jugs or pitchers varying in size and weight; with and without handles;
(empty at first and holding liquid later), e). glasses, f). cups and saucers,
$\mathbf{g})$. plates, $\mathbf{h}$ ). boxes and parcels, $\mathbf{i}$ ). tables and chairs, $\mathbf{j}$ ). specific items of apparatus,
k). scissors and other sharp, pointed objects (offering such objects to another person)
5). Holding objects correctly (scissors, sun glasses etc)
6). Carrying separate objects in each hand.
7). Handling books carefully
a). holding and carrying, b). turning the pages
8). Pouring:

## Contents:

a). small round seeds or beans, b). rice, cc). water, d). sand

## Methods:

a). from jug to jug and vice versa, b). from spoon,
c). using a medicine dropper
i). transferring liquid from a small bottle to another, ii). mixing secondary colours from primary coloured waters (red, yellow, blue - using food colouring) using a medicine dropper.
9). Folding
a). cloth napkins (to begin, use coloured stitches to mark fold lines in a variety
of stitches so the child can see where creases should go), b). handkerchiefs and tea towels, c). table cloths and other large linens (exercise for two children), d). workmats e). paper napkins $\mathbf{f}$ ). other paper (beginning simply with paper fans and hats and going on the craft items such as oragami)
10). Unfolding those items above which require it
11). Opening and closing:
a). doors, b). drawers $\mathbf{c})$. cupboards $\mathbf{d}$ ). cases and chests, e). windows and shutters
f). boxes, with removable lids and with hinged lids, $\mathbf{g}$ ). light switches
12). Opening and closing with aids as many as possible :
a). lock and keys, b). latches
13). Hanging up objects on hooks and rods:
a).brooms, mops, b). dressing frames, c). towels, d). coats
14). Cutting with scissors
a). string, b). ribbon, c). flower stalks, dry twigs, faded leaves, d). paper
15). Food preparation:
a). slicing plain cake, b). peeling of fruits and vegetables,
c). spreading of butter, jam, etc, d). chopping of nuts, e). shelling of peas and nuts
f). mashing potatoes, g). sifting flour, h). kneading and rolling of dough
i). cutting rolled dough in various shapes
16). Pasting and gluing
17). Stringing beads of varying sizes
18). Watering pot plants (sprinkling, washing and dusting of leaves)
19). Caring for the outdoor environment
20). Using a foot scraper and door mat.

## B). Caring For Oneself

1). Personal hygiene
a). washing and drying hands and face, b). cleaning the teeth,
c). care of the hair
i). brushing, ii). combing, iii). tying back with grips or elastic bands
d). care of the nails
i). cleaning, ii). cutting, e). using the toilet properly, f). blowing one's nose,
h). general health care (e.g. good nutrition)
2). Clothes
a). how and where to keep shoes and boots when not in use,
b). wearing socks, jackets, sweaters.
3). Dressing and Undressing
a). dressing frames
i). buckles, ii). zips (separated and closed at bottom), iii). hooks and eyes, iv). bows (ribbons), v). shoe laces, vi). safety pins (big ones)
4). Sharpening pencils
5). Wrapping and tying presents and parcels
6). Walking on the line (including variations -tiptoeing, carrying objects, balancing objects on head, etc.)
C. Exercises for Care of the Environment
1). Arranging tables, chairs, mats, etc. for various activities (individual, group and collective activities, functions, etc.)
2). Putting away what has been used (furniture, apparatus etc.)
3). Dusting with dusting cloth
a). with feather duster
b). with a soft brush.
4). Care of the floor
a). sweeping with broom / mopping
b). using dustpan and brush
5). Cleaning blackboards

## SENSORIAL EDUCATION <br> THE CYLINDERS

MATERIAL: Four plainly varnished, wooden blocks containing ten cylinders each. The cylinders vary in dimension regularly.
Block 1 The cylinders vary in all three dimensions. Each cylinder increases or decreases by cm on each dimension from the preceding one. The tallest cylinder is the thickest and the smallest is the thinnest.

