Cumulative Review

Starfall
Kindergarten
MATHEMATICS

Year Review

Unit **14** • Overview

Week **32**

Week **33**

Unit 14 Summary

Time Frame: 10 days

Unit 14 consists of reviews of several primary math concepts introduced throughout the school year. Math concepts such as graphing, addition, subtraction, estimating, story problems, graphing, and others are reviewed through hands-on activities and games. Although this unit consists of worthwhile lessons and additional practice with various math skills, it is also meant to be a celebration of the children's academic growth this school year.

The lessons in this unit may or may not require a full math period. Therefore you are encouraged to make adjustments as you see fit. Since it is the end of the school year, formative and summative assessments are not included for every lesson or week. There is however a mini assessment included on Day 2 of Week 33 that assesses many of the skills.

Essential Questions

(K.OA.A.1) How can we use objects to show addition and subtraction?

(K.OA.A.2) What strategies can we use to solve word problems?

(K.OA.A.3) How can we use objects and drawings to show how to take a larger group apart and make two smaller numbers?

(Starfall.Math.MD.2) How can we use a graph to understand information and answer questions?

(Starfall.Math.E.1) How do we estimate the amount of objects and compare them to the actual amount?

Enduring Understandings

What strategies can we use to solve word problems?

How can we use a graph to understand information and answer questions?

What happens when we combine groups and what happens when we take groups apart?

Finding missing numbers in equations is essential for higher-level math skills.

Vocabulary Review

Addition   Operation

Equations   Organize

Estimations   Patterns

Graph   Plus

Interpret   Position

Minus   Review

                        Subtraction

Recommended Literature

Elevator Magic by Stuart J. Murphy

Equal Shmequal by Virginia Knoll

The Greedy Triangle by Marilyn Burns

Lemonade for Sale by Stuart J. Murphy

Bunny Money by Rosemary Wells

Standards & Benchmarks

Progress on the following standards and benchmarks will be made through the course of this unit. For your convenience, applicable learning outcomes are listed alongside each lesson in summary form.

Starfall Standards

Counting & Cardinality

CC.1   Identify numerals out of sequence.

CC.2   Supply missing number in a sequence.

Money

M.1   Identify the value of coins.

Operations & Algebraic Thinking

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

Measurement & Data

MD.2   Use and interpret graphs.

Estimation

E.1   Understand the meaning of estimation.

Common Core Standards

Counting & Cardinality

		Inline Summary Form
B.4a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.	*Say number names in order, pairing each object with one number.*
C.6	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.	*Identify greater than, less than, and equal to.*

Operations & Algebraic Thinking

		Inline Summary Form
A.1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	*Represent addition and subtraction in a variety of ways.*
A.2	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	*Solve word problems with addition and subtraction within 10.*
A.3	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).	*Decompose numbers less than 11.*
A.5	Fluently add and subtract within 5.	*Fluently add and subtract within 5.*

Measurement & Data

		Inline Summary Form
B.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	*Classify, count, and sort objects.*

Geometry

		Inline Summary Form
A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	*Describe objects using shapes and relative positions.*
A.2	Correctly name shapes regardless of their orientations or overall size.	*Correctly name shapes.*

