

DAY 5 - 8

UNIT 2

SENSORIAL APPARATUS & ACTIVITIES

Pre Home Assignments

Learning Activity 1: Read passage & Meditate: Should read the passage in this unit minimum 3 times. After reading each paragraph, close your eyes & think about the paragraph content for a few minutes. Also do the preparations for the Live Class Lesson Activities.

Learning Activities for Live Class Session:

Learning Activity 1: Face to face Interview: Two pupils sit face to face like a TV interview. One acts as Dr. Montessori. The other one asks questions to her about Sensorial Apparatus and its benefits. After one round, change the pair & continue practice.

Learning Activity 2: Guided Imaginary Activity practice with closed eyes: Sub: Exercises of Sensorial Apparatus in a Montessori House of Children.

Learning Activity 3: Reality Show of Sensorial Apparatus: Conduct a Reality show like in TV. Each student becomes a Sensorial Apparatus and presents its way of practice, direct benefits and other benefits from the practice in front of the judges.

First round: Brief self-introduction round.

Second Round: Presents its way of practice, direct benefits and other benefits.

Third Round: Argument & Verbal debate in between each sensorial apparatus.

Two students become Judges and tell the judgement and marks. One student acts as the anchor.

Learning Activity 4: Pair Reverse Quiz game related to Sensorial Apparatus: One student keeps a Sensorial Apparatus name in mind and the other student makes a guess by asking questions to her. Then change roles and continue the game.

Learning Activity 5: Speech: Write each Sensorial Apparatus name in a small piece of paper. Fold or roll and keep them together. Let a trainee pick one from the lot as lotto pick and give a speech about the same for 3-4 minutes.

Speech Topics:

1. The Pink Tower
2. Brown Stairs
3. Thermic Tablets
4. Knobbed Cylinders
5. Knobless Cylinders
6. Baric Tablets
7. Pressure cylinders
8. Colour boxes
9. Geometric cabinet and inset
10. Constructive Triangles
11. Geometric Solids
12. Sound Cylinders
13. Touch Fabrics
14. Binomial & Trinomial Cubes

15. Touch board & Touch Tablets

16. Smelling cylinders

Once it's done, remove that from the lotto and continue the process with remaining trainees. Giving opportunities to all students. One student anchoring the Program.

Learning Activity 6: Screen Sharing Presentation (Sensorial Apparatus): All the students are presenting the photos of their Montessori Practical Record Book page by page and giving a brief description about each Sensorial Apparatus just like PowerPoint Presentation. One student acts as the anchor. Faculty judges each student's presentation and declares the winners.

Learning Activity 7: Sharing Ideas: Each student shares ideas about other sensorial activities possible to practice in a nursery school. One student coordinates / anchors the program and invites one by one to participate in the program. Collected ideas from others writing in your Theory Assignment Book.

Learning Activity 8: Group Discussion: Arrange a Group Discussion like in TV. All students are participating in the discussion.

Round 1: Purpose and objectives of learning and practising the content in this unit

Round 2: How to apply the knowledge and the ideas in this unit in your life, career and in society.

Learning Activity 9: Learning activity as per students' choice. Conduct a learning activity as per the choice of lesson activities coordinating group.

Self-Home Assignments & with classmates:

Learning Activity 1: Self Speech in front of Mirror: Do a Self-Speech about each Sensorial Apparatus for 3-4 minutes. Speech Topics:

1. The Pink Tower
2. Brown Stairs
3. Thermic Tablets
4. Knobbed Cylinders
5. Knobless Cylinders
6. Baric Tablets
7. Pressure cylinders
8. Colour boxes
9. Geometric cabinet and inset
10. Constructive Triangles
11. Geometric Solids
12. Sound Cylinders
13. Touch Fabrics
14. Binomial & Trinomial Cubes
15. Touch board & Touch Tablets
16. Smelling cylinders

Learning Activity 2: Face to face Interview: Two pupils sit face to face like a TV interview. One acts as Dr. Maria Montessori. The other one asks questions to her regarding Sensorial Apparatus and its practice in a Montessori House of Children. Faculty prepare the list & put it in the group.

Learning Activity 3: Pair TV Interview with a Montessori Directress: One takes the role of a Montessori Directress and the other one takes the role of an anchor. Sub: Use and practice of Sensorial Apparatus written below:

1. The Pink Tower
2. Brown Stairs
3. Thermic Tablets
4. Knobbed Cylinders
5. Knobless Cylinders
6. Baric Tablets
7. Pressure cylinders
8. Colour boxes

Faculty prepare the list & put it in the group.

