I Spy Early Math Everywhere Academy

MathAmigos

Over in the Meadow





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Sample Lesson Plans

Judy Reinhartz, Ph.D., Professor Emeritus, The University of Texas at El Paso Lead, MathAmigos & Math Literacy Program Director, <u>https://mathamigos.org</u> jreinhartz@utep.edu

September 12-13, 2024

LESSON PLAN

Date: 09-12-2024

Lesson: We All Play together

Grade: Early Pre-K

Subject: Math

Topic: Count/Sort

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Lesson Focus & Goals

the focus and goal of this lesson are to help children practice sorting and counting animals based on different characteristics such as size, color, and type, using the book we All Play by Julie Flett. Through interactive activities, children will develop their ability to classify objects, recognize patterns, and count quantities while enhancing their observation and critical thinking skills. By the end of the lesson, they will better understand how to sort objects by specific attributes and build foundational math skills that support their understanding of relationships between objects and numbers.

Materials

- We All Play by Julie Flett (physical or digital version)
- Pictures or toy figures of animals featured in the book (bear, fox, seal, etc.)
- Sorting trays or bins
- Animal counters or small animal toys
- Chart paper and markers
- A large visual ten-frame or individual mini ten-frames for each child

objectives

- Children will be able to sort animals by characteristics such as size, color, and type.
- Children will count and recognize quantities within each sorted group of animals.
- Children will develop observational skills by identifying differences and similarities between animals.
- Children will engage in physical movement activities that reinforce the concepts.

Activities

Introduction (5 minutes): Circle Time Discussion:

Start with a question: "Do all animals look the same? Are some big, small, or a different color?" Show the cover of We All Play and ask the children to identify the different animals and point out how they are different (e.g., color, size, type of animal).

Set the Purpose:

Explain that today, they will listen to a story about animals, and afterward, they will sort the animals based on different characteristics.

Read-Aloud (10 minutes): Interactive Reading:

Read We All Play aloud. Pause to discuss the animals on each page. For example, "What kind of animal is this? Is it big or small?"

Highlight key features of the animals (color, size, habitat) to prepare children for sorting them later.

Introduction to Sorting:

Ask simple sorting questions while reading: "Which animals are jumping? Which animals are swimming?" This will start building the idea of classification.

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Activity 1: Animal Sorting (10 minutes): Sorting by Characteristics:

Provide children with animal pictures or toy figures. Ask them to sort the animals into different groups based on specific characteristics. Sort by Size: Big animals vs. small animals Sort by Color: Animals that are brown, white, etc. Sort by Type: Land animals vs. water animals

Discussion During Sorting: Ask guiding questions as children sort: "What do you notice about these animals? Are all the brown animals the same size?"

Activity 2: Counting the Sorted Animals (10 minutes): Counting Each Group:

After the children have sorted their animals, help them count the animals in each group. For example, "How many big animals do we have? Let's count them together." Use number cards to label each sorted group (e.g., "5" for five small animals).

ten-Frame Activity:

Introduce the ten-frame visual and ask children to place the sorted animals into the ten-frame as they count them.

For example, "Let's place the small animals in the ten-frame and count how many we have."

Activity J: Movement and Sorting Game (5-10 minutes): Animal Movement:

Invite children to stand up and move like the animals in the book. Call out movements like "Fly like a bird!" or "Waddle like a seal!"

After each movement, ask the children to "sort" themselves into groups based on a characteristic. For example, "Everyone who moved like a bird, stand in this group!"

Sort by Movement:

After moving, sort the children into groups by how they moved (jumping, flying, crawling, etc.). Then, count the number of children in each group together.

Closing (5 minutes): Reflection and Review:

Gather children in a circle and ask, "What animals did we sort today? How did we sort them? Were they big or small? Brown or white?" Recap the lesson, emphasizing how sorting and counting helps us understand the world around us.

Extension Idea:

Encourage children to sort their toys or items at home by color, size, or type with their families.

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Assessments:

- Sorting Accuracy: Observe how well children sort animals by size, color, or type during the hands-on activity.
- Counting Ability: Assess children's ability to count the animals in each sorted group and recognize quantities accurately.



Adaptations:

For Younger Children: Simplify the sorting activity by focusing on one characteristic at a time (e.g., only sorting by color) and use fewer animals to make the task more manageable.

For Advanced Learners: Increase the complexity by encouraging children to sort animals based on two characteristics at once (e.g., small brown animals), or by introducing simple addition and subtraction with the sorted groups. Family Homework Activity:

Playful Animal Collage

objective:

to celebrate the theme of connection, play, and movement found in We All Play by Julie Flett, while encouraging creativity and family bonding.

Instructions:

Dear Parents,

For this week's family homework activity, we invite you to create a Playful Animal Collage together! Gather magazines, newspapers, or printouts of various animals, along with art supplies like scissors, glue, and markers. As a family, cut out pictures of animals and create a collage on a poster board. While doing this, think about how each animal plays and moves, just like in the book we All Play by Julie Flett. Include playful descriptions or fun facts about how these animals interact with their environment. Once completed, display your collage on our family wall to celebrate your creativity and the joy of play! Enjoy this special time together, and don't forget to share your favorite animal and its playful nature during our next class!