Block 2 The cylinders vary in three dimensions as in Block 1 but the tallest cylinder is the thinnest and the smallest is the thickest.
Block 3 The cylinders vary in two dimensions, width and length. They are all the same height. Each cylinder increases or decreases by cm in length and cm in width from the preceding one.
Block 4 Cylinders vary in one dimension, height. Each cylinder increases or decreases in height by cm from the preceding one.
PRESENTATION: It is not essential to present the cylinders in any particular order, but block 1 and block 2 are the easiest and block 4 is the most difficult. The control of error is absolute in blocks 1, 2 and 3; it is not absolute in block 4.

Invite the child to come to the shelf and carry a block to the table with a hand at each end. Seat yourself beside the child and place the block of cylinders between you, close enough for the child to look into the sockets when the cylinders have been removed but with enough room for the cylinders between the block and the edge of the table. Take out the cylinders beginning at the left and holding the knob of each between the thumb and the first two fingers. Mix the cylinders on the table in front of the block. After a short pause replace the cylinders in their correct sockets, choosing them carefully in order of size from left to right. Suggest that the child can now use the cylinders as presented.

EXERCISE: The child can now use any set without a further lesson. When the child can do each set well, he can be shown how to use two sets together, placing the blocks in an inverted V. mixing the
cylinders from both in the limited space thus made and then replacing them. Later he can take any three sets, place them on the table in the form of a triangle, mix and replace them. Lastly he can use all four sets. He places them on the table in the form of a square, mixes all the cylinders inside the square and then replaces them.

PURPOSE: Visual perception of differences in dimension, Understanding of dimension, Observation of the environment, Co-ordination of movement, small muscle control, dexterity and eye-hand co-ordination. Indirect preparation for writing. (The fingers and thumb which will later hold the pencil are being used to hold the knobs.)

## CONTROL OF ERROR:

In Blocks, 1, 2. and 3 the cylinders cannot all be replaced unless each is in its correct socket. In Block 4 all can be replaced but some would be too high in the block and some would be too low, if a mistake had been made. The child can usually see that this is not right.

AGE: 2 1/2 onwards.


2


## THE PINK TOWER

MATERIALS: Ten pink wooden cubes varying in size from 1 cubic centimetre to 1 cubic decimetre. A floor mat

PRESENTATION: Spread a mat on the floor and carry the cubes over. Te larger cubes may be carried one at a time. Mix the cubes over the mat. Build a tower beginning with the largest cube. Choose with deliberation.

Grasp cubes from above with one hand with thumb and two middle fingers on opposite sides, index -and little finger being on the other two sides. This is to get the muscular impression of size. The child may not be able to grasp the largest with one hand but let him grasp all others in this way.

Place each cube concentrically on the previous one in one movement. Take the tower apart before putting it away.

EXERCISE: (1) The child builds the tower as shown.
(2) When the child can do the exercise well he can be shown how to build a tower with two ledges towards the child, and the two other edges exactly even. Move the smallest cube around the ledges from the bottom to the top. This demonstrates the relationship in size between the cubes.

PURPOSE: Visual and muscular perception of dimensions and an awareness of dimension, Leading to observation, An understanding of dimension, Co-ordination of movement, Indirect preparation for mathematics:
(a) Ten cubes, as a preparation for the decimal system.
(b) The largest cube would hold a litre: the smallest is 1 cubic centimetre
(c) Preparation for cube root:

8 of the smallest cube make the second cube ( $2 \times 2 \times 2$ )
27 of the smallest cube make the third cube ( $3 \times 3 \times 3$ )
64 of the smallest cube make the fourth cube $(4 \times 4 \times 4)$
1000 of the smallest cube make the tenth cube ( $10 \times 10 \times 10$ )
These cubes therefore represent the cubes of the numbers 1-10.

## CONTROL OF ERROR:

If very badly built, the tower topples over.
AGE: $\quad 3$ years onwards


Exarcise 1
Exercrse 2


## THE BROAD STAIR

MATERIAL: Ten brown wooden prisms all the same length but varying in height and breadth from 1 centimetre to 1 decimetre square.

A floor mat.

PRESENTATION: Carry the smaller prisms to the floor one in each hand. Mix the prisms on a mat on the floor. Arrange them in order of size to form a stair from left to right starting with the narrowest prism. The two sides of the stair must be exactly even. When placing a prism, grasp it across its thickness with one hand-the thumb on one side and all the fingers together on the other. This stretch of the hand gives a muscular impression of thickness.

