Dear Family,
Your child is learning about numbers from $O$ to 5. In this topic, he or she will learn to recognize numbers 0 through 5 in different arrangements, and then learn how to write them.

Number Arrangements
Counting tells how many are in a set, regardless of the arrangement or order of the objects.


The same number is shown in each arrangement.
Try this activity with your child to practice counting 1 to 5 objects in different arrangements.

## Arrange the Objects

Place 10 small objects on a table such as pennies or buttons. Say a number from 3 to 5 and have your child arrange the objects in two different ways to show that number. For example, he or she can show the number 4 as a row, a column, or in a square pattern.

## Observe Your Child

Change the arrangement of the objects and ask if the number of objects has changed. Ask your child to explain why the number of objects stays the same regardless of their arrangement.

## Compare Numbers 0 to 5

Dear Family,
Your child is learning to compare numbers from 0 to 5 . In this topic, he or she will learn to compare groups of objects to identify if one group is greater in number, less in number, or equal in number to another group.

## Comparing Groups

Match each object from one group with an object from a second group to decide which group is greater in number, less in number, or if the groups have the same number of objects.

Here is an activity you can do with your child to practice comparing numbers to 5 .

## Greater Than or Less Than

Make a set of number cards from I to 4 . Gather 5 buttons or pennies. Mix up the number cards and place them facedown on a table. Have your child choose I card and read the number aloud. Then you say "greater than" or "less than." Ask your child to show a group of objects that is greater in number or less in number. For example, if the number 4 card is chosen and you say "less than," your child makes a group with I, 2 or 3 buttons. Switch roles and continue the game.

## Observe Your Child

During one of your turns, purposely show the incorrect number of objects. Ask your child to explain why you are wrong and how he or she knows.

Dear Family,
Your child is learning about numbers from 6 to 10 . He or she will learn how to represent these quantities with objects and how to read and write them as numbers.

Ways to Show a Number
The last number said tells the number of objects in a group regardless of their arrangement or order.

There are different ways to
show the number 8.


Try this activity with your child to practice showing and writing numbers 6 to 10.

## Draw Pictures

Say a number from 6 to 10 . Ask your child to show that number by drawing the appropriate number of simple objects (balls, flowers, smiley faces, stars), and then writing the number. Continue with the other numbers. When completed, have your child hold up, or point to, the picture that shows 6 objects; 7 objects; 8 objects; and so on.

## Observe Your Child

When your child writes a number, make sure he or she is writing the correct symbol. If your child has trouble writing the number, write it out first, and then have him or her trace the number you wrote.

## Compare Numbers 0 to IO

Dear Family,
Your child is learning to compare numbers from 0 to 10 . In this topic, he or she will learn to compare numbers using groups of objects to determine which number is greater. He or she will also learn to compare groups of numbers by counting.

Comparing Groups
Count the objects in a group, write the number to tell how many in each group, and then compare groups of objects as greater or less than a specific number.


5 is greater than 4.
Here is an activity to do with your child to practice comparing numbers $O$ to 10.

## Compare the Stars

Draw 6 stars on a sheet of paper and ask your child to count them. Have him or her draw a group of stars that is less in number than the number of stars they counted, and then write the number. Now ask your child to draw 6 to 9 stars and write the number to tell how many. Say, "I will draw a group of stars greater in number than the group you drew." Have him or her count the stars, write the number that tells how many, and then circle the number that is greater than the other. Repeat the activity using different numbers.

## Observe Your Child

Draw a group of 4 stars and a group of 7 stars. Have your child write the numbers that tell how many in each group. Then have them tell which number is greater than the other, and explain how they know.

## Classify and Count Data

Dear Family,
Your child is learning to sort objects into categories and count the objects in each group. He or she will use charts and tally marks to organize the information.

Classify Objects
Objects can be classified by sorting them into groups with similar characteristics. Crayons can be sorted by color.

