Montessori Institute of Teacher Education 2015-2017 Early Childhood/Primary Instructor: Trish Bradley/Veena Rao By: Lily Sage

Math Original Lesson: Mushroom Cards and Counters

Age: 3 to 6 years

Preparation:

Numerical Rods, Sandpaper Numerals, Printed Numerals, Spindle Boxes.

Materials:

A work rug, the cards and counters.

Direct Aims:

Numerical recognition 1-10.

Sequencing

Place value

Demonstrate a visual picture of sets

Teach the concept of odd and even

Indirect Aims:

Preparation of the Mathematical Mind

Growth towards abstractions

Order

Confidence building

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Preparation for linear counting.

Presentation 1:

- 1. Unfurl work rug and invite a child to the lesson.
- 2. Carry the mushroom counters and the matching cards to the work area.
- 3. Remove numerals, name them and place them in a random order at the bottom edge of the work rug.
- 4. Scan the numerals and say "I am looking for the mushroom that says 1."
- 5. Pick up and place the card on the upper left side of the work rug.
- 6. Repeat for the number 2-10, counting from one after each card is placed until all the cards are placed in order.
- 7. Point to the first card (which depicts and Amanita Muscaria or Fly Agaric mushroom in this particular set) and say "This says one."
- 8. Count out the matching counter (a photograph of an Amanita, of which there is only one), removed from the container and place into subdominant hand and say "One, this is one."
- 9. Count and place it beneath the number one card.
- 10. Continue in this way until all of the mushrooms have been placed beneath under their corresponding cards, placing them in two vertical rows. For odd numbers, place the last counter below and between the bottom mushroom counters.
- 11. Return the materials back to the math area on the proper shelf.



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Presentation 2:

- 1. Perform the same steps as in the first presentation.
- 2. Point to the quantity of each one and say "This is a set of one."
- 3. Continue identifying each quantity as a set.
- 4. When pointing to mushrooms 1, 3, 5, 7, and 9, say "This is an odd number. Sets that have one mushroom at the bottom are called odd numbers. Odd numbers are 1, 3, 5, 7, and 9." Pleace a label that reads odd below those mushrooms.
- 5. When pointing to the numbers 2, 4, 6, 8, and 10, say "The mushrooms with the couples of two at the bottom are called even. Even numbers are 2, 4, 6, 8, and 10."
- 6. Place the label that reads "Even" at the bottom of the even sets of of numbers.
- 7. Clean up and return the materials to the shelf.

Language: "Looking for one", etc., "This says...", "One, this is one.", "He's the odd one out.", "2, 4, 6, 8, and 10 are *even* numbers.", "mushroom or fungi", "Fly agaric, Amethyst Deceiver, Honey mushroom, Jelly Antler mushroom, St. George's Mushroom, Aniseed Toadstool, Hedgehog mushroom, Orange Peel mushroom, Sulphur Trocholoma, Arched Earthstar."

Control of Error: The child's previous experience with number sequencing, The counters which match the correct cards and their amounts, noting that the numerals are in sequence, the correct order of the counter placement.

Points of Interest: The fabulous fungi: their shapes, colors and textures; counting to 10; placing the numerals correctly in order; learning about odd and even; having the odd numbers with no partners.

Variation and Extensions: There is a work sheet for cards and counters, which I could make a fungal version of as well, cultural works pertaining to fungi such as three part cards, mycological illustration coloring work that matches the mushrooms on the cards, the "parts of" felt mushroom puzzle.

Notes: Included in this lesson plan are the original three-part cards. I got most of the language for this lesson from a parallel lesson in our Math albums, penned originally by Trish Bradley.