EXERCISE: The child does the exercise as presented. (If he cannot grasp the largest prism, it does not matter as he can use two hands for this one and grasp the others with one hand. Later, holding the prism at both ends, show him how to move the smallest prism onto each
step of the stair in turn, thus demonstrating the relationship in size among the prisms.

PURPOSE: Visual and muscular perception of dimension, Understanding of dimensions, Awareness of dimension leading to observation.

Preparation for the mathematical mind:
(a) Emphasis on 10 again.
(b) The relationship is the difference between squares of numbers 1 to 10 . Four of the first prism, make the second, nine of the first prism make the third, until 100 of the first prism make the tenth.

## CONTROL OF ERROR:

The child can usually see his mistakes but if he does not, get him to feel down the stair. He can then feel any irregularities.

## AGE: 3 onwards.

The child may now use the Pink Tower and the Broad Stair together on the mat where comparisons can be made and similarities observed. The child should be allowed to discover this for himself.


## THE LONG STAIR OR RED RODS

MATERIAL: Ten red wooden rods, all of the same thickness but varying in length from one decimetre to one meter. Each rod increases in length by the length of the smallest rod from the one before; that is: by one decimetre. The longest rod is then ten times the length of the smallest. A floor mat

PRESENTATION: Spread a mat on the floor. Carry the smaller rods vertically, one in each hand.

Mix the rods on the mat.
Place the rods in order of length to form a stair, beginning with the shortest.

Take care to have the ends on the left side exactly even. As each rod is chosen bring it down to the front of the mat and draw the first two fingers of the dominant hand exactly along it moving from left to right, in order to get a muscular impression of length, then place it in order.

EXERCISE: The child builds the stair as shown.
Later, demonstrate the fact that by moving the shortest rod up the progression, the difference between any two rods in succession is always the "one" rod. This gives the fundamental idea that counting is always adding one to the previous number. The child gets an idea of the succession of quantities before he comes to counting.

PURPOSE: Understanding of the differences in dimension, Visual and muscular perception of dimension, Awareness of dimension leading to intelligent observation of the environment, Co-ordination of movement, Indirect preparation for mathematics (linear measurement)

## CONTROL OF ERROR:

The child can usually, see his mistakes but, if he cannot, let him feel down the stair for irregularities.

AGE: $\quad 3$ years onwards.
When the child can use the Pink Tower, Broad Stair, and the Long Rods well, he may have all three sets on a mat. Comparisons can be made among the three sets and their similarities noted. The child should be allowed to discover these for himself.


## THE COLOUR BOXES

MATERIAL: Box 1. Three pairs of wooden tablets finely wound with silk thread or painted tablets in the primary colours, i.e. red, blue, yellow.

Box 2. Eleven pairs of tablets in the following colours: red, yellow, blue, orange, green, purple, pink, grey, brown, black, white.

Box 3. Tablets in six to eight shades of each of nine different colours in a box with a partition for each colour: blue, red, yellow, green, orange, purple, grey, brown, crimson.

PRESENTATION: Choose a table of neutral colour.
Take the colour tablets out of Box 1 and place them randomly on the table. Give the child a demonstration on holding each tablet by the lower right hand corner (or in the case of a left handed child by the lower left hand corner) using the thumb and first two fingers of the dominant hand. If the child finds this difficult he may use one hand to hold the tablet or both hands at each end.

The important part is not to touch the coloured section. When the child can do this, pairing, may begin. Pick up any tablet. Place it in front of the child; ask him "Can you find one like this?" When he does so, place the two tablets together and repeat with the others. Mix the tablets, and repeat. Do not mention the names at first as the child can recognize colours before he knows the names. The pairs are placed one below the other in a column in front of the child.

Box 2. When the child can do Box 1, he may be given Box 2. It is not necessary to give a second lesson. When the child can match and pair the colours, he is ready to learn the names.

Box 3. Take a set of tablets. Show the child how to arrange them in gradation, beginning with the lightest or the darkest. Arrange them so that the coloured edges are together in a row. Works from left to right.Do not mix the different colours.