Sort the crayons into categories: crayons that are green and crayons that are NOT green. Draw a circle around the crayons that are green. Mark an X on the crayons that are NOT green.

Here is an activity you can do with your child to understand classifying and counting objects.


## Red Squares or Blue Squares

Cut out 20 paper squares. Help your child color 10 squares red and 10 squares blue. (You can choose any 2 colors.) Have your child look for things in your house that are red and things that are blue. Each time he or she finds something that is red or blue, place that color square on the table in a row. At the end of the game, count how many of each color your child found. Ask, "Which color has a greater number of squares?"

## Observe Your Child

During the game, ask your child why you are placing the squares in two rows. Ask him or her to explain how placing the squares in rows makes it easier to figure out which group has more squares.

## Understand Addition

Dear Family,
Your child is learning about addition. In this topic, he or she will learn to join two groups and decide how many there are in all. Your child will also learn to represent joining situations as equations using the symbols + and $=$.

Equations
Joining groups can be shown in an equation.


Here is an activity to do with your child to practice addition.

## Stack the Pennies

Use 10 pennies. Count out 5 pennies and place them in a stack. Write " $5+$ " on a sheet of paper. Ask your child to add more pennies to your stack. Your child should count out the pennies (such as 4), and then place his or her group on your stack. Have your child write the number of pennies he or she added to your stack. Then work together to complete the equation: $5+4=9$. Reverse roles and continue the game.

## Observe Your Child

After you have completed an equation, ask your child to explain why 5 pennies and 4 pennies is 9 pennies, and is the same as $5+4=9$.

## Understand Subtraction

Dear Family,
Your child is learning about subtraction. He or she will learn to understand subtraction as taking apart a quantity of objects and separating them into two separate groups and as taking away a quantity of objects from a group. Your child will also learn to represent takeaway situations as equations using the symbols - and $=$.

Take Apart
Separate a set of objects into two groups.

6 take away 2 is 4.


Practice these skills with your child by using the following activity.

## What's in the Bag?

Gather 8 to 10 small objects. Count the objects as you place them in a paper bag, basket, or box. Take out 4 objects and ask your child how many objects are left. Help him or her write the equation to explain the action on a sheet of paper. $(8-4=4)$ Reverse roles, and continue the game by varying the number of total objects.

## Observe Your Child

During one of your turns use the sentence stem: $\qquad$ take away $\qquad$ is $\qquad$ Then have your child write a matching equation.

## More Addition and Subtraction

Dear Family,
Your child is continuing to learn about addition and subtraction. In this topic, he or she will learn to compose, or put two numbers together, to make numbers through 10. Your child will solve word problems and will also write addition and subtraction equations.

Making Numbers
There is more than one way to show a number.

```
4=0+4
4=1+3
4=2+2
4=3+1
4=4+0
```

The total number is always 4.


Try this activity with your child to continue practicing addition and subtraction.

## Story Problems

Help your child make up stories about the following equations:
$6+2=8,7-5=2,8+2=10,6-5=1,4+5=9,9-3=6$.

## Observe Your Child

Before your child makes up a story to match the equation, ask how he or she knows the equation is addition or subtraction.

## Count Numbers to 20

```
Dear Family,
Your child is learning to count, read, and write numbers from 11 through 20. He or she will learn to count forward from any number to 20 . Your child will also learn to use logical reasoning to solve problems when there is more than one possible solution.
Count and Write
Each number word has its own unique symbol.
\begin{tabular}{lll}
16 & 0000000000 & 000000 \\
17 & 0000000000 & 0000000 \\
18 & 0000000000 & 00000000 \\
190000000000 & 000000000 \\
20 & 0000000000 & 0000000000
\end{tabular}
Try this activity with your child to practice counting objects and counting forward from any number to 20 .
```


## Make a Group of Objects

Use 20 small objects such as pennies, buttons, paper clips, or paper squares. Ask your child to make a group with I5 objects and write the number I5 on a piece of paper. Then add objects to the group one at a time as you count forward to 20 with your child. Finally, ask your child to write the numbers you counted. Then repeat the activity with a different number of objects.

