

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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Cumulative Review

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Year Review

Week 33

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Week 33 Summary

In Week 33 the children will continue their review of major math concepts introduced this year. The children will practice answering addition and subtraction problems, creating and interpreting graphs, and practice their estimation skills.

The children will also:

- review 2-D and 3-D shapes by going on a “Shape Hunt”
- complete a mini math assessment
- review math terms
- determine how many more or less

Preparation

DAY 1

Place Number Cards 1-10 in a small basket or bag for today’s Magic Math Moment.

You will also need enough Addition and Subtraction Equation Cards to have a total of two for each child.

DAY 2

During today’s lesson you will administer a mini assessment (*Backpack Bear’s Math Workbook #2*, pages 47 and 48) to small groups of children at a time. In order to do so, you could either create three activity centers in which groups of children will work independently, or you may repeat three of the learning centers from Unit 14, Week 32 or any week of your choice.

DAY 3

In today’s Magic Math Moment you will play “Going on a Forest Walk,” which can be found on *Starfall Sing-Along Volume 2 Track 13*, or on *Starfall.com*.

You will need 2-D and 3-D Shape Cards, enough for each child to have one, plus a few extras and a basket or a bag in which to place the Shape Cards.

DAY 4

In today's Magic Math Moment the children will graph their favorite ice cream flavors. Prepare a chart paper with several favorite flavors and more than enough sections to accommodate your class.

You will also need enough stickers for each child to have one. Be sure the stickers fit the sections on the graph.

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 boards, 1 or 2 game spinners numbered 1 to 5 and a playing piece for each child in the group.

Activity Center 3 — The children will need 1 or 2 "Coin Town" game boards, 1 or 2 coin spinners, a playing piece and an empty paper or plastic cup for each child in the group, and one cup of coins to be used as "the bank," containing pennies, nickels, and dimes.

Activity Center 4 — The children will need Number Cards 1 through 20, a Bingo card for each of them, and several counters (pennies or "Bingo" chips).

Activity Center 5 — The children will need 1 or 2 "Race to 20" game boards, 1 or 2 pairs of dice and a playing piece for each child in the group.



DAY 1

DAY 2

Daily Routines

- Calendar
- Weather
- Number Line
- Place Value
- Hundreds Chart

Magic Math Moment

How Many More or Less?

Estimate with Backpack Bear

Math Concepts

Solve addition and subtraction equations

Mini Assessment in small group with teacher

Three activity centers to review skills

Formative / Summative Assessment

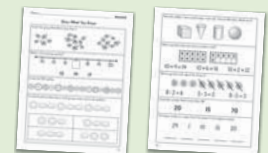
Mini Assessment for various skills

Workbooks & Media

Math Melodies CD, Track 9

Workbook pages 47 and 48

Workbook page 46



DAY 3

DAY 4

DAY 5

- Calendar
- Weather
- Number Line
- Place Value
- Hundreds Chart

Learning Centers

"Going on a Forest Walk"

Graph favorite ice cream flavors

Starfall.com (Any activity) **1**

Compare two- and three-dimensional shapes to classroom objects

Interpret the favorite ice cream flavor graph
Create insect graph (Workbook page)

"A Walk in the Park" **2**

"Coin Town" **3**

Sing-Along #2, Track 13 "Going on a Forest Walk"

Workbook page 49



"Bingo" **4**

"Race to 20" **5**

How Many More or Less?

Say: **Let's sing a song! Do you remember "Five Little Speckled Frogs?" Stand and sing it with me. Use your fingers to show how many frogs were left on the log each time one jumps into the pond.** Play *Math Melodies* CD, Track 9.

Continue: **Now, let's see if we can figure out how many numbers to add or subtract if we are trying to reach a specific number.**

Write a number on the whiteboard followed by an equal sign. (Example: $6 =$)

Indicate the basket of Number Cards and choose a volunteer to select one. Put the number chosen into the equation on the whiteboard. (Example: $6 = 4$)

Continue: **Since 4 is less, we have to add to get to 6** Add the + to the equation $6 = 4 + \underline{\quad}$.

Ask: **How many more should we add to 4 to get to 6?** (Volunteers respond.) **Right, we can count on starting from 4 to get to 6 (5,6), so the answer is 2.**

Add 2 to complete the equation.

Say: **Let's try some more!**

Continue as time allows. Change the number on the whiteboard and select new volunteers each time. If the Number Card drawn is greater than the number on the whiteboard (Example: $6 = 9$), lead the children to understand that they must subtract in order to reach that number (Example: $6 = 9 - 3$).

