



Whole Number Foundations Level K Curriculum Sampler

Moving Up! MathYa UHMG™
Whole Number Foundations Level K™
Curriculum Sampler
Lessons 11 and 40

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Lesson 11

Lesson 11 Objectives	Review numerals 1-5; Count along the number line 1-5; Order numerals 1-5; Make quantities to match numerals 1-5 ; Identify which tower has the most/least; Trace numeral 5
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Vocabulary Same, most, least, circle

Materials	Nifty Fifty chart; Yellow marker; Quick Numerals 1-5; Number line with 1-5; For each child: Small numeral cards 1-5; A baggie containing 16-18 linking cubes
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1. Identify the next number on the Nifty Fifty chart and count to that number; Identify Quick Numerals 1-5

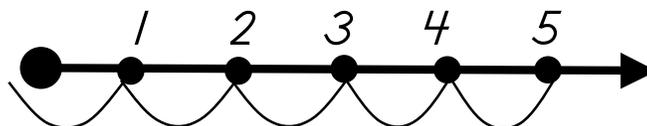
- **Nifty Fifty chart:** Choose a child to fill in the space for today.
 - **"Let's fill in our Nifty Fifty chart for today."**

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

- Lead the children as they count the filled-in spaces.
 - **"Let's count the number of spaces and find out what lesson we will do today."**
- **Quick Numerals:** Show the Quick Numerals in random order until children can identify all the numerals correctly.
- Review the numerals one more time by calling on individual children. Collect the cards and praise the children.

2. Count along the number line to 5

- Show the children (or draw) a number line for numerals 1-5.
 - **"Remember, this is called a number line. What is it?"** ("A number line.") **"Yes, a number line."**
- Model counting to 5 on the number line.
 - **"My turn. I'll count to 5 on the number line. Watch carefully. I'll start at the big dot and say the name of each numeral as I loop under it."**



- "One, 2, 3, 4, 5."
- "**Do it with me.** Count to 5 as I loop under each numeral." ("One, 2, 3, 4, 5.")
- "**By yourselves.** Count to 5 as I loop under each numeral. Get ready."
- Remove the number line.

3. Order numerals 1-5

- Give each child a set of numeral cards 1-5. Tell children that they will arrange their cards in order from 1-5.
 - "**I'm giving each of you a set of numeral cards 1-5 to put in order just like the number line.**"
- Be sure the children start at the left with numeral 1. If children start at the right, show them where to begin. You may wish to place a small circle at the left to prompt the children.

Teacher Note: If an error occurs, for example a child places numeral 5 immediately after numeral 2, correct with a counting strategy. Say, "**Listen to me count. One. Two. What comes next? Three. Your turn. One. Two. What comes next?**" ("Three.") "**Yes, three comes next. Fix your number line so numeral 3 comes after numeral 2.**"



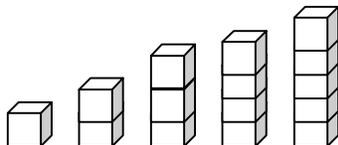
- When the children have the correct sequence in front of them, confirm by having the children touch and name numerals 1-5.
 - "**Let's touch and count the numerals starting with 1.**"
- If any child made an error, have the children mix up their cards and repeat the task.
- Congratulate the children for being able to make their own number line. The children should leave their cards in the correct order for the next task.

4. Make quantities to match numerals (Vocabulary: same, most, least)

- Give each child a baggie containing 16-18 linking cubes.
- Tell the children that they are going to put the same number of cubes on each numeral card.

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- **"Everybody, touch the first numeral. What's its name?" ("One.")**
- **"Yes, one. You're going to put the same number of cubes on this numeral. How many cubes should we put on the numeral 1 card?" ("One.")**
- **"Put 1 cube on your numeral 1 card."**
- Repeat the preceding step for numerals 2-5. Confirm or correct each response.
- Children may notice that there are extra cubes left over.
 - **"I must have put too many cubes in the baggies, but I couldn't trick you!"**
- Ask the children to touch the numeral card that they think has the most cubes on it.
- Ask the children to touch the numeral card that they think has the least cubes on it.
 - **"Does anybody have an idea how we could make sure which card has the most and which card has the least?"**
 - Accept reasonable ideas, such as counting each group of cubes or putting the cubes together and seeing which "train" is longer or which "tower" is higher.
 - **"One thing we could do is to make towers and see which tower is higher."**
- Tell the children to connect the cubes for each numeral (except for numeral 1).
 - **"Touch numeral 2. Make a tower with 2 cubes."**
- Repeat the preceding step with the cubes for each numeral.
- When the children have completed all their towers, ask which tower has the most cubes. Confirm or correct by comparing that tower with the other towers.
- Ask which tower has the least cubes. Confirm or correct by comparing that tower with the other towers.
- Have the children line their towers up in order. Ask the children to make comments about the towers. Encourage the use of the vocabulary words most and least.



