

## EDITED BY <br> Kathy Charner

# Learn Every Day About Numbers 

 Edited by Kathy Charner

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## Introduction

You have in your hands a great teacher resource! This book, which is part of the Learn Every Day series, contains 100 activities you can use with children ages 3-6 to help them develop a lifelong love of learning, as well as the knowledge and skills all children need to become successful students in kindergarten and beyond. The activities in this book are written by teachers and professionals from the field of early childhood education-educators and professionals who use these activities in their classrooms every day.

The activities in this book are separated by curriculum areas, such as Circle or Group Time, Dramatic Play, Outdoor Play, Small Motor, and so on, and are organized according to their age appropriateness, so activities appropriate for children ages three and up come first, then activities appropriate for children age four and up, and finally, activities for children age five and up. Each activity has the following components-learning objectives, a list of related vocabulary words, a list of thematically related books, a list of the materials (if any) you need to complete the activity, directions for preparation, and the activity itself. Also included in each activity is an assessment component to help you observe how well the children are meeting the learning objectives. Given the emphasis on accountability in early childhood education, these assessment strategies are essential.

Several activities also contain teacher-to-teacher tips that provide smart and useful ideas, including how to expand the central idea of an activity in a new way or where to find the materials necessary to complete a given activity. Some activities also include related fingerplays, poems, or songs that you can sing and chant with the children. Children love singing, dancing, and chanting-actions that help expand children's understanding of an activity's learning objectives.

This book, and the other books in this series, give early childhood educators 100 great activities that require few materials, little if any preparation, and are sure to make learning fun and engaging for children.

## Block Mania

## Materials

blocks: wooden, cardboard, foam, colored, alphabet, unit accessories: traffic signs, stores, people and animal figures paper pencils number cards

## Children's Books

Learning Block Books:
Numbers, Colors,
Shapes, Animals by
Susan Estelle Kwas Spot's Colors, Shapes, and Numbers by Eric Hill Ten Black Dots by Donald Crews

LEARNINGOBJECTIVES
The children will:

1. Create block structures.
2. Count objects from 1-10.
3. Write numbers from $1-10$ following an example.

## Vocabulary

blocks
build

## Preparation

- Create a project sharing form that the children will fill out. The form should say, "I built a(n) $\qquad$ and used $\qquad$ (number) blocks." Leave room for the children to draw their object. Copy enough forms for each child.


## What to Do

1. Designate a space for the block structures that the children will create. In the block area, provide a variety of blocks. Include traffic signs, stores, people, and animal figures in your block area.
2. Tell the children that it is time for Block Mania. Give the children plenty of time to explore the materials.
3. When the children, in groups or individually, have created a structure they want to keep for a while and share with others, they can use the project sharing form. Help the children fill out the form.
4. Have the children give a name to their block structure. Help the children write their names on the form.
5. Have the children count the blocks they used and write that number on the form using the models provided. Place the block structure in a special area.
6. Keep the children's creations on display that week, so they can look and share with one another.

## ASSESSMENT

To assess the children's learning, consider the following:

- When given a number of objects, can the children count out 10 of them?
- When given written examples of the numbers $1-10$, can the children copy the numbers?


## Number Detective

## LEARNINGOBJECTIVES

The children will:

1. Enjoy books.
2. Search for and identify numbers.
3. Role-play.
4. Develop their language skills.
fabric paint, markers, or number stickers baseball cap assortment of number and counting books magnifying glass

## Children's Books

Annie's One to Ten by Annie Owen Counting Sheep by John Archambault There Were Ten in the Bed by Annie Kubler

## Vocabulary

| find | magnifying glass | read |
| :--- | :--- | :--- |
| hat | numbers | search |

## Preparation

- Use the paint, markers, or stickers to add random number on the baseball cap to create a Number Detective hat.


## What to Do

1. Invite a child to put on the cap and pick up the magnifying glass.
2. Give the child an assortment of number and counting books.
3. Encourage the child to use the magnifying glass to search through the books to find numbers.
4. When the child locates numbers on the pages of the books, she should let you know.


## Teacher-to-Teacher Tip

- An easy alternative for the detective hat is to write numbers on squares of colorful paper and tape or glue them to a baseball cap.


## Assessment

To assess the children's learning, consider the following:

- Give the children an assortment of number and counting books. Can each child identify numbers 1-10 on the pages in the book?
- Hide numbers around the room. Can the children find the numbers in the room?
- Display several sheets of newspaper ads. Can the children identify numbers and circle them on the pages?


## Corduroy's Pocket

## Materials

Corduroy's Pocket
by Don Freeman number cards for 1-5
tagboard
glue
markers
piece of corduroy fabric

## Children's Books

Corduroy by
Don Freeman
My Little Counting Book by Roger Priddy A Pocket for Corduroy by Don Freeman

LEARNINGOBJECTIVES
The children will:

1. Learn to recognize numbers.
2. Learn to count actions to match a number.

## Vocabulary

 corduroynumber names pocket

## Preparation

- Make number cards from $4^{\prime \prime} \times 6^{\prime \prime}$ tagboard. Write the numbers 1-5.
- Make a tagboard pocket at least $6^{\prime \prime} \times 8^{\prime \prime}$. Glue three edges together and write "Corduroy's Pocket" on the front. Slip the number cards inside.