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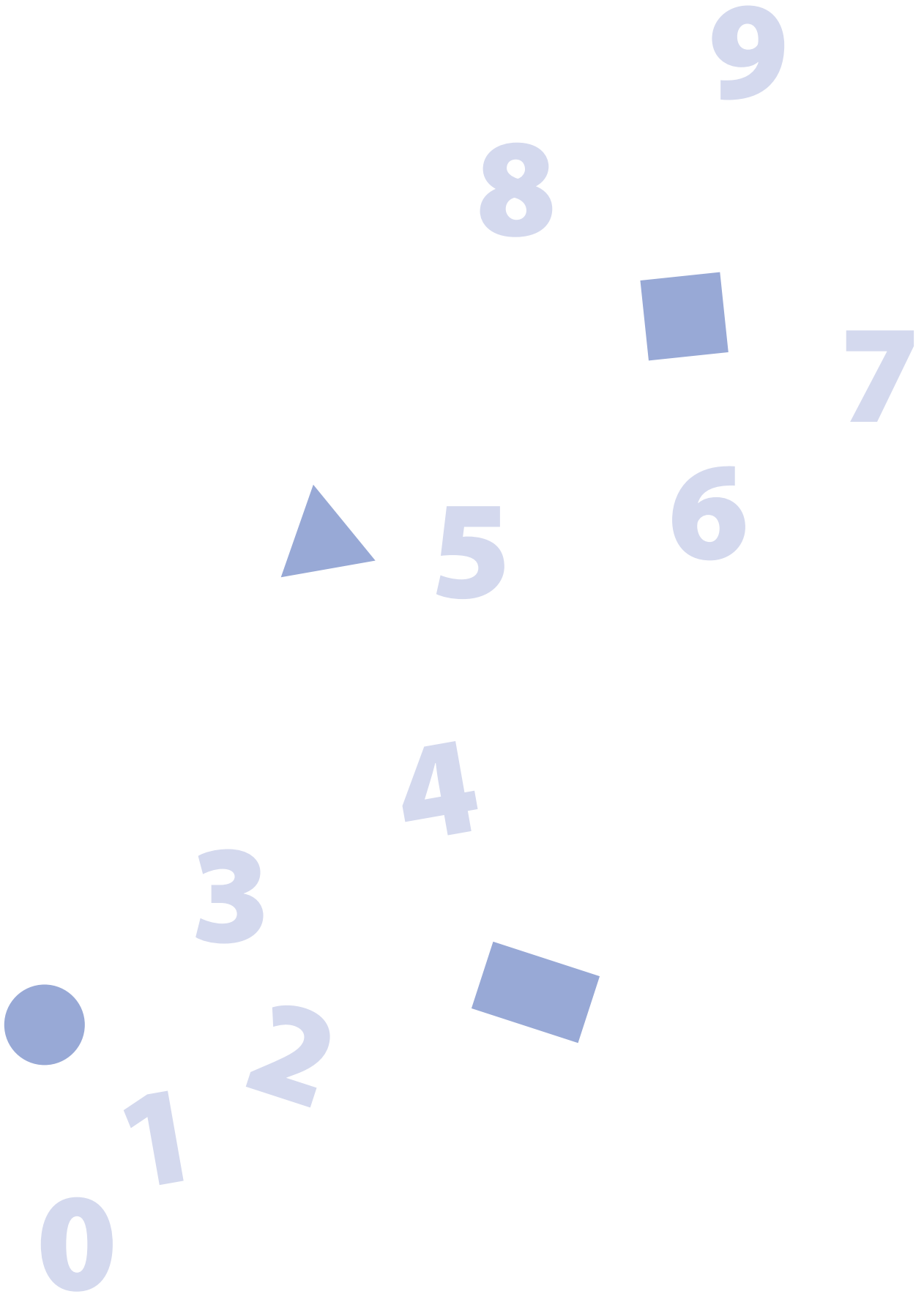
Daily ⟳ Routines

📅 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.
- Assist the calendar helper to place one penny on the money graph to match the number of today's date.
- Remind them that there are other coins (nickels, dimes) available, and lead the children to exchange the appropriate number of pennies for these coins.

☁ 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.

–2 –1 0 1 2 Number Line

- Point to and count the days on the number line by ones, fives, or tens.
- Sing "How Many Days Have We Been In School?"
- Remove the sticky note to reveal the next number.

> ***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?*

1 0 0 Place Value

- Review the number of bundles and sticks in the *Tens* and *Ones* containers.
- Add one stick to represent today, and place it in the *Ones* container.
- Write the numeral that represents the number of days the children have been in school on the board.
- Every tenth day the children bundle the ten sticks that are in the *Ones* container and place the bundle in the tens container.

🔲 100 Hundreds Chart

- The number helper turns the next number on the chart.
- Ask: **The hundreds chart shows we have been in school how many days?**

> Refer to this page for reminders of the Daily Routines for each day in this Unit.