- Discuss with the children that each tower has 1 more than the tower before it.
 - “Each tower has 1 more than the tower before it.” Touch the appropriate towers as you say, “One and 1 more is 2. Two and 1 more is 3. Three and 1 more is 4. Four and 1 more is 5.”
- Challenge the children to respond with you, as you touch the appropriate towers.
 - “One and 1 more is 2. Two and 1 more is 3. Three and 1 more is 4. Four and 1 more is 5.”

5. Math Practice Instructions

Name and identify shape (Vocabulary: circle)

- Hand out a Math Practice to each child. Show children the shape at the top of the Math Practice.
 - “What’s the name of this shape?” Children respond. Confirm or correct.
 - “Write your name next to the circle.”

Identify groups that have the most/least (Vocabulary: most, least)

- Have the children look at the 3 towers. Ask the children how they could determine which tower has the most number of cubes and which tower has the least number of cubes. Accept reasonable responses.
- Have the children touch the tower that has the most number of cubes. Confirm or correct. Give each child a red and a blue crayon.
 - “Color the tower that has the most number of cubes red. You can just put a red mark on that tower, and then you can finish coloring the tower later.” Children respond. Check.
- Have the children touch the tower that has the least number of cubes. Confirm or correct.
 - “Color the tower that has the least number of cubes blue. You can just put a blue mark on that tower, and then you can finish coloring the tower later.” Children respond. Check.
- Children may color the 2 towers as individual children are doing the race.

Lesson 11

Tracing numerals

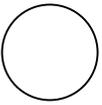
- Have the children find the boxes with the numeral 5. Have them trace each numeral then write the numeral in the empty boxes.

