



# GRADE 1 SUPPLEMENT

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## Set A8 Number & Operations: Ordinal Numbers

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### Skills & Concepts

- ★ match the ordinal numbers first, second, third, etc. with an ordered set to at least 10
- ★ use ordinals to identify position in a sequence

**Bridges in Mathematics Grade 1 Supplement**

**Set A8** Numbers & Operations: Ordinal Numbers

The Math Learning Center, PO Box 12929, Salem, Oregon 97309. Tel. 1 800 575–8130.

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Prepared for publication on Macintosh Desktop Publishing system.

Printed in the United States of America.

P201304

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Acknowledgements: Numeral Card Shuffle is an adaptation of an activity from *Teaching Number in the Classroom with 4–8 Year Olds*, by Robert Wright, Garry Stanger, Ann K. Stafford, and James Martland.

*Bridges in Mathematics* is a standards-based K–5 curriculum that provides a unique blend of concept development and skills practice in the context of problem solving. It incorporates the Number Corner, a collection of daily skill-building activities for students.

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# Set A8 ★ Activity 1



## ACTIVITY

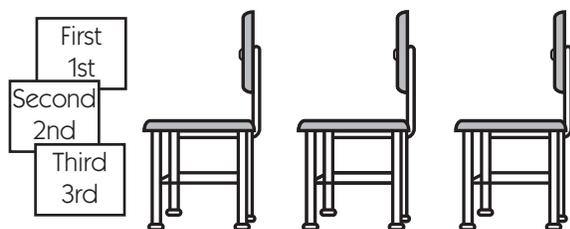
### The Train Station

#### Overview

Here are two short exercises that can be used to introduce and reinforce ordinal numbers. Plan to conduct them on two separate days.

#### Skills & Concepts

- ★ match the ordinal numbers first, second, third, etc. with an ordered set to at least 10
- ★ use ordinals to identify position in a sequence



#### You'll need

- ★ 1 piece of 6" x 9" construction paper in each of the following colors: red, orange, yellow, green, blue, purple, brown, black, pink, and gray
- ★ ten 3" x 5" index cards (see Advance Preparation)
- ★ ten student chairs (see Advance Preparation)
- ★ helper jar containing a popsicle stick for each child with his/her name on it
- ★ *On the Stairs*, by Julie Hofstrand Larios (optional)
- ★ *Henry the Fourth*, by Stuart J. Murphy (optional)

**Advance Preparation** Have children help you line up 10 chairs, one behind another in a line running parallel to your discussion area. Label each of the index cards with an ordinal number, from first (1st) to tenth (10th), and save them for the second part of the activity.

#### Instructions for The Train Station: Part 1

1. Gather children to your discussion area and seat them on the floor so they can see the row of 10 chairs you have arranged. Explain that this is a pretend train station where some of them will sit to wait for the train. Each child who sits in the line will need a ticket to get on the train, and you have 10 tickets. Hold up the 10 pieces of colored paper, and explain that you will pull sticks out of your helper jar to choose the children who will sit in line. Reassure your students that everyone will have a turn to go to the train station, but maybe not today.

2. Pull a stick out of your jar, and invite that student to come get a ticket from you before taking his/her place in the first chair. As you do so, introduce and reinforce the word *first*

**Teacher** Okay, I'm going to pull the **first** stick out of the jar. Here it is. Whose name is on this stick? That's right – it's Charlie! Charlie, come get a ticket from me and go to **first** chair in the station. You get to be **first**.

3. Continue pulling sticks out of your jar and sending children to the train station, each with a different colored ticket in hand. Keep up a running dialog with your class to model and reinforce the language of ordinal numbers, *first* through *tenth*.

**Activity 1** The Train Station (cont.)

**Teacher** Here comes the next stick. This person will get to sit in the **second** chair, right behind Charlie. Whose name is on this stick? Brianna? Okay, Brianna, come get your ticket and sit in line behind Charlie. Boys and girls, who is sitting **first** in line?

**Students** Charlie!

Charlie is **first** in line. He has a blue ticket. I hope I get the purple ticket.