Learning Activity 4: A parent's Interview with a Montessori

Directress: One takes the role of a Montessori Directress and the other one takes the role of a guardian of a Montessori school student.

Sub: Use and practice of Sensorial Apparatus written below:

9. Geometric cabinet and inset
10. Constructive Triangles
11. Geometric Solids
12. Sound Cylinders
13. Touch Fabrics
14. Binomial & Trinomial Cubes
15. Touch board & Touch Tablets
16. Smelling cylinders

Faculty prepare the list & put it in the group.

Learning Activity 5: Self Speech in front of Mirror:

Do a Self-Speech about the importance of Exercises of Practical Life (EPL) in a Montessori House of Children by following all the formalities and techniques of public speech.

Individual & Other Activities as Post Home Assignments:

Learning Activity 1: Cursive Handwriting of English: Continue practice of Cursive Handwriting of Capital & Small Letters in English.

Learning Activity 2: Sensorial exercise: Practice the possible sensorial activities with the mind of a kid. If you have kids in your house you can practice with them too.

Learning Activity 3: Illustrated Montessori Apparatus Record Book (House Assignment: for this entire practical session): For this unit: Make a session about Sensorial apparatus by including each Sensorial apparatus name & photos with a short description about its way of practice, direct benefits, other benefits etc.

Learning Activity 4: Tell a brief idea in English about Montessori Sensorial apparatus and its benefits to your English fluent external friend.

Learning Activity 5: List of Other Sensorial Activities: Make a list of other useful sensorial activities for KG children from your experience and thought and write those in your Apparatus Record Book.

Learning Activity 6: Sensorial exercise with blindfold: Practice Some Sensorial Activities with blindfold (as per written in this unit) with the mind of a kid. If you have kids in your house you can practice with them too.

Learning Activity 7: Watch good videos: Watch good videos related to Sensorial apparatus activities from good Montessori Schools (Eg: Europe) on YouTube or other internet media.

SENSORIAL APPARATUS: PRACTICE & BENEFITS

1. The Pink Tower

Ten wooden cubes of pink colour that increase in size proportionately. Dimensions range from 1 cm to 10 cm.



Practice and direct benefits:

- Sorts cubes by size.
- Recognizes size difference.
- Conductive development of muscles.

Other benefits:

- Brain development and sensitivity.
- Stimulation of creativity.
- Numeracy
- Leading to a mathematical concept.

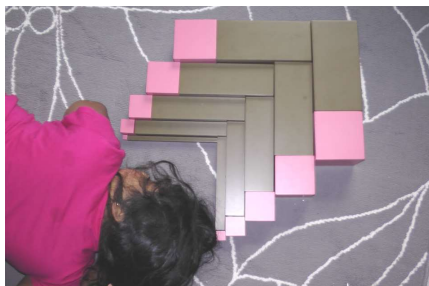
2. Brown Stairs

Ten brown cuboids of equal length and height difference.



Practice and direct benefits:

- Understands size differences in different ways.
- Conductive development of muscles.
- Adjusts from small to large and vice versa.
- Expansion of creativity.



Other benefits:

- a. Preparation of mathematical concepts.
- b. Combined action of hands and eyes.
- c. Increases discernment.

3. Thermic Tablets

Two sets consisting of 6 tablets made of different materials.

Practice and direct benefits:

- a. The thermal condition of each object is identified by blindfold and touch.
- b. Adjusts based on temperature difference
- c. The heated ones are converted into individual pairs.



Other benefits:

- a. Development of the sense of touch.
- b. Recognizes surrounding objects by touch.
- c. Creative imagination in configuration.



4. Knobbed Cylinders

4 sets of 10 cylinders each adjusted in proportion to diameter and height.

Practice and direct benefits:



- a. Kinetic development of muscles.
- b. Cylindrical shapes are perceived by touch and sight.
- c. The systematic alignment of the diameter and height of the cylinder is perceived by touch and sight.
- d. Blindfolds and adjusts the cylinders properly based on diameter and height.

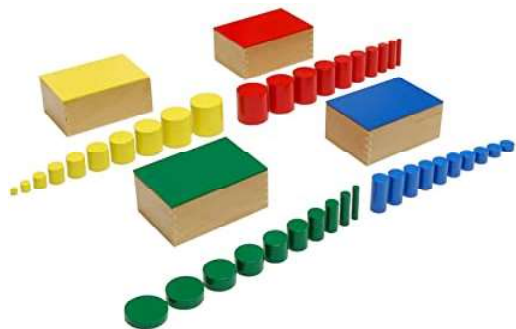


Other benefits:

- a. Introduction to geometric shapes.
- b. Increased discriminating intelligence.
- c. Tactile brain development.
- d. Creative imagination in configuration.