Numeral identification fluency - Race Track

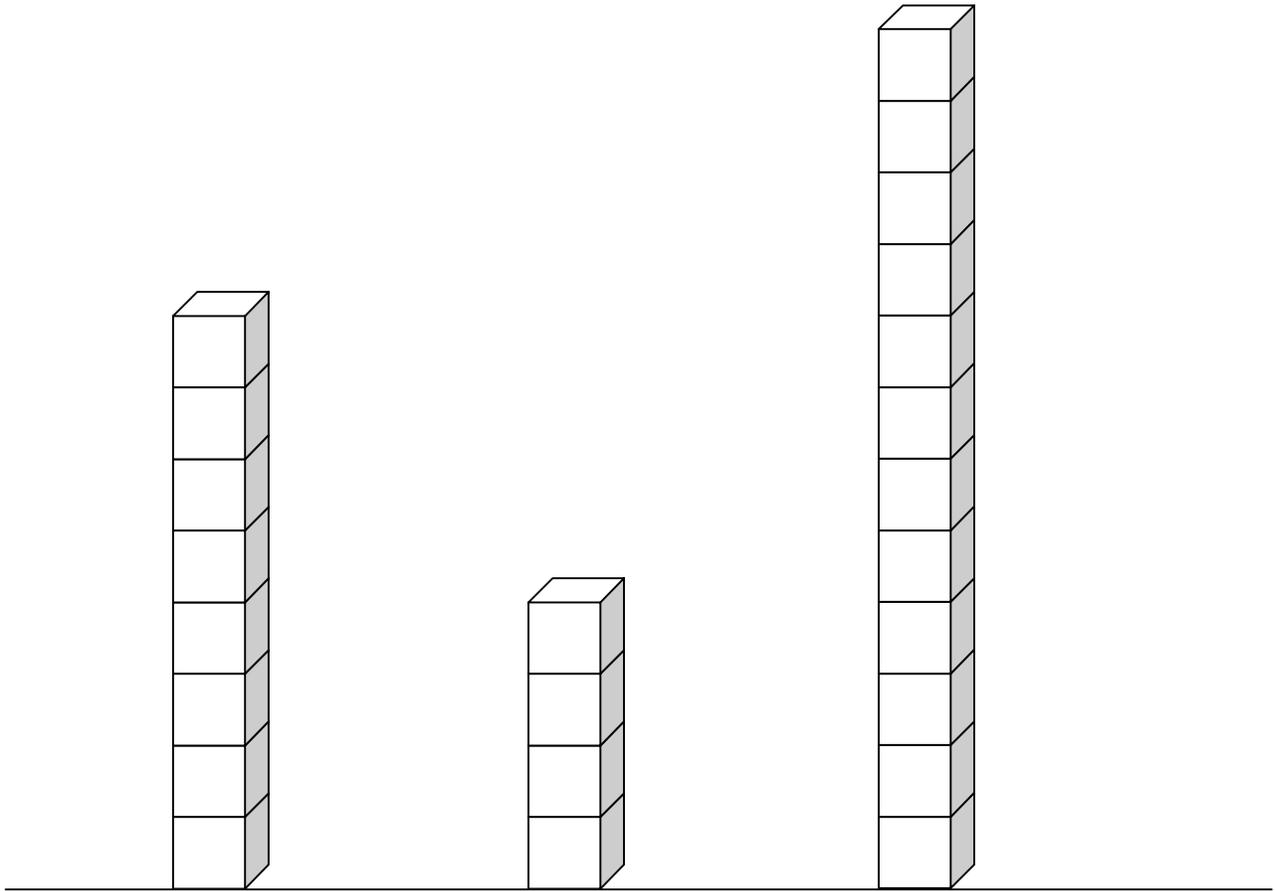
- Have the children turn their papers over and find the "race track."
 - **"While 1 child is racing around the track, the rest of you may color your towers. Remember to color the towers the same color as your marks. Color the tower that has the most number of cubes red. Color the tower that has the least number of cubes blue."**
- Call on a child to be the first racer. Have the child pick a space to start on. You may have them color the space so they will remember where to stop.
- Tell the child to start on the selected space and name each numeral around the track. Monitor and give corrective feedback if errors occur.
- Repeat with the other children in the group.

Check, clean up, and note home

- Check children's work. Read the note home to the children and encourage them to share what they have learned with their family.



Find the tower with the most cubes and color it red.
 Find the tower with the least cubes and color it blue.



Trace the numeral 5. Then write numeral 5 in the remaining boxes.

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Race around the track: Choose one of the spaces to start and say each numeral around the track as fast as you can.

2	5	4	1	3	5
4				3	3
5				2	
3				1	
4				4	
1	5	2	5	3	2



Note home

Have your child identify which tower has the most cubes and which tower has the least cubes. Ask your child to name the numerals above.

Nota para casa

Pida su hijo(a) que identifique la torre que tiene más cubos y la que tiene menos. Pídale que diga los números de arriba.

Lesson 40 Objectives	Introduce numeral 15; Rote and rational count to 15; Use ten-sticks and cubes to show that 15 is 10 and 5 more; Add 1 to a number and write the answer
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Vocabulary Greater than, less than, ten-stick, cube, hexagon, plus, equation

Materials	Nifty Fifty chart; Yellow marker; Quick Numerals 0-14; Numeral cards 0-14; Numeral card 15; Number line showing numerals 11-15; Place value mat; Numeral card 15 showing a ten-stick and 5 cubes; Container with ten-stick and 15 cubes; <u>For each child:</u> Container of 15 cubes and a ten-stick
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1. Identify next number on the Nifty Fifty chart and count around to that number; Count on from a number between 5 and 9; Review Quick Numerals 0-14; Identify numerals that are less than or greater than a given number (Vocabulary: greater than, less than)

- **Fill in the next number on the Nifty Fifty chart.** Choose a child to fill in the space for today.