**Teacher** What about Brianna? What place does she have in the line?

**Students** She's after Charlie. Charlie is one. Brianna is two.

**Teacher** Yes, Charlie is **first** in line, and Brianna is **second**. I'm about to pull a stick to find out who gets to be **third** in our line.

4. When ten children are seated at the train station, walk behind them and point to each as you and the class name their position in line: first, second, third, fourth, fifth, sixth, seventh, eighth, ninth, and tenth. Then have the students in line hold up their tickets so everyone can see them. Ask the students in the audience to identify the ticket color of each person in line as you call out their positions.

**Teacher** What color ticket does the **first** person in line have?

**Students** Blue!

**Teacher** What color ticket does the **second** person in line have?

**Students** White! She has the white ticket!

5. After you have gone through the line in order from first to tenth, ask students to identify the color of the ticket the seventh person is holding; the third person, the ninth person, and so on.

6. Finally, call out a color, such as *red*, and work with input from students to identify the position of the person holding the red ticket. Repeat with another color or two. Then choose a student from the audience to be the train conductor. Have the children at the train station move out of their chairs, line up in order, and file past the conductor onto the train (back into the discussion area), handing him/her their tickets as they file past. Recite the ordinal numbers with the class as the conductor takes their tickets: first, second, third, fourth, fifth, and so on.

**The Train Station: Part 2**

1. Repeat Part 1, steps 1–4. Mix the “tickets” so that you give out the colors in a different order, and choose children to sit in line at the train station who haven’t yet had a turn.

2. Then show your set of labeled index cards to the class. Read the ordinal number on each card aloud with the students. Next, mix the cards well and distribute them to the children in the “audience”. If there aren’t enough cards to go around, ask some of the students to share their cards with partners so everyone has a card to examine.

**Activity 1** The Train Station (cont.)

3. Explain that in a minute, each cardholder is going to get up and deliver their card to the correct person at the train station. Before anyone gets up, however, give everyone a few moments to read their card carefully and think about which person they will give it to.

4. Ask the students at the train station to hold up their tickets so everyone can see them clearly. Explain that you are going to give the children in the audience a chance to practice before they deliver the cards to their owners. Tell them you are going to call out the color of one of the tickets. The child or children holding the index card that identifies which person at the train station has that color ticket will stand up and read their card to the group.

**Teacher** *Let's give it a try. Blue! Which person in the train station is holding the blue ticket? Eloise? Where is Eloise sitting in line at the station? Is she **first, second, third?***

*You think she's sitting **sixth** in line? Let's check! **First, second, third, fourth, fifth, sixth.** You're right, Eloise is **sixth** in line. So which people in the audience get to stand up and read us their card? Right! Luis and Mark.*

5. Call the ticket colors in order, from first to tenth, as students stand and read their index cards to the group. Then have the cardholders sit down. Now call the ticket colors in mixed order as students stand and read their index cards. Then have the cardholders sit down again. Finally, call the ticket colors in mixed order, and have the cardholders deliver the cards to the children sitting in the station. Ask these students to each hold up their ticket and their ordinal number card. Walk behind the line and point to each student in turn as the class reads the ordinal numbers, from first to tenth.

**Extensions**

- Repeat these exercises as time allows on other days.
- Reinforce ordinal numbers through the school day (e.g., when you dismiss children to stand in line, when you give a series of instructions, and so on)
- Read *On the Stairs*, by Julie Hofstrand Larios, *Henry the Fourth*, by Stuart J. Murphy, or other picture books that teach ordinal numbers.



# Set A8 ★ Activity 2



## ACTIVITY

### Ten Cubes in a Box

#### Overview

Pulling colored cubes from a sock box provides the context for this activity about ordinal numbers.

