

**This is a one-week excerpt from the Starfall Kindergarten Mathematics Teacher's Guide.**

If you have questions or comments, please contact us.

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# Numbers Everywhere

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# Numbers Everywhere

## Week 4

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# Week 4 Summary

In Week 4 the children will continue learning to identify the meaning of numbers, and discussing ways they are represented in their everyday lives. They will discuss math strategies and explore one-to-one correspondence. The children will also:

- Learn to play “Backpack Bear Says”
- Use cooperative learning techniques
- Compare objects in groups to determine which has the greater/lesser number
- Review AB patterns
- Supply missing numbers in a series

## Preparation

### DAY 1

No additional preparation is needed.

### DAY 2

The children will use their math bags which should contain a ten-frame and several connect cubes.

You will use a set of Shape Cards (*square, rhombus, triangle, pentagon, hexagon*).

### DAY 3

The children will use their math bags.

### DAY 4

Have the “A Walk in the Park” game available for demonstration if time permits.



## DAY 5

*Activity Center 1* — Navigate classroom computers to *Starfall.com*.

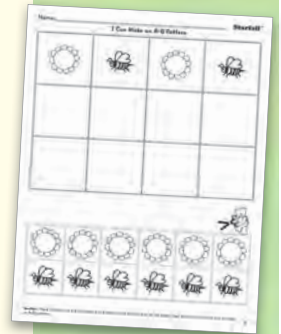
*Activity Center 2* — The children will need 1 or 2 “A Walk in the Park” Game board(s), playing pieces and 1 or 2 game spinners numbered 1-5.

*Activity Center 3* — The children will use math mats and a game spinner numbered 1-5. Create a set of Number Representation Cards for 1-5 by combining the 1-5 Number, Dice, Tally Marks, Domino, and Ten-Frame Cards.

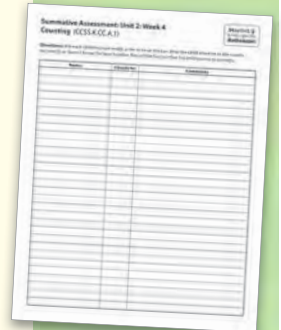
*Activity Center 4* — Prepare materials for this week’s Teacher’s Choice Activity.

*Summative Assessment* — The children will need *Backpack Bear’s Math Workbook #1*, pencils, scissors, and glue sticks to complete page 11 as you individually administer the Summative Assessment to each child.

Duplicate a Summative Assessment Checklist for Unit 2, Week 4 on which you will record the results of the Unit 2 counting assessment.



Backpack Bear's Math  
Workbook #1, Page 11



Summative Assessment  
Unit 2 - Week 4

DAY 1

DAY 2

*Daily Routines*

- Calendar
- Weather
- Number Line
- Place Value
- Hundreds Chart
- “How Many Days Have We Been In School?”

*Magic Math Moment*

Count to five

“Backpack Bear Says” (Numbers)

*Math Concepts*

The number five

5

Relationship between number and quantity

Partner sharing

The number six

6

Discriminate fives

Discriminate hexagons

Relationship between number and quantity

Discriminate sixes

*Formative / Summative Assessment*

The number five

The number six

*Workbooks & Media*

Math Melodies CD Track 17, “One Little Elephant Went Out to Play”

Workbook page 8

Workbook page 7



DAY 3

DAY 4

DAY 5

- Calendar
- Weather
- Number Line
- Place Value
- Hundreds Chart
- "How Many Days Have We Been In School?"

Learning Centers

Using math strategies

What number comes between?