Provide:

Instruction Sheet, Animal Printouts, Description Template, Example Collage, Discussion Questions, Art Supplies Suggestions.

Reflection:

After completing the collage, families can discuss their favorite animal and how it plays. They can also talk about their play activities and how they connect with nature, reinforcing the book's themes of community and interaction.



09-12-2024

Daily Lesson Plan for Toddlers (2-3 yrs)

LaVerne Rodriguez

Theme: Gingerbread

Changes to Environment: Visuals/Pictures/Books

The children will explore Gingerbread through books and images.

Circle Time

Read aloud – The Gingerbread Man

Literacy and Language: Add Gingerbread book themes to library area.

Suggested books:

The Gingerbread Mouse by Katy Bratun

The Gingerbread Cowboy by Janet Squires, Illustrated by Holly Berry The Gingerbread Bear by Robert Dennis, Illustrated by Tammie Lyon

Music/Movement: 5 Gingerbread Men (Lyric & Video, The Kiboomers Preschool Song-YouTube)

Fine Motor Skills: Gingerbread pom pom color match (incorporates color recognition and math)

Children pick up pom pom with tweezers and place them on the gingerbread of the same color. As a math extension – count how many pom poms on each gingerbread.

Materials needed:

5 colored gingerbread man cutouts mini pom pom of matching colors as gingerbread cutouts big tweezers

Family Partnerships

Parent/Child home activity

- · Child and parent will explore Gingerbreads through picture and books
- · Child and parent will do a gingerbread activity counting from 1-5
 - Suggested: Five Little Gingerbread Men poem
 - Materials needed: a baking tray, and 5 gingerbread cutouts
 - Start with 5 gingerbread cutouts laying on the tray as each gingerbread man runs away – have the child take away a cutout from the tray
- **Poem**: Five little gingerbread men laying on a try. One sat up and ran away. Yelling, "Run! Run! Run, as fast as you can. You can't catch me. I'm the gingerbread man"
- Four little....three little....two little...one little....
- No little gingerbread men laying on a tray. They all got up and ran away. They ran, ran, ran as fast as can be. Those gingerbread men were too quick for me.

Over in the Meadow



Jill McDonald

Susan Reed

Illustrated by

Sung by

Characters: Animals in their natural habitats

*Each animal has a number as the number of babies they have

*Count the objects of nature of each page

*Find shapes

*Organize colors

*Compare heights, lengths and widths

*Use math vocabulary

Math Connections



*Counting with Friends



*Students

- Imitate the animals, with movement and sounds
 - Count and sing along
 - Physically move, dance and pretend

*White board and markers

*Computer/Projector

Materials

By: Cassandra Hernandez Luna County Parent as Teachers





Date: 09/19/2024

Book Title: Eyes, Nose, Fingers, and Toes

Author: Judy Hindley

Illustrated by: Brita Granstrom

Description:

A group of children who explore their bodies and the many ways they can use them. This will encourage them to participate in activities that include moving their body.

Materials:

- Easel Pad
- · Pictures of a person
- Mirror

Activities and Practice:

- 1. Have a conversation with children about the parts of their body.
- 2. Explain that the group is going to count each of their body parts.
- 3. Provide each child with a mirror.
- 4. Using the mirror, ask each child how many noses, mouths, or eyes they have. Encourage them to count as they mention the body parts.
- 5. Suggest other body parts to count.
- 6. As they count, write the number of body parts.

Kassie Herbert (Wagner) MathAmigos Activity



Book: Red Leaf, Yellow Leaf Author: Lois Ehlert Math Based: No Plot: This story is about a leaf that gets planted and turned into roots and a tree. It then gets taken to a tree nursery and tended each year. Then the child "I" gets to take the tree home and plant it there Setting: Outside, Tree Nursery, Home Characters: "I" and "Dad"

Activity #1 - rote counting

Nature walk to collect items like leaves, twigs, seeds, pine needles, etc.. Count as they go

Supplies needed: Sticks & packing tape to make a "nature wand" (see attached video)

Activity #2 - Rote counting, comparing quantities, conservation of number

Sorting, counting, comparing - have children group items multiple different times based on color, size, category of item (leaves, sticks, etc.). In between each grouping compare with others for how many items of each they have.

Supplies needed: manipulatives that were collected during nature walk

Activity #3 - number recognition

Make craft like what is on the first page of story (see photo) - children can pick how many and what they want to use for the craft. After they have chosen and glued down the objects they prefer from the nature walk, help them write down how many items they glued, the colors, textures, and shapes of items below the objects on their paper to make a description of what they glued.

Supplies needed: markers, glue, paper, manipulatives they picked up on nature walk.



Math Lesson Plan: Amber Vasquez Thomas. This lesson is aimed towards children ages 3-8

Book: Carnival of the Animals

Written by John Lithgow llistrator: Boris Kulikov Music written by: Camille Saint-Saens Introduction

1. **Welcome:** Start each day by talking about one of the animals, looking at pictures of the animal and then listening to the music.