Week 32 Summary

This week, the children will review how many more or less it takes to reach a specific number, composing and decomposing numbers 6-10, plus and minus signs, number representations, and estimation. The children will also:

- play "What's the Operation?"
- solve addition and subtraction problems
- review shapes ("Shape Game")
- play "Concentration" with Representation Cards

Preparation

DAY 1

In today's Magic Math Moment the children will play "I Spy" with "Backpack Bear's Math Dictionary" (See *Backpack Bear's Math Big Book*, pages 47-56).

Label eight individual sheets of construction paper with one number each from 7 to 10 at the top. You will need two of each number.

DAY 2

Prepare two sets of index cards with one of the following numbers on each card: 1, 10, 20, 50, 100, and 1000. (Two cards labeled "1," two cards labeled "10," etc.)

DAY 3

For today's lesson you will need a large ball and a basket or box in which to place Subtraction Equation Cards.

DAY 4

For today's Magic Math Moment the children will need their math mats and their math bags that contain bags of coins. You will also need a bag of coins for demonstration purposes.

Have 2 index cards for each child for today's math lesson.

DAY 5

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

Activity Center 2 — The children will need dominoes and 1 or 2 "Parking Lot" game boards.

Activity Center 3 — The children will need 1 or 2 "Shape Town" game boards, 1 or 2 sets of Shape Cards, and a playing piece for each child in the group.

Activity Center 4 — The children will need a "Number Grid: Count to 50" game board, dominoes, and a playing piece for each child in the group.

Activity Center 5 — The children will need a pocket chart and Representation Cards 1-10, (Number Cards 1-10, Domino Cards 1-10, Dice Cards 1-10, and Ten-frame Cards 1-10).

Note: If there are enough children in Activity Center 5 for two groups to play simultaneously, they will need two sets of the Number, Domino, Dice, and Ten-frame Cards.

	DAY ①	DAY ②
Daily Routines	• Calendar • Place Value • Weather • Hundreds Chart • Number Line	
Magic Math Moment	"Our Math Dictionary"	*Estimate with Backpack Bear*
Math Concepts	Composing and Decomposing Numbers 6-10	Addition Game Day Solve addition equations
Formative / Summative Assessment	Groups share equations	
Workbooks & Media	*Math Melodies* CD, Track 23	

DAY **3**	DAY **4**	DAY **5**

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

Learning Centers

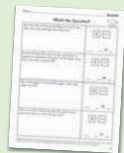|		
Position Words *Where Oh Where is Backpack Bear?*	Create patterns using coins	*Starfall.com* (Any activity) **1**
Solve subtraction equations	Review and make plus and minus signs Play "What's the Operation?" Determine the appropriate operation to use to solve story problems	"Parking Lot" **2**
		"Shape Town" **3**
	Write and solve equations for story problems (Workbook page)	
		"Count to 50 Number Grid Game" **4**
Math Melodies CD, Track 29	Workbook page 45	"Number Concentration" **5**

Geometry

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

Operations & Algebraic Thinking

A.3 - Decompose numbers less than 11.

Magic Math Moment

"Our Math Dictionary"

Say: **This week we will review some of the math ideas we learned this year. To review means we learned it already, and now we will talk about it again to see how well we remember. Let's start with a song! If you remember this song, stand and join in.** Play *Math Melodies* CD Track 23, "Ten Bears in the Bed."

Say: **This year we learned about using a dictionary. Who can tell us what a dictionary is? (**Volunteers respond.**) Right, a dictionary is a place we can look to help us understand, read, and write words.**

Indicate *Backpack Bear's Math Big Book*, page 47.

Continue: **Since this is a special math dictionary all of the words in it are math words. Backpack Bear would like us to play "I Spy" with some of the words in this dictionary.**

Turn to page 46. Say: **Look at the words that begin with *Aa*. I spy the word "above." Raise your hand if you can come to the front and point to the word *above*.** A volunteer does this. The volunteer indicates the word *above* and explains how he or she knows it is the correct word.

Say: **I spy (**a B word**).** The first volunteer chooses the next volunteer, and the game continues.

Note: To make the game more interesting, skip around in the dictionary.