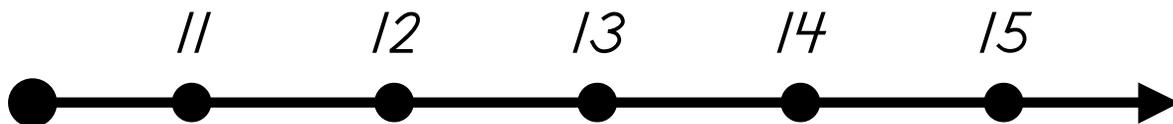
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

- **Counting Around:** Have the children count to 20 on the Nifty Fifty chart by using the "Counting Around" game.
- **Counting On:** Point to a numeral between 5 and 9. Ask the children to identify the numeral and count on from that numeral to 12.
- **Quick Numerals:** Show Quick Numerals 0-14 in random order until children can identify all the numerals correctly.
- **Identify numerals that are greater than or less than:** Place numeral cards 1-13 on the table in front of the children. Pick up a numeral card between 8 and 13 and ask the children to select a numeral that is "less than" (any numeral between 8 and 13). Have each child identify their numeral by saying, "Four is less than 9." Return the numeral cards to the table. Select another numeral between 1 and 7 and ask the children to select a numeral that is "greater than" (any numeral between 1 and 7). Have each child identify their numeral by saying, "Eight is greater than 5."

Lesson 40

2. Introduce the numeral 15; Rote count to 15

- Show numeral 15.
 - "Everybody, today we're going to learn about a new numeral. This numeral is 15. What's the name of this numeral, everybody?" ("Fifteen.")
 - "Yes, fifteen. Just like thirteen and fourteen, fifteen is another numeral that ends with 'teen.' Listen, thirteen, fourteen, fifteen."
- Clap as you count to 15.
 - "Let's clap and count to 15 together. Get ready."
- Clap and count to 15 with the children. Repeat until firm.
 - "Now, all by yourselves. This time, I'll clap and you'll count. Get ready."
- Clap as the children count to 15. Repeat until responses are firm.
- Display a number line with numerals 11 to 15



- "Look at this number line. I'll touch and say all the numerals. Eleven, 12, 13, 14, 15. Fifteen is our new numeral. What numeral?" ("Fifteen.") "Yes, 15."
 - "Fifteen is ten (show 10 fingers) and 5 more (show 5 fingers)."
 - "Your turn to count along the number line starting with 11."
- Touch the numerals as the children count to 15. Repeat until firm. Provide individual turns.

3. Ten-stick Game (Vocabulary: ten-stick, cube, more)

Teacher note: Use cubes and ten-sticks to show that the number 15 is made up of 10 and 5 more. The children count as the teacher puts down cubes on the place value mat. At the 10th cube, the children instruct the teacher to trade them in for a ten-stick. The teacher puts the ten-stick in the tens column and then 5 more cubes in the ones column to show that 15 is ten and 5 more.

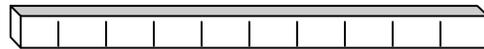
- Hold up a ten-stick.



- "Everybody, what is this called?" ("A ten-stick.")
 - "Right, this is a ten-stick. It's made up of 10 cubes. Remember, when you want to show the amount 10 cubes, you can use this stick."
 - "We're going to play our Ten-stick Game again. We need 15 counters. Every time I put a cube down, you'll count. Remember, when I get to 10, you'll say, 'ten-stick,' and I'll trade in the 10 cubes for a ten-stick. Get ready to count."
- As you lay cubes down 1 at a time in the ones column, the children should count. ("1, 2, 3, 4, 5, 6, 7, 8, 9...") As you lay down the 10th cube, the children should say, ("Ten-stick.")



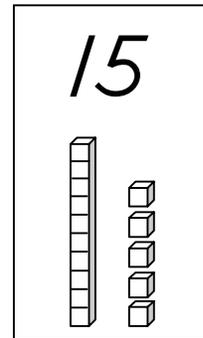
- "Right. We can trade the 10 cubes in for a ten-stick."
- Remove the individual cubes, substituting them for a ten-stick in the tens column.



- "Right now, we have 1 group of 10 and zero more."
 - "I still have 5 more cubes."
- Put down a cube in the ones column.
-
- "That makes 11."
- Put down another cube.
-
- "That makes 12."
- Put down another cube.
-
- "That makes 13."
- Put down another cube.
-
- "That makes 14."
- Put down the last cube.
-
- "That makes 15. Ten and 5 more. Ten and 5 more makes 15."