2. **Background information:** Carnival of the Animals was composed by French composer **Camille Saint-Saëns** in 1886. Though it was originally written as a humorous suite for a private performance, it became one of his most popular works, with each movement representing different animals or natural scenes

Activities:

1. Lion (March of the Lion) - Sound & Movement

- Project: "Roaring Drums"
- **STEAM Focus:** Sound and vibration (Science), rhythm (Math), and percussion instrument creation (Engineering)
- Activity: Children make simple drums from recycled materials (like coffee cans and plastic containers). They explore sound by tapping and roaring along with the lion's march.

2. Kangaroo - Jump Experiment

- Project: "Hopping Heights"
- **STEAM Focus:** Measurement (Math), force (Physics), and physical movement (Engineering). role play, theater (Art)
- Activity: Toddlers jump like kangaroos! They mark how far they can jump using a measuring tape and colorful markers. We can chart our data and observe the effect of force on our jumps.

3. Aquarium - Water Play

- Project: "Underwater Discovery"
- STEAM Focus: Buoyancy (Science & Math), boat making (Art), estimation & counting (Math)
- Activity: Set up a water table with clear containers, provide foil and Colorfull plastic animals. Children experiment with floating and sinking, then we build our own foil boats. Estimate how many buttons our boat will hold before it sinks. Take turns placing the boats in the water and counting buttons out loud as we place them in the boat.
- 4. Elephant Bridge Building
- Project: "Elephant skip counting"
- **STEAM Focus:** Skip counting (Math) Animal movements and traits (science). Dance (Art) Skip counting using the movements of elephants: counting by 2- pick two

movements that an elephant can do. (raise his trunk-count 1, stomp a foot-count 2). After doing that a few times, repeat the sequence while whispering the 1 action and saying the 2 action outloud. Next repeat the sequence while staying silent for the 1 action and saying the 2 action out loud.

5. Birds (Aviary) - Feather Balance

- Project: "Balancing Birds"
- **STEAM Focus:** Buoyancy (Physics), texture (Science), and fluid dynamicsBalance and weight distribution (Math and Physics), Dancing to music (Art).
- Activity: Toddlers play with scarves throwing them in the air and catching them. Have them catch the scarves on different body parts, head, arm, one leg. Talk about how the scrf has to balance and how they have to balance to catch them.

6. Tortoise - Slow and Steady Painting

- Project: "Turtle Tracks"
- STEAM Focus: Pattern recognition (Math) and slow motion (Physics), painting (Art)
- Activity: Create process art by slowly moving toy turtles through paint and across paper, leaving trails behind. This helps toddlers explore patience, pacing, and pattern creation.

7. Donkey (Personages with Long Ears) - Sound Exploration

- Project: Donkey runs and kicks
- **STEAM Focus:** Sound and vibration (Science), pathways and number recognition (Music), counting and number recognition (Math), dance pathways (Art)
- Activity: Toddlers use long ribbons and run across the room in different pathways, straight, zig zag, diagonal. At the other side they will see a number card. They have to donkey kick as many times as the number on the card.

8. Fossils - Digging for Treasures

- Project: "Mini Excavation"
- **STEAM Focus:** Geology (Science), problem-solving (Engineering), Spatial sense (Math)

Activity: Create a sandbox "dig site" where children can uncover toy fossils and bones. They can brush away sand and explore the textures of different objects, learning about dinosaurs and history. Have a Spacial challenge. Asking the little archeologists to place the bones "under the rock", near the front of the box etc...

Amber Vasquez Thomas

| Lesson Title Bugin | ning to Court |
|---|--|
| Grade: 24 to 36 Months Subject: Beginning to Cant | Date: 9/20/24 |
| Topic Counting Learning Numbers and Lesson # 4 | 21 PAT-Curriculum |
| Lesson Focus and Goals: Af this age start to understand what numbers mean and use them to solve problems. Family wants for her toddler to slart learning her numbers, Start counting small quantities be able to recognize call number and how to write them. | |
| Materials Needed: Flagh Card numbers Objects to caunt like pont-pome, blocks, balle, cups, shapes etc. Trovel numbers shetts Now to u | bjectives: After finish this od aller will able to learn ers, count small quantities cognize each number anal with Them. |
| Structure / Activity: PE mill provide a parent handout along with the learning activity using our PAT- Corneulum guide lines, in aur hence visit we will do an a rearning activity about Counting, practice write her numbers and undertanding small quantities. Will have abailable the learning materials for each activity that we'll be working ou'lt. Will we the Big Preschool Book (Early mathnumbers 0-10. will use the Number Sense Skills. Mote Counting Name numbers in order. | |
| Assessment: In our activity for today 9/18/24 toddler was able to insert the color balls, into the tube start counting them | |

1, 2, 3, 4, 5, 6 and 17 one time due did it up to 10. It was hard to do a fort video, sometimes wante to play with other toys, finally - was able to recored the dor vidio counting up to 5 Mom were able to guide her, toddler was fallow her

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Instructions.