EXERCISE:

PURPOSE:

## AGE:



Box 1


Box 2


Box 3

## THE TOUCH TABLETS

MATERIAL: Box of tablets mounted with different textures: each texture a slightly different colour.

PRESENTATION: 1. The teacher spreads the tablets at random on the table, then closing her eyes she touches one tablet and brings it to the centre. She then finds the matching one and puts it beside the first. She continues until all the tablets are paired. The tablets are arranged in a column as they are matched.
2. Take one of each pair of tablets and show the child how to grade them from rough to smooth or smooth to rough, first with his eyes open and then with a blindfold. Work from left to right, placing tablets in a row

EXERCISE: The child does the presentations as shown. He should be encouraged to close his eyes or use a blindfold.

PURPOSE:
Refinement of the tactile sense. Awakening of a conscious awareness of the texture of surfaces. Education of the hand.

CONTROL OF ERROR: Difference in colour, Difference in texture.
AGE:
3 years onwards.

## THE FABRICS

MATERIAL: A box containing two of each of a variety of about six pairs of materials cut into the same sized squares. If possible, a pair of each of the basic materials, silk, linen, nylon, cotton, etc., should be in the box. Each pair is a different colour from all the other pairs. There can be more than one box of pairs in the classroom as there are so many kinds of material.

PRESENTATION: Start with the three most contrasting fabrics from the point of view of touch. Linen and cotton for example, are too much alike and therefore, would be too difficult to begin with. Silk, muslin and wool are very different. Take the three pairs to the child's table. Mix the three chosen pairs on the table and show the child how to feel them with his finger tips and between his fingers and thumb, as one usually feels materials. Let him pair them by touch. Then encourage him to feel and pair them with his eyes shut or with a blindfold over his eyes.

EXERCISE: The child does the exercise as presented. When the child has paired the materials he takes off the blindfold. He can then see by the colour if he has matched the pairs correctly, as two of the same colour or patterns are always the same material.

PURPOSE: Development and refinement of the sense of texture, Interest in materials and observation of those used, To learn the names of the basic materials using the Three Period Lesson.

CONTROL OF ERROR: Visual, by colour.
AGE: 3 years onwards.


## SANDPAPER LETTERS

MATERIAL: Each letter of the alphabet cut out in fine sandpaper and mounted on strong cardboard. The vowels are mounted on blue and the consonants on pink. The letters are in the middle of the cards so that there is a space on either side for the child to hold the card steady. They therefore suit left and right handed children equally well.

PRESENTATION 1. The teacher takes any two letters to the child's table. She chooses two which contrast in shape and sound. She sits beside the child, places one letter between them and feels the letter a few times in the direction in which it is written, saying the phonetic sound of the letter as she does so. She then places the letter in front of the child and asks him to feel the letter, showing him how to feel the shape with the index and middle two fingers of the dominant hand. While the child feels, the teacher repeats the phonetic sound of the letter and encourages the child to feel the letter many times while she continues to repeat the sound.
2. The teacher puts both letters in front of the child and asks him to select and feel the ones she asks for. As he feels a letter, the teacher continues to say the sound. The child may spontaneously say the sound after the teacher and this should not be discouraged.
3. She then gives the child one letter and asks him to feel it and say the sound. She gives each letter in turn.

At the end of the third period of the lesson she gives the child the idea that words are composed of these letters and starts him analysing words into their component sounds. Suppose the teacher has taken c and m . She will say, "Listen for a " c " when I say cat" "Listen for $c$ when I say topic"." Listen for "c" when I say car" "Listen for $c$ when I say act" When she has given a
number of words with c , she does this with m, e.g. man, am, Emily etc. N.B, she should not confine herself to initial letters. She then tells the child that he may be able to think of words with these sounds in them.

EXERCISE: The child takes any letters he knows, traces the form of the letters with two fingers and says the sound of the letters. The teacher gives him more letters as he is ready for them, or he can go to her to be shown how to feel and sound them.

PURPOSE: Learning to recognize the forms by touch and sight and to know the phonetic sounds of all the letters of the alphabet. Gaining muscular memory of the form of the letters through touch, as a preparation for writing. Understanding the composition of words and beginning to analyze them into their component sounds.