Starfall.com:

- Monthly Calendar
- Numbers: "5-8"
- Numbers: "Feed the Animals"
- Math Songs: "Five Little Bears"

The number seven  
Relationship between  
number and quantity  
Discriminate sevens

7

Identify the number that comes  
before another number

The number eight  
Review octagon

8

Discriminate eights  
Relationship between number  
and quantity

"A Walk in the Park"

Ways to Represent Numbers

The number seven

The number eight

Teacher's Choice

Starfall.com: "Numbers"

Workbook page 9



Workbook page 10



Summative Assessment:  
Counting  
(Workbook p. 11)



**Calendar**

- A volunteer tells the name of the month.
- The children name the days of the week.
- The calendar helper turns the next number.
- Say: **Today is** (name of day and date).
- Name an action such as jump, hop, clap, squat, or jumping jack, and the children do the action the number of times that correspond to the date.

**Weather**

- Review yesterday's weather.
- The meteorologist goes to the window to look outside, predicts the weather, and places a tally mark under his or her prediction.
- Add a tally mark next to today's weather on the Weather Graph.

**Number Line**

- Point to and count the days the children have been in school.
- Sing "How Many Days Have We Been In School?"
- Remove the sticky note to reveal the next number. Say: **We have been in school** (number of days) **days**.

**How Many Days Have We Been In School?**

(Tune: "Here We Go Round the Mulberry Bush")

*How many days have we been in school,  
been in school, been in school?  
How many days have we been in  
school, who can tell me please?*

**Place Value**

Indicate the *Ones* container. Ask: **How many sticks are in the Ones container?** (five) **Right, five. Today we get to add one stick to our Ones container.** Do this.

Choose two volunteers to come forward and hold the *Ones* and *Tens* containers. Count the sticks with the children and write the new total on the board. Say: **When we have one set of ten and six more, we have sixteen.**

**Hundreds Chart**

- Say: **Today we will turn the next number.** The number helper does this.
- Ask: **The hundreds chart shows we have been in school how many days?**

**Counting & Cardinality**

A.2 - Count forward from a given number.

B.4 - Understand the relationship between numbers and quantities.

B.4a - Say number names in order, pairing each object with one number.

B.4b - The last number counted tells the total number of objects.

B.4c - Each successive number refers to one more.



# Magic Math Moment

## "Count to Five"

Play the *Math Melodies* CD Track 17, "One Little Elephant Went Out to Play." The children listen and then sing along.

### Materials

- Math Melodies* CD, Track 17

### "One Little Elephant Went Out to Play"

One little elephant went out to play  
Upon a spider's web one day;  
She had such enormous fun,  
She asked another little elephant to come!

Two little elephants...  
Three little elephants...  
Four little elephants...

Five little elephants went out to play  
Upon a spider's web one day;  
They had such enormous fun,  
They didn't ask another little elephant to come!

## The Number Five

**Essential Question:** How can we use a numeral to show how many objects there are?

### Materials

- Backpack Bear's Math Big Book*, page 22
- Backpack Bear's Math Workbook #1*, page 7
- Pencils, crayons

### Counting & Cardinality

A.3 - Write numbers from 0 to 20.

B.4 - Understand the relationship between numbers and quantities.

## 1 Introduce the Number Five

Write the numeral 5 on the board. Say: **This is a five. The numeral 5 stands for five.** Indicate and count five classroom objects to demonstrate five.

Indicate *Backpack Bear's Math Big Book*, page 22. Ask: **Can you find some pictures on this page that show five?** The children do this.

Say: **Today we will partner share to help us think of other places we see 5 that Backpack Bear may have missed.**

## 2 Review Partner Sharing and Finding Fives

Review the procedure for "Stand Up, Hand Up, Partner Up." Explain that the children will use this procedure today.

- The children stand and raise one hand.
- They partner by touching their hands to a partner's hand.
- Partners sit criss-cross, knee-to-knee.
- The children greet their partners.
- Partners discuss the question: **Where can you see the number five or five of something?**



The children will have an opportunity to view five on Starfall.com during Learning Centers.

After a short time, say: **Clap once if you can hear me.** (The children do this.) **Clap twice if you can hear me.** (The children do this.) Explain: **This is the signal to end the partner discussion.**

Ask: **Where can you see the number five or five of something?** (Volunteers respond.) **The next step is to compliment your partner.** **Partners, compliment each other, say good job (name).** Partners do this.