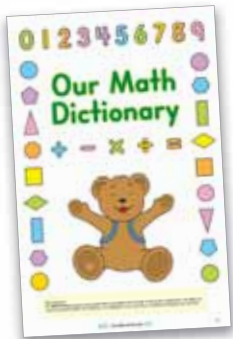### Materials
- [ ] *Backpack Bear's Math Big Book*, pages 47 and 48
- [ ] *Math Melodies* CD, Track 23

Composing and Decomposing Numbers 6-10

Materials
- [ ] Prepared paper labeled with numbers 7-10
- [ ] Pencils

1 Composing and Decomposing 6

Gather the children in front of the classroom whiteboard. Say: **Today let's write all of the different equations we can for numbers. We'll try one together.**

Write the number 6 on the board. Ask: **What's an equation that equals 6?** You or a volunteer write the equation on the board. Volunteers continue naming equations that equal 6 and listing them on the board.

Note: If the children are not able to think of several equations for a number, Backpack Bear may suggest one, such as 7-1= 6. Encourage the children to create both addition and subtraction equations.

2 Composing and Decomposing 7-10

Divide the class into groups of 3 and distribute a sheet of paper with the number 7, 8, 9, or 10 on it to each group. The children in each group work together to create as many equations as possible to equal that number. Assign one child in each group to write the equations on the paper.

Note: More than one group may have the same number depending on the size of your class.

Formative Assessment

Record Results

Record the equations on the whiteboard as each group shares its results. The class confirms whether or not the equations equal the target number.

Magic Math Moment

Estimation

Say: **Today let's do some estimation with Backpack Bear! Who can choose a number between 4 and 40?**
A volunteer does this.

Turn to the corresponding page in *Estimate with Backpack Bear* and lead the children to complete the estimation activity. A different volunteer chooses a number and the children complete the estimation activity on that page. Continue as time allows.
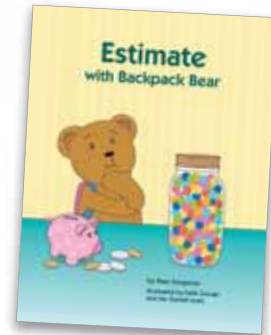
Estimation

E.1 - Understand the meaning of estimation.

Operations & Algebraic Thinking

A.2 - Solve word problems with addition and subtraction within 10.

Addition Game Day

Materials

☐ Prepared Point Value Cards (2 sets)
☐ Addition Equation Cards

Divide the class into two teams and write Team 1 and Team 2 on the whiteboard.

Say: **Today we will work in teams. Each team will have a set of point cards with different numbers on them.**

Distribute a set of point cards face down to each team.

Continue: **The teams will take turns. I will show you an equation card. The first person on the team will give the answer. If the answer is correct, he or she will reveal an index card that tells how many points the team receives. You might receive 1 point or you could receive 1,000 points! If your answer is not correct, you may ask other children on your team for help. I'll be the scorekeeper. Ready?**

Continue play as time allows.
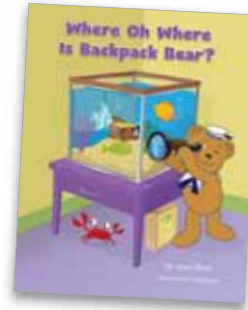
Position Words

Say: **Today we will review our book about positions. First, let's sing "This Old Man." As we sing, let's create actions to go with the song. Be sure to point to where the old man played knick-knack each time! Ready? Let's stand.**

Play *Math Melodies* CD Track 29, "This Old Man." Encourage the children to sing along.

Read *Where Oh Where Is Backpack Bear?* Pause to discuss illustrations and review position words as you read.

Materials

☐ *Where Oh Where Is Backpack Bear?*

☐ *Math Melodies* CD, Track 29

Geometry

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

Operations & Algebraic Thinking

A.2 - Solve word problems with addition and subtraction within 10.

Subtraction Ball Toss

Materials

☐ Ball

☐ Subtraction Equation Cards in a basket or box

Gather the children in a circle. Say: **Today we will play a subtraction game with a ball and the Subtraction Equation Cards. The game is called "Ball Toss."**

Choose a "helper" to stand next to you with the basket (or box) of equation cards.

