General Information

Lesson Parts & Duration

Total Duration: 1 hour

- Number Order and Using the Number Grid

Subject(s)

- Missing number, Number Order, Before, Between, After, Counting, Reading and Writing Numbers, Using a Number Grid (1.NBT.1)

Objective

- Students will use a number grid to help them put numbers in order from least to greatest.
- Students will work in partners to put numbers in order from least to greatest.
- Students will discuss the patterns they see on the number grid.
- Students will read and write numbers ranging from 1-120.

Materials

- pencil
- document camera
- **Prep Work:** "Number Order Activity" cut out each row of numbers and place in a bag, or in an envelope, or clip together with a paper clip. If you cannot do this before the lesson, have the students cut them out right before the activity. Numbers are color coded to help you keep the numbers from getting mixed up with another bag/envelope/stack.
- **Optional Printables:** "Exit Slip" (page 6) (1 copy per student), "Number Grid" (page 7) (1 copy per student), "Number Order Practice" (page 8) (1 copy per student), "Number Order Activity Cards" (pages 9-15) (1 set for the class)
- **Optional:** printable "Break Up Your Day" brain/movement break ideas (page 16)

Throughout this lesson, you will find:

- ***Scripted Text*** indicates things that need to be said directly. Bullets starting with a **"T"** followed by *italicized type* indicate scripted text
- **Clarifiers** within scripted text are in orange
- **Teacher Directions** indicate things you should be doing
- **Side notes** provide helpful hints, ELL strategies, differentiation and information
- **Break Up Your Day** (Brain/Movement Breaks) are in green boxes (at the end)

Remember!

Quality over quantity. All components do not have to be accomplished; lessons may be ended at any time and resumed later.

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Instructional Plan: 45-60 minutes

Have students seated on the floor or at their desks so they can see the number grid on the document camera.

Introduction

T *Today we are going to look at a number grid.* Show number grid on the document camera.

T *I want you to look at the number grid for a couple minutes and tell me any patterns you might see on the grid.* Wait for students to think.

T *What do you notice about the grid or the numbers.* Call on students to share what they noticed.

As students make suggestions, discuss and explain what they see. If they do not mention some of the answers, guide them to see some of the patterns in the grid.

Number Grid

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

Possible Answers:

- There are ten boxes in each row.
- The numbers go in order from left to right.
- All the numbers in the columns going down end in the same number.
- All the numbers in the last column have a zero.
- Smaller numbers are on the top of the grid.
- Larger numbers are on the bottom of the grid.
- When you look at a column, the first number in each box goes up by one number.
- If you go forward on the number grid, the numbers get bigger.
- If you go backwards on the number grid, the numbers get smaller.

T *A number grid helps us count, it helps us find numbers, and it helps us see patterns in numbers.*

T *Today we are going to use the number grid as a tool to put numbers in order.*

T *If I know the patterns on a number grid, I can find a number on the number grid quickly.*

T *Let me show you how I can use the number grid to find a number.*

T *Let's say I was looking for the number 58. I know that I can count by tens down the last column to find the 50s. 10, 20, 30, 40, 50.* Point to the last column boxes as you count out-loud.

T *Then I can count on from 50 to find 58.*

T *Where should I go from 50?*

T *Should I go down?* Point to the box below 50. Wait for students to answer. Answer: No

T *Should I go up?* Point to the box above 50. Wait for students to answer. Answer: No

T *Should I go to the next row?* Point to 51. Wait for students to answer. Answer: Yes.

T *I need to go to the next row to 51.*

T *Just like if I were counting on. 50, 51.*

T *Then keep counting on in the same row to find 58.*

T *52, 53, 54, 55, 56, 57, 58.* Point to boxes as you count out-loud.

T *There is 58!*

T *Can someone show me another way I can find 58 quickly on the number grid?* Call on students to answer. Possible answers: Find the column with numbers ending in 8.

Number Grid

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
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That's the ones place. Then I can go down by tens to find the 50s and find 58. I know 58 is close to 60. I can find 60 and then go backwards to find 58.

T *There are many ways you can find a number on a grid quickly.*
T *You can choose the way you like best.*

Whole Group

Pass out student practice sheet of missing numbers and a number grid. Have a practice sheet and number grid available for you to use on the document camera.