## Formative Assessment

### Backpack Bear's Math Workbook, Page 7

Distribute *Backpack Bear's Math Workbook #1*. The children turn to page 7. Complete the page together as with previous workbook pages.



Daily  Routines

DAY

2

CALENDAR  
31

## Calendar

- A volunteer tells the name of the month.
- The children name the days of the week.
- The calendar helper turns the next number.
- Say: **Today is** (name of day and date).
- Name an action such as jump, hop, clap, squat, or jumping jack, and the children do the action the number of times that correspond to the date.



## Weather

- Review yesterday's weather.
- The meteorologist goes to the window to look outside, predicts the weather, and places a tally mark under his or her prediction.
- Add a tally mark next to today's weather on the Weather Graph.



## Number Line

- Point to and count the days the children have been in school.
- Sing "How Many Days Have We Been In School?"
- Remove the sticky note to reveal the next number. Say: **We have been in school** (number of days) **days**.

**How Many Days Have We Been In School?***(Tune: "Here We Go Round the Mulberry Bush")*

*How many days have we been in school,  
been in school, been in school?  
How many days have we been in  
school, who can tell me please?*

100

## Place Value

Indicate the *Ones* container. Ask: **How many sticks are in the Ones container?** (six) **Right, six. Today we get to add one stick to our Ones container.** Do this.

Choose two volunteers to come forward and hold the *Ones* and *Tens* containers. Count the sticks with the children and write the new total on the board. Say: **When we have one set of ten and seven more, we have seventeen.**



## Hundreds Chart

- Say: **Today we will turn the next number.** The number helper does this.
- Ask: **The hundreds chart shows we have been in school how many days?**

**Counting & Cardinality**

*A.2 - Count forward from a given number.*

*B.4 - Understand the relationship between numbers and quantities.*

*B.4a - Say number names in order, pairing each object with one number.*

*B.4b - The last number counted tells the total number of objects.*

*B.4c - Each successive number refers to one more.*

# Magic Math Moment

## "Backpack Bear Says"

### Materials

None

Play "Backpack Bear Says" (a variation of "Simon Says").  
Suggestions:

- Tap your nose five times.
- Hop six times.
- Nod your head three times.
- Turn around two times.
- Touch your nose one time.

### Counting & Cardinality

A.3 - Write numbers from 0 to 20.

B.4 - Understand the relationship between numbers and quantities.

### Geometry

A.2 - Correctly name shapes.

## The Number Six

### Materials

- Shape Cards: hexagon, pentagon, rhombus, square, and triangle
- Math bags containing ten-frames and connect cubes
- Backpack Bear's Math Big Book, page 23
- Backpack Bear's Math Workbook #1, page 8
- Pencils, crayons
- Pocket chart

### 1 Introduce the Number Six

Instruct the children to take the connect cubes and ten-frames from their math bags.

Say: **Look at the ten-frame. Put your finger on the first section. I will write a number on the board. Begin with the first section and place enough cubes to match the number in the ten-frame.** Write

5 on the board. Check for accuracy as children place their cubes.

Ask: **What if you add one more cube to your ten-frame? How many cubes would you have?**

Continue: **Let's check. Add one more cube. Now, count your cubes. Raise your hand if you have six cubes altogether.**

Write the numeral 6 on the board. Say: **This is a six. The numeral 6 stands for six.** Indicate and count six classroom objects to demonstrate six.

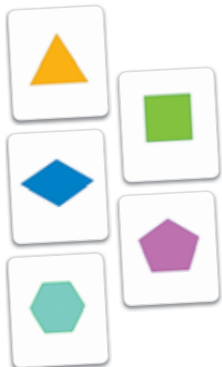
The children put their connect cubes and ten-frames back into their math bags.

### 2 Play "Find the Hexagon"

Place the Shape Cards *square, rhombus, triangle, pentagon, and hexagon* face down in a pocket chart.