Continue: **I will toss the ball to one of you. (**Helper's name**) will remove an equation card from the basket and show it to you. If you caught the ball, you will tell us the answer. If the answer is correct you will toss the ball to another child and he or she will answer another equation. If the answer is wrong, you will toss the ball back to me and I will toss it to another child. Ready?**

If necessary, remind the children that only the child who caught the ball should answer.

Note: You may alternate helpers to give several children a turn.

Measurement & Data

B.3 - Classify, count, and sort objects.

Operations & Algebraic Thinking

A.2 - Solve word problems with addition and subtraction within 10.

Magic Math Moment

Patterns Using Coins

Gather the children in a semicircle on a rug or the floor. Say: **Today we will use your math mats and the coins in your math bags to create different patterns. Let's try one together.**

Spread the coins from you bag onto the floor. Continue: **Who can create a pattern using my bag of coins?** A volunteer does this. The children determine the pattern.

Distribute the math mats and math bags.

Say: **Now you will use your own coins to create patterns. Remove all of the coins from your math bag and place them on your math mat.** The children do this.

Say: **Raise your hand if you can tell me which coins you have. (**Volunteers respond.**) Right, you have pennies, nickels, and dimes. Think of a pattern you could create with them.**

The children create patterns and share them with the class.

What's the Operation

1 **Review Plus and Minus Signs**

Say: **This year we have learned about the operations of addition and subtraction. Who remembers the difference? (**Volunteers respond.**) Right, when we add we put numbers together and then we have more. When we subtract we take numbers away and then we have less.**

Indicate *Backpack Bear's Math Big Book.* Review the plus sign on page 43 and the minus sign on page 45. Say: **When we add or subtract we call these operations. The plus and minus signs are very important because they tell us which operation we should do.**

2 **Make Plus and Minus Signs**

Distribute two index cards to each child. Say: **Use your crayon to make a plus sign on one index card and a minus sign on the other. (**The children do this.**) You will use these signs today to play a game called "What's the Operation?"**

③ Play "What's the Operation?"

Say: **Listen closely to this number story and decide which operation, addition or subtraction, we should use to solve the problem. Ready?**

- **Story #1—One flower has 5 petals. Another flower has only 4 petals. How many petals do the flowers have altogether? What's the Operation?**

The children hold up their plus or minus signs to indicate the correct operation to solve the problem.

Repeat the story problem. A volunteer solves it and explains how he or she knew which operation to use.

Continue the above procedure for the following story problems. Emphasize key terms (*altogether, how many are left,* etc.) as you read the problems, and remind the children to use these clues to help them make their choices.

- **Story #2—One tree has 3 apples. Another tree has 4 apples. If Tommy picks all the apples from both trees how many apples will he have? What's the Operation?**

- **Story #3—Eight children were riding bikes. Two of the children needed to go home. How many children were still riding their bikes? What's the Operation?**

- **Story #4—Susi and John each have two balloons. How many balloons do they have altogether? What's the Operation?**

Formative Assessment

What's the Operation?

Distribute *Backpack Bear's Math Workbook #2*. Instruct the children to turn to page 45. If you have projection capabilities, project this page for demonstration purposes.

Say: **We will work the first problem together as an example. Who can read the first problem?** A volunteer does this, with your assistance if necessary. The children draw pictures to represent the story. They color the box that shows the correct operation to use to solve the problem. Then they write the corresponding equation and solve the problem.
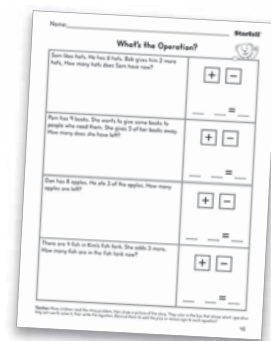
Learning Centers

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.

Operations & Algebraic Thinking

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

A.3 - Decompose numbers less than 11.

Geometry

A.2 - Correctly name shapes.