## Observe Your Child

When your child makes the group of I5 objects, ask him or her to organize the objects in a way that makes them easier to count. Ask your child to explain what a ten-frame is and how it can help to organize objects.

# Compose and Decompose Numbers II to 19 

Dear Family,
Your child is learning about composing and decomposing numbers. In this topic, he or she will learn to compose and decompose numbers 11 to 19 . Your child will learn ways to show these numbers as the sum of 10 ones and some more ones. He or she will also learn to write equations to show these numbers in different ways.

Compose and Decompose Numbers You can show numbers in different ways. The ten-frame and equations show 12 as 10 and 2 more.

$10+2=12$
$12=10+2$

Here is an activity to do with your child to practice composing and decomposing numbers 11 to 19.

## 10 and More Ones

Give your child 19 pennies and a sheet of paper with a ten-frame drawn on it. Say a number from II to 19. Have your child fill the ten-frame first with pennies, and then count on from 10 to the number you said. Then have him or her say the number both as 10 and $\qquad$ ones and as an equation. Repeat with other numbers.

## Observe Your Child

After your child says the equation, ask him or her to explain how he or she knows the equation is correct.

## Count Numbers to IOO

Dear Family,
Your child is learning to work with larger numbers through 100. In this topic, he or she will learn to count and read numbers to 100. Your child will also learn to use a hundred chart to recognize patterns when counting by tens and ones.

## Numbers on a Hundred Chart

Numbers are counted and written in a specific sequence on a hundred chart. Use a hundred chart to count to 100.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

Try this activity with your child to practice using a hundred chart.

## Guess the Number

Play "Guess the Number." Say, "I am thinking of a number that comes just after 91. What number is it?" Encourage your child to use the chart to find the correct number, and then say the number aloud. You may wish to write each number that your child finds.

## Observe Your Child

Using the hundred chart, point to a number in the top row and have your child count by IOs from that number. Ask your child to color the pattern, and then explain how he or she knows the pattern is right.

## Identify and Describe Shapes



Here is an activity to do with your child to practice describing locations.

## Describe the Position of Shapes

Locate shapes all around your house. Have your child identify the shape, and then describe its location in relationship to other objects in the room. Have your child use the terms in front of, next to, behind, beside, above, and below to describe where the shape is in relation to the object you choose.

## Observe Your Child

During the activity, encourage your child to use the correct terminology when describing location.

# Analyze, Compare, and Create Shapes 

 Topic 13Dear Family,
Your child is continuing to learn about geometry. In this topic, he or she will work with both 2-dimensional and 3-dimensional shapes to create other shapes. He or she will also learn to use pattern blocks of different shapes to make new shapes, and how to use solid figures and materials to make new shapes.

## Solid Shapes

Use solid figures to create new shapes, and then tell what figures were used to make the new shape.


Here is an activity to do with your child to practice identifying solid shapes.

## Make a Shape

Provide craft sticks, pipe cleaners, or string for your child to make shapes with. Name a shape and have your child draw that shape on a piece of paper. Have your child make that same shape using the materials you provided. Repeat using the following shapes: circle, square, rectangle, triangle, hexagon.

## Observe Your Child

During this activity, ask your child which materials he or she could use to make a circle. Have your child make the circle using the material and ask why he or she chose that material.

## Describe and Compare Measurable Attributes

Dear Family,
Your child is learning to use measurement to describe and compare different objects. In this topic, he or she will learn to compare objects based on length, height, weight, and capacity.

Measure
Objects can be measured and described by their attributes.


Here is an activity to do with your child to practice measurement.

## Is it Longer?

Give your child a pencil. Have him or her find an object in your home that is longer than the pencil. Then have your child find an object in your home that is shorter than the pencil. Continue with other objects.

## Observe Your Child

After your child decides which object is longer, ask how he or she knows that the object is longer.