T *We are going to use our number grid to help us put these numbers back in order from least to greatest.*
T *The smaller number will come first.*
T *Let's do the first one together.* 15, 14, 16, 13.
T *These numbers are not in order!*
T *I can look at my numbers and find the smallest number and write it on the first blank.*
T *Then count on from that number.*
T *Let's see. The smallest number is* 13. Write 13 on the first blank. Have students do the same.
T *What comes after* 13? *I count on from* 13, 14. Write 14 in the next blank. Have students do the same.
T *To fill in the rest of the blanks, I just need to count on.* 14, 15, 16. Write in 15, 16 in the next blanks. Have students do the same.
T *That is one way to put the numbers in order.*
T *But what if I need more help? For the next one, I'm going to use the number grid to help me.*
T *What number is the smallest?* 32, 30, 31, 29.
T *If I'm not sure, I can try to find the first number on the number grid.*
T 32 - *I'll look at the column ending with 2s. Then go down to find the 30s.* Point to the boxes as you think aloud.

Name: ANSWER KEY

Putting Numbers in Order

1: 15, 14, 16, 13	**13, 14, 15, 16**
2: 32, 30, 31, 29	**29, 30, 31, 32**
3: 27, 30, 29, 28	**27, 28, 29, 30**
4: 42, 39, 41, 40	**39, 40, 41, 42**
5: 85, 88, 87, 86	**85, 86, 87, 88**
6: 100, 99, 97, 98	**97, 98, 99, 100**

T *Here's* 32. *Now if I go forward or backward on the number line, do I see any of the other numbers in my list?* Go forward a box.
T 33, *nope, that's not on my list.* Go backwards.
T 31. *Yes, that's on my list, but can I keep going backwards to get a smaller number?*
T *Where do I go now? Up?* Point to the box above. Wait for students to answer. Answer: No.
T *Oh, I have to go all the way back to the row above and to the other side!*
T *Wow, that's tricky.*
T 30. *That's on my list!*
T *Can I go backwards again and get a smaller number?* Wait for students to answer. Answer: Yes.
T *There's* 29! *That's the smallest number.*
T *I'll write* 29 *in my first blank.* Write 29 in the first blank and have students do the same.
T *Now I can use my number grid again to write the next numbers in order.* 30.
T *Then go to the next row to find* 31, 32. Write 30, 31, 32 in the next blanks and have students do the same.
T *Now you try doing the rest of the sheet.*
T *I'll walk around to help you if you need me.*

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Make sure to "Break Up Your Day!"

Now is a great time to take a break and get students re-energized.
See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see page 16)

Partner Practice

T *We are going to work with partners to put numbers in order from least to greatest.*
T *If you need the number grid for help, you can use it.*
T *If you don't need it, you don't have to use it.*
T *In each envelope/bag/stack clipped together there are a bunch of numbers.*
T *Notice that the numbers are color coded.*
T *You and your partner should have a group of numbers that are the same color.*
T *If you find another number that is a different color, let me know so we can find its home!*
T *Someone else will be missing their number and won't be able to complete their activity.*
T *Let me show you what to do.*
T *Who wants to be my partner?* Call on a volunteer.
T *First, I take out all my numbers.* Take out numbers from bag/envelope/stack.

15 #1	20 #1	78 #2	83 #2
16 #1	21 #1	79 #2	84 #2
17 #1	22 #1	80 #2	85 #2
18 #1	23 #1	81 #2	86 #2
19 #1	24 #1	82 #2	87 #2

T *Then we work together to put the numbers in order from least to greatest.*
T *We can use the number grid for help.* Have the student help you put the numbers in order.
T *Did we do it right? Let's check!* Read the numbers in order and have the class check.
T *Great! When you are done putting your numbers in order, raise your hand and I will come check your answers.*
T *Once I check it, you will put the numbers back in the bag/envelope/stack.*
T *Then you can trade with another group to do another one! Ready to try it?*

Put students in partners and hand them a bag/envelope/stack of numbers. Walk around to watch for partners who raise their hands to indicate they are done. Check their work. Help them find someone else to switch bags/envelopes/stacks with.

Note:
Allow 20 minutes for students to work through the problems.

T *Let's finish your last one.*
T *Show your answer to the group next to you.*
T *Check each other's work and tell them what strategy you used to put the numbers in order.*

Optional Assessment Component Exit Slip

***You may use the exit slip at the end of this lesson as a quick assessment of student understanding. Either print them out (page 6), or simply have students copy the problems on a half sheet of paper.**

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Name: ANSWER KEY

Exit Slip:

Ordering Numbers

Directions: Put these numbers in order.