## What to Do

1. Read Corduroy's Pocket by Don Freeman to the children several times. Put a copy in the book area for the children to read independently.
2. Show the pocket to the children. Invite a child to come and draw a number card out of "Corduroy's pocket." Ask the child to name the number on the card.

3. Ask all the children to clap that number of times.
4. Vary the actions with slapping their knees, snapping their fingers, patting their shoes, and so on.
5. When the children are ready, use cards from 1-10.

## Assessment

To assess the children's learning, consider the following:

- Show the children the set of number cards individually. Can the children name the cards when they are in random order?
- Can the children choose a card, name the number, and clap the correct number of times?


## The Numeral Song

## LEARNINGOBJECTIVES

The children will:

1. Learn how to form numerals.
2. Develop number recognition.

## Małerials

recording of "The Numeral Song" from Sing to Learn with Dr. Jean
tape or CD player oak tag copy paper marker or computer

## Children's Books

Count and See by Tana Hoban
Fish E: A Book You Can Count On by Lois Ehlert
Ten Black Dots by Donald Crews

## Vocabulary

 number names, to 10numeral

## Preparation

- Make a book with the lyrics from Dr. Jean's "The Numeral Song."
- Write the numbers, one on each page, with arrows to illustrate the correct formation of each number from 1-10.


## What to Do

1. Play a recording of "The Numeral Song."
2. Hold the book up so that all the children can see the number.
3. Demonstrate how to make the number by tracing the number on the page.
4. Encourage the children to draw the figures in the air with large strokes to help them practice writing numbers and remember the correct formation as you sing the song together.

## Teacher-to-Teacher Tip

- If "The Numeral Song" is not available,
 the Internet has several sites with rhymes to help the children write their numbers.


## Assessment

To assess the children's learning, consider the following:

- Can children correctly form numbers?
- Can children write numbers 1-10?


## Jackie Wright, Enid, OK

## Straight and Curvy Numbers Book

## Materials

craft sticks
yarn
card stock ( $6^{\prime \prime} \times 6^{\prime \prime}$; several per child)
glue sticks
stapler
plastic bags (10 per child)
number stickers (optional)

## Children's Books

Neil's Numberless World by Lucy Coats Numberlies: Number One by Colin and Jacqui Hawkins (a series of book featuring numbers 1-10) Spot's Colors, Shapes, and Numbers by Eric Hill

## LEARNINGOB JECTIVES

The children will:

1. Learn the difference between numbers that are made from straight or curved lines and numbers that include both (a good activity for tactile learners).
2. Learn to form numbers.

## Vocabulary

curved number names straight

## Preparation

- Cut craft sticks into short pieces for numbers with straight lines, such as 1, 4 , and 7.
- Cut yarn pieces for numbers with curved lines such as 2, 3, 5, 6, 8, and 9 . The length will depend on how big you want the children to make the numbers. For $6^{\prime \prime} \times 6^{\prime \prime}$ card stock, make the yarn pieces $4^{\prime \prime}$ long.
- Put the craft sticks and yarn into individual bags. Prepare enough that there is one bag per number per child.


## What to Do

1. Let the children explore the craft sticks or yarn, forming them into numbers (one per piece of card stock).
2. Ask the children to take the glue stick and "write" the number on the card stock. Smaller children will need help with this.
3. Place the craft sticks or yarn over the glue, forming the number. Allow to dry.
4. When the pages are completely dried, staple two more pieces of plain card stock to the front and back, forming a book.
5. The children can decorate the cover with stickers of numbers or draw them. Write "My Number Book" on the cover if desired.

## Teacher-to-Teacher Tip

- Bulky yarn works best for this activity.


## Assessment

To assess the children's learning, consider the following:

- Can the children recognize number "shapes"?
- Do the children understand the concepts of straight and curved?


## Ten Little Rabbits

## LEARNINGOBJECTIVES

The children will:

1. Count units in a group.
2. Describe some traditional Native-American activities.
3. Tap a steady beat to a chant.

Ten Little Rabbits<br>by Virginia<br>Grossman

## Children's Books

Chicka Chicka Boom Boom by Bill Martin, Jr. Over in the Meadow by John Langstaff Ten Little Rabbits by Virginia Grossman

## Vocabulary

 anglersplain
trappers
weavers beat

## Preparation

- Practice reading the book as a rhythmic chant while tapping the beat.


## What to Do

1. With the children, look at each picture in the book. Count the number of rabbits in that picture and discuss the rabbits' activity (the pages in the back of the book describe each activity).
2. Read the book to the children. Invite the children to start each page with you by saying the number of rabbits on that page.
3. Repeat step two until children come in with the number on cue as you maintain a rhythmic chant while reading.
4. Start tapping a steady beat on your thighs and invite the children to do the same. While they are tapping, read the book in a rhythmic chant.
Note: You may prefer to have the children lightly tap their toes or pat their fingers together.
5. Finally, ask the children to say the number at the beginning of each page while you rhythmically read the book and they tap or pat the beat.
Note: Your class can "perform" the book for families, or for another class or teacher.