5. Knobless Cylinders

Knobless cylinders consist of four sets of ten cylinders in each set, varying in height and/or diameter. Each set is in a separate wood box with a lid painted the same color as the cylinders: red, green, yellow and blue. Yellow cylinders vary in height and diameter. Green cylinders vary in height and diameter. Red cylinders vary in diameter only (height remains constant). Blue cylinders vary in height (thickness/ the diameter is the same).



It helps the toddlers and preschoolers to discriminate using a visual sense between height and diameter of solid 3D shapes

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Practice and direct benefits:

- To develop child fine-motor movements, concentration.
- Hand-eye coordination.
- Visual perception of dimension.

Other benefits:

- Provides experiences of seriation.
- Gives the child basic language important in maths.
- Creative imagination.



6. Baric Tablets

Three sets of 6 wooden tablets in one set. Each set varies in wood, colour and weight.

Practice and direct benefits:

- Blindfold and understand the weight of each tablet.
- They are classified as lightweight and overweight.

Other benefits:

- Conductive development of muscles.
- Concentration occurs.



7. Pressure cylinders

Pressure cylinders of wood with 6 matching pairs in the holding tray. Each tray has 6 wood colored positions and 6 black colored positions.



Practice and direct benefits:

- The difference in resistance is detected by pressing the knobs on the spring balance.
- Conductive development of muscles.
- Divide into pairs based on pressure.
- Sorts high pressure and low pressure.



Other benefits:

- Enhancing Discernment.
- Creative Imagination in Adjustment Technology.

8. Colour boxes

3 main boxes containing colour tablets.

A. Colour Box Primary: A box with 6 tablets. Two



tablets of each primary colour (red, yellow, and blue).

B. Colour Box Second Set:

Box containing 22 tablets. This includes pairs of primary colour, secondary colour (green, orange, purple) and pairs of pink, brown, black, white and grey eva.



C. Colour Box Full Set: Set of 63 tablets. 7 shades of 9 colours.

Practice and direct benefits:

- a. Identifies primary colours, secondary colours, and shades.
- b. Recognizes colour names.
- c. Classified as Dark Colour and Light Colour.
- d. Different shapes are made using colored tablets.

Other benefits:

- a. Recognizes the colours around us.
- b. Development of the ability to discern.

9. Geometric cabinet and inset

Wooden cabinet with 6 drawers and a presentation tray. 6 wooden squares and insets in the drawer of each drawer.

Practice and direct benefits:



- a. Take the shapes of each tray and identify what it is.
- b. Understand the names of the shapes.
- c. The cover of each inset is accurately traced.

Other benefits:



- a. Introduction to geometric shapes.
- b. Preparation for writing.
- c. Identifies which shapes.

10. Constructive Triangles

Five sets consisting of two rectangular boxes, one triangular box, and two hexagonal boxes. Triangles of different sizes, colors and shapes in each box.



Practice and direct benefits:

- a. The joint action of the hands and eyes.
- b. Recognizes that all kinds of geometric shapes can be created using triangles.
- c. Creates different shapes using triangles.

Other benefits:



- a. Creativity increases.
- b. Introduction to geometric shapes
- c. Creative Imagination in Adjustment Technology.

11. Geometric Solids

Ten wooden geometric cubes in blue in a large box and the matching cards.

Practice and direct benefits:

- a. Understands the shape by touching each solid and saying names.
- b. Finds cards that are comparable to solid and compatible.
- c. Stimulates muscle function.



Other benefits:

- a. To identify solid shapes in our environment.
- b. Introduction to geometric shapes.
- c. Increases discernment.
- d. Tactile brain development.



12. Sound Cylinders

Two boxes with 6 cylinders in each box. The surface of the cylinder in one set is red and the surface of the cylinders in the next set is blue. Inside the cylinder, objects that make a noise when shaken.

Practice and direct benefits:

- Shake each cylinder and notice the sound difference.
- Adjusts according to sound intensity.
- The blue cylinder and the red cylinder are paired according to the sound intensity.
- Recognizes loud and small sounds.



Other benefits:

- Purification of auditory function.
- Concentration increases.
- Understands the distance from the sound centre.



13. Touch Fabrics

Square pieces of fabric in many colours and materials in one box.