CONTROL OF ERROR: If the child's fingers move off the sandpaper he knows it at once by the different texture of the surface.

## AGE:

$31 / 2$ years onwards
NOTE:
The child learns through four senses: hearing, touch, sight and "the muscular sense." Great care must be taken when teaching the child to feel the letter, to see that he starts where one would normally start in writing and to see that he traces the letter through in the direction of writing. A dot may be placed at the point where the formation of the letter begins, and small arrows may be drawn to show direction of movement. He must keep his fingers on the letter from start to finish except for the dots on the i and $j$ and the cross on the $t$ and $f$. The simple cursive form of the letters was recommended by Dr. Montessori but the manuscript ones are also available for those teachers who need them in their school system.

Manuscript


Cursive

## THE SANDPAPER NUMERALS

MATERIAL: Ten cards with the numerals 1 to 10 cut out in fine sandpaper and mounted separately, one on each card.

PRESENTATION: Take the first two or three numerals to the childs place. Hold the card flat with the non-dominant hand and trace the numeral lightly with the first two fingers of the dominant hand while saying the name clearly. Trace in the direction in which the numerals are written.

Let the child trace the numeral in turn a number of times while you say the name.

Proceed with the Three Period Lesson, at each stage getting the child to feel the numerals in the direction in which he will later write them.

Introduce him to more numerals in their correct order as he is ready for them until he knows them to 10 , always going over those already learnt.

EXERCISE: The child feels the numerals and says the names.

PURPOSE: To learn the symbols 1 to 10 and to associate them with the spoken name. To learn how to form the written symbol through tracing with the fingers.

AGE: 3 years onwards


## NUMBER WORK

## THE NUMBER RODS

MATERIAL: Ten wooden rods varying in length from 1 decimetre to 1 metre, the decimetres coloured alternately red and blue. Thus the first rod is entirely red, and the second, which is two decimetres long, is divided into one red and one blue section, and so on.

PRESENTATION: 1 The teacher and the child take the rods to the floor mat and place them in random order. The teacher suggests to the child that he build the rods into a stair in the same way that he built the Red Rods, starting with smallest. 'All the red ends should be even on the left-hand side.

2 Teach the names of the rods by the Three Period Lesson.
lst Period.' The teacher shows the child the first rod and says "One". She shows the second and says "Two', then, touching the sections, slit says "One", "two".

2nd Period: She mixes the rods and asks the child for them in turn: "Give me the two." When the child offers the rod, the teacher names it. This stage is repeated. The teacher then goes on to period three.

3rd Period.' The teacher shows the child a rod and asks him to name it. The child now has to remember the names and to be able
to count the rods. When the child knows the first two rods, add another and, over a period of time, introduce more, in sequence, until the child has had them all.

EXERCISE: The child can now take the rods, counting them from 1 to 10 , and build them in order (with red ends even on the left side).

PURPOSE: To learn the names 1 to 10 and to associate the names with the quantities.

## CONTROL OF ERROR:

The length of each rod forms a stair, with the blue and red colours alternating at the right ends.

## AGE: <br> 3 years onwards



## THE NUMBER RODS AND CARDS ( $2^{\text {nd }} \mathbf{T e r m}$ )

MATERIAL: The Number Rods and a set of cards on which are written the numerals 1 to 10 . A floor mat.

PRESENTATION: 1. Mix the rods on the floor mat. Have the numbers on a mat or table. Show a rod, and ask the child to count it. Ask for the corresponding numeral. Put the numeral against the last section of the rod. Repeat until each rod has the correct numeral against it.
2. This exercise may also be done the other way around. Show the child a numeral, ask him to name it and then to fetch the corresponding rod.
3. The rods are mixed on the mat. The cards are mixed on a nearby mat or table. The teacher asks the child to find the one rod and the corresponding numeral and place the numeral against the
rod. Then to find the next rod and the corresponding numeral. In this way, the rods are built into a stair with a card against each one.

4 As in 3 but the child first finds the 'one card and then the rod.
EXERCISE: The child does the exercises as presented. Where several children have been introduced to these exercises, they can work as a group if they desire.

PURPOSE: To associate the numerals with the actual quantities for the numbers 1 to 10 .