Say: **We learned about a shape with six sides called a hexagon. A hexagon is hidden somewhere in our cards. Let's play a game. A volunteer will turn over a card and identify the shape. The volunteer will choose someone to tell how many sides that shape has. We'll do this until we find the six-sided hexagon shape!**

Play "Find the Hexagon."



### 3 Find Sixes

Indicate *Backpack Bear's Math Big Book*, page 23. Ask: **Can you find some pictures on this page that show six?**

Ask: **Where else can you see the number six or six of something?** (six dots on a domino, six on the number line, three plus three equals six)



## Formative Assessment

### Backpack Bear's Math Workbook, Page 8

Distribute *Backpack Bear's Math Workbook #1* to each child. The children turn to page 8. Complete the page together as with previous workbook pages.





## Calendar

- A volunteer tells the name of the month.
- The children name the days of the week.
- The calendar helper turns the next number.
- Say: **Today is** (name of day and date).
- Name an action such as jump, hop, clap, squat, or jumping jack, and the children do the action the number of times that correspond to the date.



## Weather

- Review yesterday's weather.
- The meteorologist goes to the window to look outside, predicts the weather, and places a tally mark under his or her prediction.
- Add a tally mark next to today's weather on the Weather Graph.



## Number Line

- Point to and count the days the children have been in school.
- Sing "How Many Days Have We Been In School?"
- Remove the sticky note to reveal the next number. Say: **We have been in school** (number of days) **days**.

**How Many Days Have We Been In School?**

(Tune: "Here We Go Round the Mulberry Bush")

*How many days have we been in school,  
been in school, been in school?  
How many days have we been in  
school, who can tell me please?*



## Place Value

Indicate the *Ones* container. Ask: **How many sticks are in the Ones container?** (seven) **Right, seven. Today we get to add one stick to our Ones container.**

Choose two volunteers to come forward and hold the *Ones* and *Tens* containers. Count the sticks with the children and write the new total on the board. Say: **When we have one set of ten and eight more, we have eighteen.**



## Hundreds Chart

- Say: **Today we will turn the next number.** The number helper does this.
- Ask: **The hundreds chart shows we have been in school how many days?**

**Counting & Cardinality**

A.2 - Count forward from a given number.

B.4 - Understand the relationship between numbers and quantities.

B.4a - Say number names in order, pairing each object with one number.

B.4b - The last number counted tells the total number of objects.

B.4c - Each successive number refers to one more.

# Magic Math Moment

## Using Math Strategies

### Materials

None

Say: **A strategy is a way of finding an answer. If we want to know how many girls there are in our class today, what strategy could we use to find the answer?** Accept responses.

Continue: **Let's use the strategy of having the girls stand in the front of the room and we'll count them together. We will pass Backpack Bear to each girl as we count. This is called one-to-one correspondence. That means we say one number for each girl.** Do this.

Ask: **How many girls are here today? Let's use the same strategy to count how many boys there are in school today.**

Repeat the procedure for the boys. Ask:

- **How many girls are here today?** (Write the numeral on the board.)
- **How many boys are here today?** (Write the numeral on the board.)
- **Which number is larger, or bigger?**
- **Are there more boys or more girls here today?**

### Counting & Cardinality

A.3 - Write numbers from 0 to 20.

B.4 - Understand the relationship between numbers and quantities.

B.4a - Say number names in order, pairing each object with one number.

C.6 - Identify greater than, less than, and equal to.

## The Number Seven

**Essential Question:** Why do we need to count each object to find out how many we have?

### Materials

- Math bags
- Backpack Bear's Math Big Book, page 24
- Backpack Bear's Math Workbook #1, page 9
- Starfall.com: Numbers
- Pencils, crayons

### 1 Introduce the Number Seven

Write the numeral 7 on the board. Say: **This is seven. The numeral 7 stands for seven.** Indicate and count seven classroom objects to demonstrate seven.

### 2 Seven Hunt

Say: **Today let's go on a seven hunt! Look in your math bag and find seven objects. They can be all the same or they can be seven different things. Place the seven objects in front of you.**

The children do this.