Practice and direct benefits:

- Tell the difference by touching each fabric.
- Blindfolds and identifies the same type of material by touch.
- The same type is classified.
- Conductive development of muscles.



Other benefits:

- Enhancing discriminating intelligence.
- Tactile brain development.
- recognize what fabrics people use around us.



14. Binomial & Trinomial Cubes

One red cube and three red and black matching prisms in a box, and one blue cube and three blue and black matching prisms. The image of the binomial cube is painted on the lid of the box.

Practice and direct benefits:

- Adjust each cube by looking at the picture on the lid of the box.
- Arrange the cubes in a concentrated manner.
- Sensitivity increases.



Other benefits:

- Creativity increases.
- Understands the algebraic terms $(a + b)^3$ and $(a + b + c)^3$ in materialised form.
- Preparation for the mathematical branch of Algebra.



15. Touch board & Touch Tablets

Touch board:

Three rectangular boards. It is arranged in sandpaper and polished wood.



Touch Tablets:

2 sets of 5 tablets varying in roughness in a box.

Practice and direct benefits:

- Touch senses the roughness and smoothness of the surface.
- It is felt by touching with the fingers in the order of top to bottom.
- Blindfolds and adjusts by touching.



Other benefits:

- Tactile brain development.
- Conductive development of muscles.
- Preparation for writing.

16. Smelling cylinders

Two trays with 6 jars in one tray. The lid of each set and jar is different. This lid can be closed and opened very quickly. Moist cotton balls with different smells inside the jar.

Practice and direct benefits:

- a. The lid of the jar is opened and sniffed alternately near the nose.
- b. Recognizes smell.
- c. Each jar smells and says what.
- d. Recognize the difference.



Other benefits:

- a. To understand the function of the nostrils.
- b. Identifies smell and aroma.
- c. Odour-related brain development.
- d. Concentration increases.



OTHER SENSORIAL ACTIVITIES

1. Let the child know and identify plastic goods and furniture, wooden goods and furniture and iron or steel goods and furniture.
2. Let the child identify the physical properties such as shape, colour, smell, taste and weight, temperature and texture of the various things at home. The child can understand that the table is brown in colour, smooth in texture and rectangular in shape. Let the child take a box, a flower, a leaf or a stone and identify its physical properties.
3. You can hum the tunes of the songs which are very familiar to your child and let the child identify the song. The child too can take

turns with you to hum.

4. At night, switch off all the lights and light a candle. You can invite the child to play the shadows. Both of you can make different shadows: of a dog, of a tree etc. A shadow becomes smaller and bigger as one moves to and from the candle.

5. Your child can learn how a new colour is made by mixing two or three different colours.

6. Keep some small and big things on a table. Let the child lift each thing and feel its weight. He can find out the lightest and the heaviest thing.

7. Ask the child to sit in a room and you make different sounds with different materials in another room. Ask your child to guess and tell what sound it is.

8. Let the child arrange plates and vessels according to its size.

9. Let the child make a list of things that are cylindrical. For example: gas cylinders, tins etc.

Some Sensorial Activities with Blindfold:

1. The child can blindfold himself and you take him to other rooms. Ask him to tell you where you are.

2. Blindfold the child and let him touch, feel and tell you the various things in the room.

3. Keep the following things in a small basket: book, doll, pencil, glass, candle, banana and a mango, Blindfold the child and let him

pick out one thing at a time. Let him identify and tell its name.

4. Blindfold the child and let him tell the name of the body parts when you keep his hand on the different parts of your body.

5. Blindfold the child and make him sit on a chair. Then you move about in the room and clap your hands. Let the child show you the direction from which the clapping sound comes by pointing his index finger.

6. Blindfold the child and you make different sounds with different materials. Let the child say what the sound is and how it is made. Examples: tearing paper, pouring water, tearing cloth, beating on a wooden table, beating on a steel chair, closing a window, switching on a bulb, deep breathing etc.

7. Sitting inside the house, identify the different sounds outside such as: Footsteps, Barking of dogs, Auto sound, Car horn, Bus horn, Train, Plane, etc.

8. When you go out with a child for walks, both of you are bound to listen to different sounds heard from far and near. Identify them.

9. Blindfold the child and tell him to open the mouth. Place different items, one at a time in his mouth and let him identify the taste: The following items may be used: Sweets, chocolates, salt, sugar, water, juice, lime, etc.

10. Collect different items with different smells. Then blindfold the child and ask him to identify each item by taking it in the hand and smelling the same. The following items may be collected for this purpose: face powder, perfumed oil, dettol, lemon, agarbathis, balm, tea dust, etc.