36, 37, 34, 35

34 35 36 37

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See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see page 16)

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Name: _____

Exit Slip:

Ordering Numbers

Directions: Put these numbers in order.

36, 37, 34, 35

_____ _____ _____ _____

Name: _____

Exit Slip:

Ordering Numbers

Directions: Put these numbers in order.

36, 37, 34, 35

_____ _____ _____ _____

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Name: _____

Number Grid

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

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Name: _____

Putting Numbers in Order

1: 15, 14, 16, 13 _____, _____, _____, _____

2: 32, 30, 31, 29 _____, _____, _____, _____

3: 27, 30, 29, 28 _____, _____, _____, _____

4: 42, 39, 41, 40 _____, _____, _____, _____

5: 85, 88, 87, 86 _____, _____, _____, _____

6: 100, 99, 97, 98 _____, _____, _____, _____

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15 #1	20 #1
16 #1	21 #1
17 #1	22 #1
18 #1	23 #1
19 #1	24 #1

78 #2	83 #2
79 #2	84 #2
80 #2	85 #2
81 #2	86 #2
82 #2	87 #2

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55 #3	60 #3
56 #3	61 #3
57 #3	62 #3
58 #3	63 #3
59 #3	64 #3

28 #4	33 #4
29 #4	34 #4
30 #4	35 #4
31 #4	36 #4
32 #4	37 #4

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25 #5	30 #5
26 #5	31 #5
27 #5	32 #5
28 #5	33 #5
29 #5	34 #5

98 #6	103 #6
99 #6	104 #6
100 #6	105 #6
101 #6	106 #6
102 #6	107 #6

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35 #7	40 #7
36 #7	41 #7
37 #7	42 #7
38 #7	43 #7
39 #7	44 #7

8 #8	13 #8
9 #8	14 #8
10 #8	15 #8
11 #8	16 #8
12 #8	17 #8

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43 #9	48 #9
44 #9	49 #9
45 #9	50 #9
46 #9	51 #9
47 #9	52 #9

67 #10	72 #10
68 #10	73 #10
69 #10	74 #10
70 #10	75 #10
71 #10	76 #10

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82 #11	87 #11
83 #11	88 #11
84 #11	89 #11
85 #11	90 #11
86 #11	91 #11

107 #12	112 #12
108 #12	113 #12
109 #12	114 #12
110 #12	115 #12
111 #12	116 #12

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73 #13	78 #13
74 #13	79 #13
75 #13	80 #13
76 #13	81 #13
77 #13	82 #13

39 #14	44 #14
40 #14	45 #14
41 #14	46 #14
42 #14	47 #14
43 #14	48 #14

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Make sure to "Break Up Your Day!"

These can be used in the middle of a lesson or at the end of your lesson.

Here are a few engaging movement and brain break ideas to get your students moving and ready to refocus!

Break Up Your Day: Ball Toss Counting!

- Have students stand in a circle.
- You need a ball or small object to toss like a stuffed animal.
- Teacher stands in the middle of the circle.
- Students count by 1s starting from 1 to 120.
- As everyone counts together, the teacher tosses the ball to a student and the student tosses the ball back to the teacher.
- The teacher will only toss the ball to students who are actively counting and engaged. This will help students stay on task and count out-loud.
- To make it harder, the teacher can say "Stop!" at any number.
- Say a new number and the students have to count on from that number.
- If you stopped at 45, the teacher can say a new number like 54 and students have to pick up from there and say 55.

Break Up Your Day: Body Stretches!

10 minutes

FORMATION: Standing at desks

- Have students begin the day with a series of simple activities lasting 30 seconds or more: jumping jacks, knee lifts, flap arms like a bird, hopping, scissors (feet apart then cross in front, feet apart then cross in back)…
- Follow each activity with a basic stretching movement:
- Reach for the sky runner's stretch
- Butterfly stretch (sit with bottom of feet together)
- Knee to chest, rotate ankles, scratch your back

Hold stretches for 10 - 30 seconds. Repeat a different simple activity followed by a new basic stretch as many times as desired.

Break Up Your Day: Thumbs Up!

- Student is called on to state their favorite number from 1 to 20, use name cards or equity cards if available.
- Other students signify whether they see that number somewhere in the classroom. Tally their responses.
- The number with the most votes or Thumbs Up is the winner for the activity!

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