## THE NUMERAL CARDS AND COUNTERS

MATERIAL: Ten numeral cards from 1 to 10.55 counters, all the same colour and size.
PRESENTATION: 1. Place the cards on the table in mixed order. The teacher asks the child: "What number comes first?'" 'One"' 'Please find it," The child finds the 1 card and is shown how to place it at the extreme left of the table. She then gives him the box of counters and asks him to put one counter underneath the card. "What comes after one?" "Two." "Yes, please find that. Now put it next to "one." Now put that many underneath". (She sees that he puts them side by side.) The child continues to lay the cards in order and to put the required number of counters under each, counting them one at a time and starting a new row of counters after each pair, but pushing the uneven ones to the middle (as in the diagram).
2. When the whole series has been laid out, the teacher can give a lesson on the terms "odd" and "even", possibly by a Three Period Lesson. This will probably be on another clay.

EXERCISE: The child does the exercise by himself, as he has been shown.

PURPOSE: For the first time the child builds up the sequence bf numbers putting the correct quantity below each. He makes the association between the numerals and the corresponding quantities of the numbers 1 to 10 . He has a visual impression of odd and even numbers and later can be taught these terms.

## CONTROL OF ERROR:

The exact number of counters to complete the exercise are given, then if there are not enough, or if there are too many at the end, the child will know he has made a mistake.

## AGE: <br> 4 years onwards

In the case of the Number Rods and Cards, the 'quantities were fixed and the numerals movable.

In the case of the Spindle Box, the numerals were fixed in their correct order and the quantities (the spindles) were movable.

In the case of the Cards and Counters, both the numerals and the quantities are movable.


## THE SMELLING BOTTLES (For Second Term)

*teachers to develop these themselves

MATERIAL: $\quad$ Set 1.4 to 6 pairs of similar, opaque bottles containing liquid substances with distinctive smells, •e.g. eau-de-cologne, antiseptic, vanilla essence, peppermint essence, coffee essence, rose water, etc. A drop or two of each is sufficient to put on a cotton wool ball in each bottle. The inside lid and base of each pair of bottles or jars are marked with a matching coloured disc.

Set 2. 4 to 6 pairs of similar, small opaque jars with air-tight stoppers or lids. The jars are filled with dry substances which have distinctive smells, e.g. dried herbs, coffee, cloves, spice, etc. Matching discs may be put on the jars in the same way as Set 1. The child is shown how to put the right lid on each bottle or jar according to the colour of the disc. This prevents the smells becoming mixed.

The dry substances are best sewn into a muslin bag and the bags rammed tightly into the jars to prevent spilling. These should not be taken out except for refilling.

PRESENTATION: Take a set to the child's table. Remove the stoppers. Put one of each pair on opposite sides of the table. Take one jar, let the child smell the contents; let him try to find the pair from among those on the other side of the table by smelling each in turn. Place the pair together in the centre of the table and find another pair in the same way.

EXERCISE: The child pairs the sets by smell. More pairs are included as he becomes proficient at the exercises. N.B. The child should be taught to blow his nose gently after finding each pair.

PURPOSE: To educate the sense of smell and bring the child's attention to smells in the environment.

## CONTROL OF ERROR:

Each pair, when the exercise is completed, should have the same colour discs at the bottom of the jars.

AGE: 4 years onwards.

The environment should contain other opportunities for exercising the sense of smell. Aromatic herbs and scented flowers should be grown in the garden or in pots or window boxes. Sachets containing lavender, rosemary, etc. can also be in the room.

## THE SILENCE GAME (Beginning of Second term)

Dr. Montessori first played the silence game with a class of normalized children. She stood at the back of the class, then she softly called the name of each child in turn. The children had to listen for they were not allowed to turn around and watch her lips. When a child heard his name he went very quietly to Dr. Montessori. At first she used to reward the children with sweets. It was the children who showed her that they did not want rewards. When the children were happy and interested they did not care for the sweets.

One day Dr. Montessori went to visit a class of normal children under five years of age. She went to the Children's House that she had started in one of the tenements of Rome. As she was walking through the courtyard she met and began to talk to a mother with her new baby. Dr. Montessori took the baby in her arms and went into the classroom to show it to the children. "Look" she said, "how still the baby lies": "Listen" she continued, "he does not make a sound; I don't suppose you can be as quiet as he is".