Continue: **Now, turn to your neighbor and take turns counting each other's objects.**



### 3 Find Sevens

Indicate *Backpack Bear's Math Big Book*, page 24. Ask: **Can you find some pictures on this page that show seven?**

Ask: **Where else can you see the number seven or seven of something?** (seven days in a week, seven on the calendar, six plus one equals seven)



### 4 Starfall.com

Project *Starfall.com*: Numbers, "7." The children watch carefully for examples of seven. Add additional suggestions to your list.



## Formative Assessment

### Backpack Bear's Math Workbook, Page 9

Distribute *Backpack Bear's Math Workbook #1* to each child. The children turn to page 9. Complete the page together as with previous workbook pages.





# Daily Routines

DAY

4


 CALENDAR  
31

## Calendar

- A volunteer tells the name of the month.
- The children name the days of the week.
- The calendar helper turns the next number.
- Say: **Today is** (name of day and date).
- Name an action such as jump, hop, clap, squat, or jumping jack, and the children do the action the number of times that correspond to the date.



## Weather

- Review yesterday's weather.
- The meteorologist goes to the window to look outside, predicts the weather, and places a tally mark under his or her prediction.
- Add a tally mark next to today's weather on the Weather Graph.



## Number Line

- Point to and count the days the children have been in school.
- Sing "How Many Days Have We Been In School?"
- Remove the sticky note to reveal the next number. Say: **We have been in school** (number of days) **days**.

### How Many Days Have We Been In School?

(Tune: "Here We Go Round the Mulberry Bush")

How many days have we been in school,  
been in school, been in school?  
How many days have we been in  
school, who can tell me please?

100

## Place Value

Indicate the *Ones* container. Ask: **How many sticks are in the Ones container?** (eight) **Right, eight. Today we get to add one stick to our Ones container.**

Choose two volunteers to come forward and hold the *Ones* and *Tens* containers. Count the sticks with the children and write the new total on the board. Say: **When we have one set of ten and nine more, we have nineteen.**



## Hundreds Chart

- Say: **Today we will turn the next number.** The number helper does this.
- Ask: **The hundreds chart shows we have been in school how many days?**

### Counting & Cardinality

A.2 - Count forward from a given number.

B.4 - Understand the relationship between numbers and quantities.

B.4a - Say number names in order, pairing each object with one number.

B.4b - The last number counted tells the total number of objects.

B.4c - Each successive number refers to one more.

# Magic Math Moment

## What Number Comes Between?

### Materials

- Backpack Bear
- Number Cards 1 through 10

Choose two volunteers to stand next to each other. Say: **These children are standing next to each other. Say, next to.**

Continue: **If Backpack Bear wants to stand between them, where would he stand? Raise your hand if you can stand with Backpack Bear between (name volunteers).** A volunteer does this. **Say, between.**

Select 10 children to hold Number Cards 1 through 10 in numerical order. The remaining children practice identifying the child holding the number between two other numbers (Example 3 and 5) and identify the number. Practice with several examples. Change volunteers to give all of the children a turn to hold Number Cards and identify the number that comes between.

### Counting & Cardinality

A.3 - Write numbers from 0 to 20.

B.4 - Understand the relationship between numbers and quantities.

CC.2 - Supply missing number in a sequence.

### Operations & Algebraic Thinking

OA.1 - Identify, describe, or extend simple patterns.

### Geometry

A.1 - Describe objects using shapes and relative positions.

## The Number Eight

### Materials

- "A Walk in the Park"
- Backpack Bear's Math Big Book, page 25
- Backpack Bear's Math Workbook #1, page 10
- Pencils, crayons
- Backpack Bear

### 1 Introduce the Number Eight

Write the numeral 8 on the board. Say: **This is an eight. The numeral 8 stands for eight.** Indicate and count eight classroom objects to demonstrate eight.

Choose four girls and four boys to come to the front of the classroom. Say: **Let's count how many boys and girls are standing together.** Do this.

