

Connecting Literature and Math - Component of STEM Curriculum

7 - Mrs. McTats and Her Houseful of Cats By Alyssa Satin Capucilla, illustrated by Joan Rankin

Introduction

Story books with strongly repetitive and predictable patterns have long been enjoyed by young children. In the book, *Mrs. McTats and Her Houseful of Cats*, there is a repetitive and predictable pattern with more cats entering her house each day. In addition, the book supports number names and count sequence, changes in quantity, and addition.

As you involve children in the activities in this guide, help them understand that a pattern is the same thing repeated over and over again and to identify the patterns found in *Mrs. McTats and Her Houseful of Cats*: each day she goes to market at eight and each day she hears a scratch on the door and more cats enter her house.

Refer to the Additional Books section for a list of familiar children's books that have a repetitive and predictable pattern. Consider reading some of these books with children to strengthen their patterning skills.

Teacher Notes about STEM

- Early Childhood Educators are now linking together science, technology, engineering, and math into what is called STEM curriculum.
- CLAM focuses on Math, one of the components of a STEM curriculum.
- CLAM was developed to give preschool children foundations of mathematical understanding through concrete experiences; a foundation for life-long learning and school success in math.

Arkansas Child Development and Early Learning Standards: Birth through 60 Months

Domain Component: MT2 Algebraic Thinking

Learning Goal: MT2.1 Uses classification and patterning skills (*patterning*)

Domain Component: MT1. Number Concepts and Operations

Learning Goal: MT1.1 Demonstrates number sense and an understanding of quantity (*number names and count sequence*)

Learning Goal: MT1.2: Explores combining and separating groups (*numerical operations (changes in quantity, addition and subtraction)*)

Learning Goals and Strands will be identified for all activities in the guide.

Materials to Collect and Make

- Locate plastic chips/poker chips (at least 26).
- Counting Match Ups - number/numeral/word 2-piece puzzles (purchase or make) Refer to *Ten Red Apples* Curriculum Guide
- Numeral stamps
- Cat stamps
- Make felt or magnetic figures of three little kittens, a larger cat (Mother), and three mittens. Make each kitten and each mitten different for “Three Little Kittens” story.
- Use one kitten and make four mittens of different colors for the “Color Mittens” story.
- Create numeral cards as follows to use with “Counting and Adding Mrs. McTats Cats”:
 - Card: 1 cat
 - Card: 2 cats
 - Card: 3 cats
 - Card: 4 cats
 - Card: 5 cats
 - Card: 6 cats
 - Card: 4 cats
 - Card: 1 dog

Story Presentation

Learning Goals:

LD1.1 Understands and responds to language (in child’s home language) (*vocabulary and language comprehension*)

EL1.1 Shows interest in literacy experiences (*engagement in literacy experiences*)

EL1.2 Engages in read-alouds and conversations about books and stories (*engagement with books and stories*)

EL2.1 Notices and manipulates the sounds of language (*rhyme*)

EL3.1 Responds to features of books and print (*book knowledge and print knowledge*)

MT1.1 Demonstrates number sense and an understanding of quantity (*number names and count sequence, connection of number, numeral and quantity*)

MT1.2 Explores combining and separating groups (numerical operations) (*changes in quantity, addition and subtraction*)

Book: *Mrs. McTats and Her Houseful of Cats* by Alyssa Satin Capucilli, illustrated by Joan Rankin

First Reading of *Mrs. McTats and Her Houseful of Cats*

- Be familiar with the book, *Mrs. McTats and Her Houseful of Cats*
- Show the cover, give title and illustrator. (Explain that the author writes the words and the illustrator is the person who creates the pictures.)
- Invite children to look at the cover and describe what they see. Have children count the number of cats on the front cover and then on the back cover.
- Ask children how many cats they think would be a houseful. Accept all answers, then say, “Let’s read and find out.”
- Read the story so all children can see the pictures in the book.
- Follow up the reading by inviting children to recall what Mrs. McTats does each morning (she goes to market to buy food for her cats) and what happens when she returns home (more cats enter her house).
- Invite children to recall how many cats Mrs. McTats had in the end. (Twenty-five). How many dogs (1).

Second Reading of *Mrs. McTats and Her Houseful of Cats*

- Show the cover and invite children to read the title with you as you run your fingers under each of the words.
- Read the title again and pause before you read “Cats” and invite children to supply the word. Say to them that McTats and cats rhyme.
- Suggest to children that they listen to the rhyming words in the story.
- Read the story so all children can see the pictures in the book.
- Follow up the reading by inviting children to help you read the story. Explain that you will sometimes pause and allow them to fill in the rhyming word.
- Choose the parts of the story where you want children to say the rhyming word. For example, on the second page: “To market, to market! I mustn’t be _____.” (late)
- Thank the children for helping you read the story.