Materials

- Number Cards 1-10 in a bag or basket
- Math Melodies* CD, Track 9

Operations & Algebraic Thinking

A.1 - Represent addition and subtraction in a variety of ways.

A.3 - Decompose numbers less than 11.

Addition and Subtraction

Gather the children in a circle on a rug or the floor. Say: **Close your eyes and don't peek!**

Hide the Addition and Subtraction Equation Cards in fairly obvious locations around the classroom. Continue: **Open your eyes! While you had your eyes closed I hid Addition and Subtraction Equation Cards all around the classroom. See if you can find them. When you have found two equation cards bring them back with you, and have a seat in the circle. You may only bring two cards. If you can't find two cards, you may ask a friend to help you. Ready? Go!**

When the children are all back in the circle divide them into two groups. Seat them in two rows facing each other and name them Team 1 and Team 2.

Materials

- Addition and Subtraction Equation Cards (enough for 2 per child)
- Backpack Bear's Math Workbook #2*, page 46

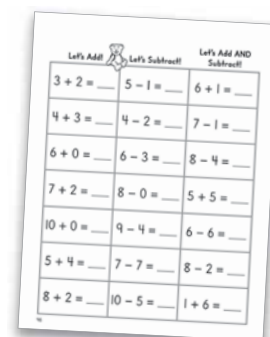
Say: **We will take turns to show our equation cards and give the answers. If you answer correctly your team will get a point. I will keep score on the whiteboard.** Begin with the first child on Team 1 and alternate teams. The children only show one equation card until they have all had a turn. Repeat for the second equation card. If the children answer incorrectly, the class helps them arrive at the correct answer.

Distribute *Backpack Bear's Math Workbook #2* and instruct the children to turn to page 46.

Say: **To solve these problems we will have to look very carefully! Raise your hand if you notice something about these math problems.** (A volunteer responds.) **Yes, for some of these problems we will add and for others we will subtract.**

Continue: **What tells you which operation to use? Right, the plus and minus signs. Look very carefully as you work to make sure you use the correct operation.**

The children may complete this page independently. Observe them as they work, reminding them to always look carefully at the signs. Review the correct answers with the children when they have completed the page and discuss the operations used.



Estimation

Say: **Let's do some estimation with Backpack Bear!**

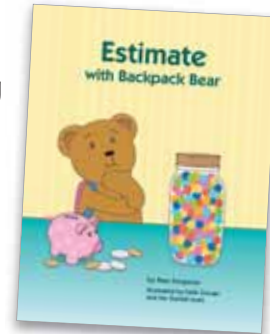
Indicate *Estimate with Backpack Bear*.

Continue: **Who can choose a number between 4 and 40?** A volunteer does this. Turn to the corresponding page and perform the estimation activity together.

Continue with additional volunteers and estimation activities as time allows.

Materials

- Estimate with Backpack Bear



Counting & Cardinality

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

CC.1 - Identify numerals out of sequence.

CC.6 - Identify odd and even numbers.

Operations & Algebraic Thinking

A.1 - Represent addition and subtraction in a variety of ways.

OA.A1 - Identify, describe, or extend simple patterns.

Estimation

E.1 - Understand the meaning of estimation.

Mini Centers and Assessment

Materials

- Backpack Bear's Math Workbook #2, pages 47 and 48
- Pencils
- Three center activities

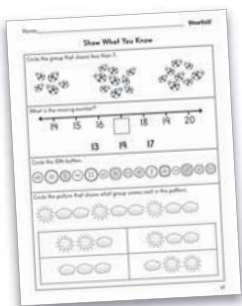
Divide the class into four groups. Assign three of the groups specific centers in which they will work independently in various areas of the classroom. The fourth group will meet with you to complete a mini assessment.

Mini Assessments

Distribute *Backpack Bear's Math Workbook #2* and instruct the children to turn to page 45. Work together to complete the mini assessment one problem at a time.

Note: Although it may be possible for the children to look at others' answers, you should be able to get a general idea of each child's ability while completing this assessment.

Continue for four rotations.



Going on a Forest Walk

The children sit in a circle on a rug or the floor. Play *Starfall Sing-Along* Volume 2, Track 13 "Going on a Forest Walk" or navigate a classroom computer to *Starfall.com*. (This song is similar to "Going on a Bear Hunt").

The children repeat each line then perform the actions indicated in the song. They pretend to have a camera for their forest walk.