Ask: **What pattern could we make using these girls and boys? Let's use the AB rule.** Assist the children to understand the pattern could be girl/boy, girl/boy, or boy/girl, boy/girl.

### 2 Find Eights

Indicate *Backpack Bear's Math Big Book*, page 25. Ask: **Can you find some pictures on this page that show eight?** The children do this.

Say: **Backpack Bear remembers that an octagon has eight sides. He remembers this shape because it is the shape of a stop sign! Who can find the stop sign in Backpack Bear's picture?** A volunteer does this.

Ask: **Where else can you see the number eight or eight of something?** (an octopus has eight legs, there are eight crayons in a box, eight on a clock or calendar)





# Formative Assessment

## Backpack Bear's Math Workbook, Page 10

Distribute *Backpack Bear's Math Workbook #1* to each child. The children turn to page 10. Complete the page together as with previous workbook pages.

If time permits, preview "A Walk in the Park."



## 1 Computer

The children explore:

- Monthly calendar
- Numbers: 5-8
- Numbers: "Feed the Animals"
- Geometry and Measurement: "Geometry Terms"

The children may navigate to other *Starfall.com* math activities after they have explored those suggested above.

**Materials**

- Computers navigated to *Starfall.com*

## 2 A Walk in the Park

The children place their playing pieces on the start. They take turns to spin then move the corresponding number of spaces.

If a player lands on a +2 or +1, he or she moves that number of additional spaces.

If the player lands on -3, the player moves back 3 spaces. The first player to reach the end wins (or the children may play until all players reach the end).

**Materials**

- 1 or 2 "A Walk in the Park" game board(s)
- Game spinner(s) numbered 1 to 5
- Playing piece for each child

## 3 Ways to Represent Numbers

The children mix the sets of Representation Cards together and lay them face up on the floor or a table.

The first child spins the spinner. He or she finds all the cards that represent the number rolled and places the cards on his or her math mat.

The next child spins until he or she spins a different number, finds all the cards that represent that number, and places the cards on his or her math mat. The children continue until they have all had a turn.

If time allows, the children place all the Representation Cards back on the floor or table and repeat as above.

**Materials**

- Representation Cards for numbers 1 through 5
- Game spinner numbered 1-5
- Math mats

**Counting & Cardinality**

A.2 - Count forward from a given number.

A.3 - Write numbers from 0 to 20.

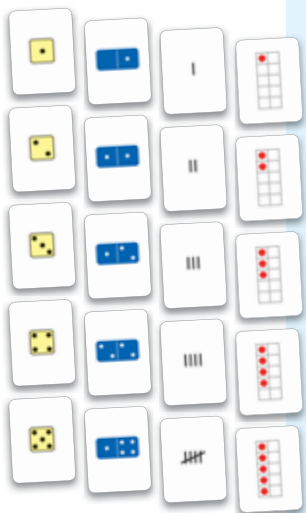
B.4 - Understand the relationship between numbers and quantities.

**Operations & Algebraic Thinking**

OA.1 - Identify, describe, or extend simple patterns.

**Geometry**

A.2 - Correctly name shapes.



## 4 Teacher's Choice

Prepare an activity that will provide the children with an opportunity to practice a skill from this unit.

## 5 Summative Assessment

Distribute *Backpack Bear's Math Workbook #1*. Instruct the children to turn to page 11. Explain how to complete the page. The children will work to complete their pattern workbook page as you individually assess them.

To perform this week's Summative Assessment, you will listen to each child count individually as far as he or she can. Choose a child to begin and ask him or her to begin counting orally. Listen until the child either counts incorrectly or says he or she doesn't know what number comes next. Record the last number the child counts to correctly on the Summative Assessment Checklist for Unit 2, Week 4. Repeat with each of the other children in the group.

### Materials

- Backpack Bear's Math Workbook #1*, page 11
- Summative Assessment Checklist (Unit 2, Week 4)
- Pencils, scissors, glue sticks