Third Reading of *Mrs. McTats and Her Houseful of Cats*

- Show the cover and invite children to recall the title of the book.
- Read the last four lines in the book and ask children what they think Mrs. McTats means when she says “from A to Z.” Accept all answers and say “Let’s read and see if we can find out what Mrs. McTats means.”
- Read the story, emphasizing the name of each cat and point to the beginning letter of each name. For example, point to the “A” in Abner.
- Follow up the reading by again asking children what Mrs. McTats means when she says “from A to Z.”
- Guide children to understand that each cat’s name begins with a different letter of the alphabet.
- Involve children in singing the alphabet song.

Additional Learning Goal:

EL3.2 Shows knowledge of the shapes, names, and sounds of letters (*alphabet knowledge*)

Teacher Note:

- *All of the story presentations are teacher-guided activities.*

Additional Language and Literacy Activities

Learning Goals:

LD1.1 Understands and responds to language (in child's home language) (*vocabulary and language comprehension*)

EL1.1 Shows interest in literacy experiences (*engagement in literacy experiences and variety of interests*)

EL2.1 Notices and manipulates the sounds of language (*rhyme*)

MT1.1 Demonstrates number sense and an understanding of quantity

CA1.1 Explores through listening, singing, creating, and moving to music

Activity: One Stormy Night (Poem)

One Stormy Night	
Two little kittens, One stormy night Began to quarrel, And then to fight.	The ground was covered With frost and snow, And the two little kittens Had nowhere to go.
One had a mouse, The other had none; And that's the way The quarrel begun.	They lay and shivered On the mat at the door, While the old woman Was sweeping the floor.
"I'll have that mouse," Said the bigger cat. "You'll have that mouse? We'll see about that!"	And then they crept in As quiet as mice, All wet with the snow, And as cold as ice.
"I will have that mouse," Said the eldest son. "You shan't have that mouse," Said the little one.	And found it much better That stormy night, To lie by the fire, Than to quarrel and fight. Traditional
The old woman seized Her sweeping broom, And swept both kittens Right out of the room.	

Teacher Notes:

- Read the poem, "One Stormy Night," with expression and body language. For example, use a deep voice when speaking for the bigger cat and a high voice when speaking for the little cat. Pretend to shiver when you read, "They lay and shivered."
- This is a teacher guided activity.

Learning Goals:

EL1.1 Shows interest in literacy experiences

EL2.1 Notices and manipulates the sounds of language (*rhyme*)

MT2.1 Uses classification and patterning skills (*patterning*)

Activity: Storytelling Figures: “Color Mittens”

- Make a kitten and four felt or magnetic mittens (blue, red, yellow, green) for the story, Color Mittens.
- Use the figures to tell the following story

Color Mittens

My poor little kitten lost her mitten
And began to cry, “Boohoo.”
So I helped my kitten look for her mitten
Her beautiful mitten of blue.

(Place kitten on storyboard)
(Pretend to cry)
(Cup hand above eye and glance around)

I found a mitten just right for a kitten
Under my mother’s bed.
But, alas, the mitten was not the right mitten,
For it was colored red.

(Pretend to peek under bed)
(Place red mitten on storyboard)

I found a mitten just right for a kitten
Under my father’s pillow.
But alas, the mitten was not the right mitten
For it was colored yellow.

(Pretend to peek under pillow)
(Place yellow mitten on the storyboard)

I found a mitten just right for a kitten
Under the laundry so clean.
But, alas, the mitten was not the right mitten
For it was colored green.

(Pretend to peek under folded laundry)
(Place green mitten on the storyboard)

I found a mitten just right for a kitten
Inside my favorite shoe.
And this time the mitten was just the right mitten,
For it was colored blue.

(Pretend to peek inside shoe)
(Place blue mitten on storyboard next to kitten)

Teacher Notes:

- *Make enough mittens for each child to have one, using the different colors. Read the story and ask the children to hold up the correct mitten when you say the color word.*
- *This is a teacher guided activity.*

Color Mittens from Arkansas Children’s Week 2000 booklet, “Tell Me a Story.”