## Assessment

To assess the children's learning, consider the following:

- Randomly open to a page in the book. Can the children tell you how many rabbits are in the picture?
- Act out one of the activities pictured in the book (fishing, weaving, tracking). Can the children identify the activity?

Roberta Volkmann, Springfield, IL

## Baggie Book

LEARNINGOBJECTIVES
The children will:

1. Save favorite numbers in an organized "baggie book."
2. Draw pictures representing favorite numbers.
3. Read or recite favorite numbers out loud.
4. Use favorite numbers as a "dictionary" or reference for spelling and writing favorite numbers.

| VocABULARY |  |  |  |
| :--- | :--- | :--- | :--- |
| dictation | drawing | literacy | writing |
| dictionary | favorite | reading |  |

## Preparation

- Cut squares of drawing paper to fit inside a clear plastic sandwich baggie, and keep in a box in the child's art or writing area.
- Keep paper squares, baggies, and drawing tools on hand for children to draw or write favorite numbers whenever they choose.


## What to Do

1. Ask the children to draw a set of items that represents their favorite number.
2. Help the children write the number word next to their picture. Put each child's favorite number drawing into a clear sandwich baggie and close it.
3. When there are two or more favorite word baggies, staple them together like a book. Or, if preferred, punch a single hole in the strong part of the baggie and insert a single metal binder ring. The ring method allows for words to be added or removed easily.
4. Each baggie can have a word facing front, and one facing back, that is, two drawings/words per baggie.
5. Place the baggies in an easily accessible place in the classroom.

## Assessment

To assess the children's learning, consider the following:

- Can the children memorize the spelling of their favorite number word is as it relates to the drawing?
My Favorite Word Book by Selina Young Spot's Favorite Words by Eric Hill The Very Hungry Caterpillar's Favorite Words by Eric Carle


## Class Lift-the-Flap Book

LEARNINGOBJECTIVES

The children will:

1. Learn to name the numbers $1-5$.
2. Learn to make sets for numbers $1-5$.

## Małerials

$9^{\prime \prime} \times 12^{\prime \prime}$
construction paper in assorted colors
markers
hole punch
$4^{\prime \prime} \times 7^{\prime \prime}$ card stock
glue
number cards for 1-5
metal rings (or yarn) for assembling the book
small blocks or counters

## Children's Books

Anno's Counting House by Mitsumasa Anno Count! by Denise Fleming
How Many Snails? by Paul Giganti, Jr.

## Vocabulary

 countflap set

## Preparation

- Draw a line down the middle of each sheet of $9^{\prime \prime} \times 12^{\prime \prime}$ construction paper, positioned horizontally.
- Punch holes in the left side of the paper.
- Fold the $4^{\prime \prime} \times 7^{\prime \prime}$ card stock along the short edge, making a $1 / 4^{\prime \prime}$ fold for gluing.


## What to Do

1. Show the children the number cards for 1-5. Explain that they will be coloring sets of objects that match these numbers to make a lift-the-flap book for the classroom.
2. Give each child a sheet of $9^{\prime \prime} \times 12^{\prime \prime}$ construction paper, positioned horizontally with the holes punched on the left. Ask the children to choose a number card, name the number, and draw a set of that many objects on the right side of their papers. Ask the children to try to keep the objects on the right side of the line.
3. When the children are finished drawing, ask them to count the objects. Write the number (no larger than $4^{\prime \prime} \times 7^{\prime \prime}$ ) on the left side of the page and glue a card stock covering for the number to make a flap to lift. Allow to dry.
4. Assemble the pages in numerical order with a cover sheet and slip the rings through the holes.

## ASSESSMENT

To assess the children's learning, consider the following:

- Can the children recognize the numbers on the cards?
- Using small blocks or counters, can the children make sets to match the number cards?


## Number Book

## Materials

poster of numbers
from 1-10
copy paper
paper numbers
crayons
markers

LEARNINGOBJECTIVES
The children will:

1. Count numbers.
2. Create a book of numbers.
3. Decorate their book.

## Vocabulary

number names to 10

## Preparation

- Place a poster of numbers from 1-10 on the wall in the classroom.
- Put five sheets of copy paper together. Fold in half. Staple the fold to create a "number book."
- Make one book for each child.


## What to Do

1. Point to each number on the poster. Ask the children to identify each number. Count with them.
2. Pass out the number books. Give each child his own set of paper numbers.
3. Ask the children to glue the numbers in the book. Ask them to place each number on a separate page. Give them crayons and markers to draw in their books.
4. Say, "Draw one thing on the 'one' page. Draw two things on the 'two' page, and so on."
5. Help the children write their names on the back page of their books.

## Teacher-to-Teacher Tip

- Ask the children to say the numbers as they glue them in their book. Use other props such as posters to visually reinforce the numbers.


## Assessment

To assess the children's learning, consider the following:

- Can the children tell you about their number books?
- Can the children tell you what numbers they see?
- Can the children count together?

Lily Erlic, Victoria, British Columbia, Canada