Materials

- Starfall Sing-Along* Volume 2, Track 13

Going on a Shape Hunt

Say: **Today let's go on a shape hunt! Backpack Bear put pictures of all the two-dimensional and three-dimensional shapes we have learned about this year in a basket (or bag). Each of you will select a card from Backpack Bear's basket (or bag) and return to your seat.** The children do this.

Continue: **When I give the signal, you try to find an object that is shaped like your shape card or has your shape in it somewhere, then bring it back to your seat. Ready...Going on a Shape Hunt...go!**

When the children return to their seats they take turns to show their Shape Cards, name them, and explain why they chose their items.

Materials

- 2-D and 3-D Shape Cards (enough for each child to have one plus a few extra cards)
- Bag or basket

Geometry

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

A.2 - Correctly name shapes.

Graphing

Indicate the prepared graph attached to the whiteboard or the wall. Ask: **Who remembers what this is called?**

Right, it's a graph. Why do we use graphs? Yes, a graph is a good way to organize information and compare things. Today we will graph our favorite ice cream flavors!

Read the choices and explain to the children that they should choose their favorites from these options, even if their real favorite isn't listed.

Ask: **Who likes vanilla best? If vanilla is your favorite you will place your sticker in this row.** The children whose favorite flavor is vanilla come forward to receive a sticker and place it on the graph. Repeat for each of the other flavors listed.

Materials

- Prepared graph
- Stickers

Measurement & Data

MD.2 - Use and interpret graphs.



Interpreting a Graph

Attach a sheet of chart paper to the whiteboard next to the graph. Indicate the favorite ice cream flavors graph created in today's Magic Math Moment.

Say: **We said earlier that a graph is a good way to organize information and make comparisons. Let's take a closer look and interpret the graph we created. What information can we learn from this graph? I will make a list.**

Elicit responses and lead the children to make comparisons as they interpret the graph. Write their observations on the chart paper.

Distribute *Backpack Bear's Math Workbook #2* and instruct the children to turn to page 49.

Say: **Now you will create your own graph. Look at the picture at the top of the page and then look at the graph. The pictures on the graph show the insects you will count. What is the first insect?** (Volunteers respond.)

Continue: **Now look at the larger illustration and count how many of those you find. Color one square for each one. As you count them you may use a pencil to cross them out so you don't count them again. Be sure to color all of the squares in that row the same color.** The children do this.

Repeat for each of the insects on the graph. Ask questions that lead the children to interpret their graphs as time allows.

Materials

- Backpack Bear's Math Workbook #2*, page 49
- Chart paper
- Stickers

Learning Centers

DAY

5

1 Computer

The children explore their favorite *Starfall.com* math activities.

Note: The children may enjoy being allowed to explore the first grade math online activities in addition to the kindergarten activities they have explored this year.

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 +2 or +1, he or she moves that number of additional spaces.

If a 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 boards
- Game spinner(s) numbered 1 to 5
- Playing piece for each child



3 "Coin Town"

For each turn the player spins, then moves his or her playing piece to the next coin equal to the amount shown on the spinner.

The child identifies the coin and takes the corresponding coin out of the bank and places it into his or her own bank (cup).

At the end, the children sort their coins and count their pennies, nickels, and dimes.

Materials

- 1 or 2 "Coin Town" game board
- Playing pieces for each child
- 1 or 2 coin spinners
- One cup of coins – "the bank" (pennies, nickels, dimes)
- One empty paper or plastic cup for each player

**Counting & Cardinality**

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

CC.1 - Identify numerals out of sequence.

Operations & Algebraic Thinking

A.1 - Represent addition and subtraction in a variety of ways.

A.5 - Fluently add and subtract within 5.

Math

M.1 - Identify the value of coins.

4 Bingo

Each child selects a “Bingo” card. The children place the Number Cards face down in a stack.

The first child reveals the top Number Card and identifies the number. The children who have that number on their Bingo cards place a counter on top of the number.

The children take turns to reveal Number Cards. Play continues until all numbers are covered on a card.

Materials

- Bingo card for each child
- Number Cards 1-20
- Counters (pennies or Bingo chips)

5 “Race to 20”

The players take turns to roll the dice and move their playing pieces the corresponding number of spaces on the “Race to 20” game board.

Play continues until a player reaches 20. A player must roll the exact number to land on 20 in order to win the game.

The children repeat the game as time permits.

Materials

- 1 or 2 “Race to 20” game boards
- Playing piece for each child
- Pair of dice