2 "Parking Lot"

Materials

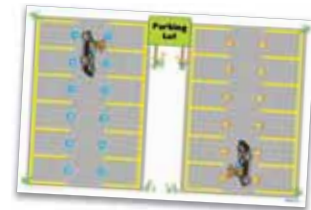☐ 1 or 2 "Parking Lot" game boards

☐ Dominoes placed face down

The first child selects a domino, adds the dots on the domino, then "parks" the domino in the appropriate parking space.

If the child chooses a domino that equals the same value as one already on his or her board, he or she stacks it on top.

The children take turns. The first child to fill all of his or her parking spaces wins, or the game continues until both children fill their spaces.

3 "Shape Town"

Materials

☐ 1 or 2 two-dimensional "Shape Town" game boards

☐ Shape Cards (1 or 2 sets)

☐ One playing piece per child

The children take turns drawing from a stack of Shape Cards. They move to the next corresponding shape on the game board. Play may end when a player reaches the star, or play may continue until both players reach the star.

4 "Count to 50 Number Grid Game"

The children place the dominoes face down. They place their playing pieces at 0 on the game board.

For each turn the player turns over a domino and adds together the dots on both sides then moves his or her playing piece the corresponding number of spaces.

Play ends when the first player reaches 50.

Note: For a more challenging game use the Count to 100 side of the game board.

Materials

- [ ] "Count to 50" game board
- [ ] Playing piece for each player
- [ ] Dominoes

5 "Number Concentration"

Note: If two groups play simultaneously, they will need two sets of Number, Domino, Dice, and Ten-frame Cards.

The children mix together the different sets of cards and arrange them face down in a pocket chart. They take turns to reveal two of the cards.

The goal is to find two cards that represent the same number. If a match is made the child places the cards on a table or on the floor and takes another turn.

If a match is not made, the child turns the cards face down and play continues with the next player. You may vary the game by forming two groups.

Materials

- [ ] Pocket chart
- [ ] Number Cards 1-10
- [ ] Domino Cards 1-10
- [ ] Dice Cards 1-10
- [ ] Ten-frame Cards 1-10

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 • Place Value • Weather • Hundreds Chart • Number Line	
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 page 46	Workbook pages 47 and 48

DAY 3	DAY 4	DAY 5
• Calendar • Place Value • Weather • Hundreds Chart • Number Line		
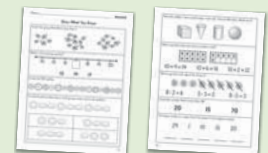
Learning Centers

DAY 3	DAY 4	DAY 5 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**
		"Bingo" **4**
Sing-Along #2, Track 13 "Going on a Forest Walk"	Workbook page 49	"Race to 20" **5**

Operations & Algebraic Thinking

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

A.3 - Decompose numbers less than 11.

Magic Math Moment

How Many More or Less?

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

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 +__.

Ask: **How many more should we add to 4 to get 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).

Addition and Subtraction

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

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.

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.

Magic Math Moment
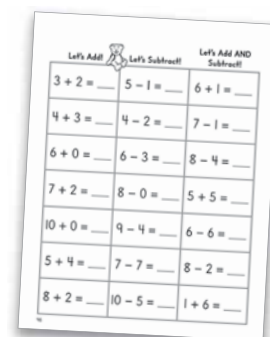
Estimation

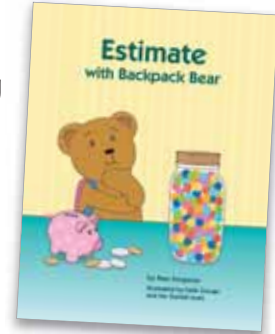Say: **Let's do some estimation with Backpack Bear!** Indicate *Estimate with Backpack Bear*.

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.

Mini Centers and Assessment

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.
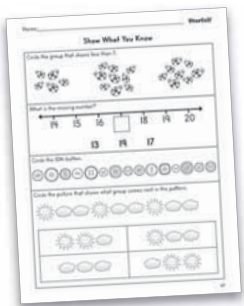
Going on a Forest Walk

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.

Geometry

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

A.2 - Correctly name shapes.

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.

Magic Math Moment

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.

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.

Learning Centers

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