She said it almost as a joke and expected the children to laugh. Instead every child became silent. Then she said: "See how still the baby's hands are. Listen how softly
he breathes, You could not make so little noise". Again the children tried to keep themselves more quiet and a great silence fell upon the room.

After this experience, Dr. Montessori decided to try the silence game again. She played it just as she had with the partially deaf children but without the aid of the baby and this time she called the children's names softly at the end of the silence. She stood behind the class or even just outside the room so that the children could not see her. She called the children's names very softly but did not whisper them. The children came to her one by one when they heard their names and they trod lightly so as not to break the silence.

Children love this Silence Game. They are interested in the silence. They like to listen to the little noises which one does not usually hear.

When you wish to introduce the game, ask the children to be really quiet. When there is no talking you can say that you hear feet moving, or heavy breathing and so on. The children will understand that to get silence, one must be quite still. Then you should call the children's names one by one, and the children must come quietly or they will break the silence. It is important to call every child. If someone does not hear his name, call some of the other children, then call his name again. The children really need to listen.

As soon as the children understand the exercise, a card on which is written "Silence" is hung face to the wall in the classroom. The teacher or any of the children can turn it round when they want to play the silence game. It is amazing how quickly silence spreads over the room without a word being said. If a child puts up the "Silence" card the teacher does not need to draw anyone's attention to it, though often one of the children will. The teacher herself must call the children's names.

The Silence Game must never be played in order to get peace in a noisy classroom. It is not possible to play it with a new class that is still disorderly. Before a child can play the Silence Game he must have the ability to keep still. He must have done the exercises for the control of movement, e.g. lifting chair quietly, scrubbing tables without spilling water, etc. The teacher must know the children well and feel that
they can trust her and be able to obey. The children must have developed a social consciousness and be kindly towards each other before they can join in his game.

Dr. Montessori said that the Silence Game was a spiritual experience for the children and therefore it should not be broken off abruptly. Afterwards the children are very happy, calm and rested.

## THE LEARNING OF ADDITIONAL VOCABULARY

$$
\begin{array}{ll}
\text { Cylinders } & \text { Tall — short Thick — thin Large — small } \\
& \text { Deep—shallow (with the sockets) Tall—taller—tallest } \\
& \text { Short — shorter — shortest Thick — thicker — thickest } \\
& \text { Thin — thinner — thinnest Large — larger — largest } \\
& \text { Small — smaller — smallest Deep — deeper — deepest } \\
& \text { Shallow — shallower — shallowest } \\
\text { Pink Tower } & \text { Large—small Big—little Large—larger—largest. etc. } \\
& \text { Broad Stair Broad — narrow Broad — broader — roadest } \\
& \text { Narrow—narrower—narrowest } \\
& \text { Long Stair Long — short Long — longer — longest } \\
\text { Colour Tablets } & \text { Short — shorter — shortest } \\
& \text { The names of the colours light—dark (with graded box) } \\
& \text { light—lighter, etc. }
\end{array}
$$

Sound Boxes Loud — soft Loud — louder —loudest Soft — softer — softest Touch Boards Rough—smooth Rough—rougher—roughest
Smooth-smoother-smoothest
Fabrics The names of the different materials:
Linen, cotton, silk, etc.
Baric Tablets Light — heavy Light — lighter — lightest Heavy — heavier — heaviest

Bells or Tone Bars | Names of the notes (The children may be taught to sing |
| :--- |
| these to the bells) |

Geometric Cabinet The names of all the geometric figures.
Leaf Cabinet $\quad$ The botanical names.
Taste Bottles $\quad$ Salt, acid, sweet, bitter.
Sandpaper Letters $\quad$ Phonetic sounds of the letters.
Sandpaper Figures of the numerals one to ten.
The children learn new words and terms if they are given material which enables them to
understand clearly to what the name refers. A great deal of material is introduced into the
classroom at this stage, so that the children can learn some of the vocabulary they will need
in the study of special subjects later. At this age, they learn the terms easily and have a real
"word-hunger".