Lesson 40

- Show the numeral 15 card with a ten-stick and 5 cubes.
 - “That’s what the numeral 15 means. It means that we have 10 and 5 more.”



4. Math Practice Instructions

Name and identify shape (Vocabulary: hexagon)

- Hand out a Math Practice to each child. Show children the shape at the top of the Math Practice.
 - “What’s the name of this shape?” (“Hexagon.”)
 - “Yes, this shape is a hexagon. How is a hexagon different from a square?” (“Hexagons have 6 sides, squares have 4 sides.”) Confirm or prompt the answer.
 - “Write your name next to the hexagon.”

Use ten-sticks and cubes to model numbers 14 and 15 (Vocabulary: cube, ten-stick, more)

- Give each child a container of 15 cubes and a ten-stick.
 - “Touch the first numeral in the box on your Math Practice.” (Children respond.)
 - “What numeral?” (“Fourteen.”) Confirm or correct.
 - “Touch the numeral in the next box.” (Children respond.)
 - “What numeral?” (“Fifteen.”) Confirm or correct.
- Read the first direction on the Math Practice.
 - “Today you get to use the ten-stick and cubes to show each numeral all by yourselves. Start with the box with 14 and use the ten-stick and cubes to show 14.”
- Prompt and assist as needed.

- After children have a ten-stick and cubes in the space with 14, have them each count by touching the ten-stick and saying, "10," and then touching the cubes to say, "11, 12, 13, 14."
 - "Yes, 14. Fourteen is ten and 4 more."
- After each child counts, ("10, 11, 12, 13, 14,") have the children pick up their ten-stick and cubes as you quickly draw a ten-stick and 4 cubes in the box.
- Repeat with the box for 15.
- Have children put away their ten-sticks and cubes.

Trace and write numeral 15

- Have children find numeral 15. Have them trace and copy numeral 15 using the following chant.

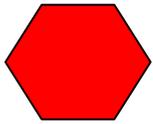
Fifteen, fifteen, what a funny number!
 Fifteen, fifteen, what can it be?
 Start with a 1 and then make a 5,
 Fifteen is really one 10 and 5.
- Provide verbal cues as the children trace and write the numeral.

Plus 1 problems (Vocabulary: plus, equation, more)

- Have children turn their papers over and put their pencils down.
- Have them touch the first plus 1 problem and read the equation. Remind them that when they plus 1, it's the same as saying the number that is 1 more.
- Have the children raise their hand when they know the answer. If they have difficulty, have them use the number line above.
- Call on an individual child to answer. Confirm or correct.
- Repeat with the other problems.
- Have the children pick up their pencils and write the answers for each of the problems.

Check, clean up, and note home

- Check children's work. Read the note home to the children and encourage them to share what they have learned with their family.



Use a ten-stick and cubes for the numerals below. Pick up your ten-stick and cubes and your teacher will draw them in the box.

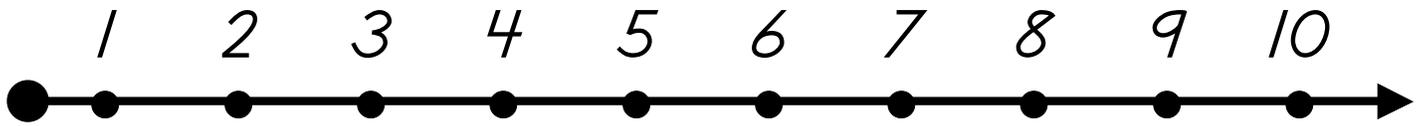
14

15

Trace and write the numeral 15.

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Write the answer to the plus 1 problems below. Use the number line to help you find the number that is 1 *more*.



$$2 + 1 =$$

$$6 + 1 =$$

$$4 + 1 =$$

$$8 + 1 =$$

$$5 + 1 =$$

$$3 + 1 =$$



 Note home

Have your child show you that 14 is ten and 4 more and 15 is ten and 5 more. Have your child tell you the answers to the plus 1 problems above.

 Nota para casa

Pida a su hijo(a) que le muestre que 14 es diez más cuatro y 15 es diez más cinco. Pídale que le diga las respuestas de los problemas de sumar uno.