Learning Goals:

EL1.1 Shows interest in literacy experiences

EL2.1 Notices and manipulates the sounds of language (rhyme)

Activity: Storytelling Figures: Mother Goose Rhyme, “Three Little Kittens”

- Make felt or magnet figures of three little kittens, a larger cat (Mother), and three mittens for the rhyme, “Three Little Kittens.” Make each kitten and each mitten different.
- Use the figures to say the following rhyme:

<p style="text-align: center;">Three Little Kittens</p> <p>The three little kittens They lost their mittens, And they began to cry.</p> <p style="padding-left: 40px;">Oh, Mother dear, We sadly fear Our mittens we have lost.</p> <p>What? Lost your mittens, You naughty kittens! Then you shall have no pie. <i>Mee-ow, mee-ow, mee-ow.</i></p> <p>No, you shall have no pie.</p>	<p>The three little kittens They found their mittens, And they began to cry.</p> <p style="padding-left: 40px;">Oh, Mother, dear, See here, see here, Our mittens we have found.</p> <p style="padding-left: 40px;">Put on your mittens, You silly kittens, And you shall have some pie.</p> <p style="padding-left: 40px;"><i>Purr-r, purr-r, purr-r,</i> Oh let us have some pie.</p>
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Learning Environment

Teacher Note: *As children are involved in the learning centers listed here, they are engaged in activities that support the following Domains of Child Development and Early Learning:*

- *Emergent Literacy*
- *Mathematical Thinking*
- *Creativity and Aesthetics*

Art Center

- Add cat stamps and numeral stamps

Dramatic Play Center

- Add stuffed cats to the center

Library

- Add a magnetic or felt storyboard.
- Add magnetic or felt figures for the rhyme “Three Little Kittens”
- Add books that have a repetitive pattern (Refer to Additional Books section)

Discovery Center

- Add the Counting Match Ups - number/numeral/word 2-piece puzzles (purchase or make) Refer to *Ten Red Apples* Curriculum Guide
- Observe children to see if any of them need help with the activities

Activity: Counting and Adding Mrs. McTats Cats

- Form a small group of children (4 to 6) for this activity. If possible, include children who are at different levels of mathematical thinking.
- Place the numeral cards (see Materials to Collect and Make) on the table so that they are facing the children. The cards should be placed from children's left to right, beginning with one cat, then two cats, etc.
- Place 26 plastic chips on the table where children can reach them.
- Read/retell the story and invite children, one at a time, to place the correct number of chips on the cards.
- Involve children in counting the cats at different times during the activity.

Transition Activities

Activity: Move Like a Cat

- Invite two children at a time to walk softly and quietly like a cat as they transition to the next activity.
- Continue with this activity until all children have transitioned to the next activity.

Family Connection

- Send home to families a copy of the rhyme "Three Little Kittens."
- Invite families to say the rhyme with their children.
- Ask families who are familiar with the rhyme to talk with their children about how they came to know the rhyme.
- Suggest that families with Mother Goose rhyme books in the home check the book to see if the rhyme is included. If so, ask them to read the rhyme with their child.

Additional Pattern Books

Brown Bear, Brown Bear, What Do You See? by Bill Martin, Jr., illustrated by Eric Carle (also available in many languages)

Chicken Soup with Rice: A Book of Months by Maurice Sendak

The Doorbell Rang by Pat Hutchins (also available in Spanish)

Five Little Monkeys Jumping on the Bed by Eileen Christelow (also available in a bilingual Storybook Treasury)

If You Give a Mouse a Cookie by Laura Numeroff, illustrated by Felicia Bond

If You Give a Pig a Pancake by Laura Numeroff, illustrated by Felicia Bond

Jump, Frog, Jump by Robert Kalan

The Napping House by Audrey Wood, illustrated by Don Wood (also available in Spanish)

Pete the Cat: I Love My White Shoes by Eric Litwin, illustrated by James Dean

Polar Bear, Polar Bear, What Do You Hear? by Bill Martin, Jr., illustrated by Eric Carle (also available in Spanish)

Rosie's Walk by Pat Hutchins (Also available in Spanish)

The Very Busy Spider by Eric Carle (also available in Spanish)

The Very Quiet Cricket by Eric Carle

Assessment Ideas

Refer to page 7 of this guide: Discovery Center – Activity: **Counting and Adding Mrs. McTats' Cats**

Domain Component: MT1. Number Concepts and Operations

Learning Goals:

MT1.1 Demonstrates number sense and an understanding of quantity (*number names and count sequence and connection of number, numeral and quantity*)

MT1.2 Explores combining and separating groups (numerical operations) (*changes in quantity, addition and subtraction*)

To Assess:

- Involve children in the activity
- Assess children's competence by observing and listening to them as they are involved in the activity with you.