#### Skills & Concepts

- ★ match the ordinal numbers first, second, third, etc. with an ordered set to at least 10
- ★ use ordinals to identify position in a sequence

#### You'll need

- ★ Cubes in a Box Record Sheet (page A8.7, run a class set, and 1 copy on a transparency)
- ★ Unifix cubes
- ★ probability container from your Bridges kit
- ★ overhead pens in as many colors as you have
- ★ crayons and pencils

#### Instructions for Ten Cubes in a Box

1. Gather children to your discussion circle and tell them that you are going to do some more work with ordinal numbers, such as first, second, third, and so on. Then show them your probability container and the Unifix cubes. Work with their help to place one Unifix cube in each of the ten colors (red, orange, yellow, green, light blue, dark blue, maroon, white, black, and brown) into the container.
2. Give the container a good shake and explain that you are going to pull out the cubes one by one and snap them together to into a train. Which color will you pull out first? Second? Third? Is there any way to tell for sure? Will you pull a pink cube out of the container? Why not? Will you pull a green cube out of the container? How do they know?
3. After a bit of discussion, explain that the children will each keep a record of this experiment. Ask them to return to their desks and get out their crayons and pencils, as helpers distribute copies of the Cubes in a Box record sheet. Place your transparency on display and ask children to examine it with you.

Set A1 Number & Operations: Ordinal Numbers Blackline Run a class set and 1 copy on a transparency

NAME \_\_\_\_\_ DATE \_\_\_\_\_

**Cubes in a Box Record Sheet**

1st First	2nd Second	3rd Third	4th Fourth	5th Fifth	6th Sixth	7th Seventh	8th Eighth	9th Ninth	10th Tenth	

What do the labels under the cubes at the top of the page say? Point to and read each ordinal number as students do so on their sheets. Then ask them to each place their finger on the first cube in the line; the third cube in the line; the seventh cube in the line; and so on.

4. Shake the probability container again, and pull the first cube out for all the students to see. What color is it? If you are working with a document camera, set the cube into position on your sheet. If you

**Activity 2** Ten Cubes in a Box (cont.)

are working on an overhead, color in the first cube on the transparency (or label the first cube with the color's initial if you don't have a matching pen). Then ask students to color in the first cube on their sheet with the correct color.

5. Repeat step 4 until there are no cubes left in the container. Here are some questions you might ask as you go:

- Which color is first (second, third, fourth, fifth, etc.) in line?
- Which color do you think we will pull out of the container next?
- Are there any colors we will NOT pull out? How do you know?
- What place in line is the \_\_\_\_\_ cube?
- Which cube is in line before the \_\_\_\_\_ cube?
- Which cube is in line before the \_\_\_\_\_ cube?

6. Complete the rest of the record sheet with your class. (Depending on the strengths and needs of your students, you might assign some of them to work independently or in pairs, while the rest work with you.)

Set A1 Number & Operations: Ordinal Numbers Blackline Run a class set and 1 copy on a transparency

NAME \_\_\_\_\_ DATE \_\_\_\_\_

**Cubes in a Box Record Sheet**

1st First	2nd Second	3rd Third	4th Fourth	5th Fifth	6th Sixth	7th Seventh	8th Eighth	9th Ninth	10th Tenth

Use what you know about the cubes you colored above to complete the statements below.

- 1 Red is \_\_\_\_\_ in line.
- 2 Black is \_\_\_\_\_ in line.
- 3 Yellow is \_\_\_\_\_ in line.
- 4 Green is \_\_\_\_\_ in line.
- 5 Brown is \_\_\_\_\_ in line.
- 6 The first (1st) cube in line is the color \_\_\_\_\_.
- 7 The third (3rd) cube in line is the color \_\_\_\_\_.
- 8 The sixth (6th) cube in line is the color \_\_\_\_\_.
- 9 Draw a star above the ninth cube in line.
- 10 Mark an X above the fourth cube in line.

**Extension**

- Ten Cubes in a Box can be offered to children as a Work Place. To do this, set up 6 probability containers with 10 cubes each, one cube of every color. Place the containers, along with extra copies of the record sheet, crayons, and pencils, in a tub and add the activity to your current set of Work Places. Remind children to make sure all 10 cubes are in the container before they start, and to give the container a good shake before they start pulling out cubes. Will their record sheets turn out the same way every time? Why not?

NAME \_\_\_\_\_

DATE \_\_\_\_\_

## Cubes in a Box Record Sheet

1st First	2nd Second	3rd Third	4th Fourth	5th Fifth	6th Sixth	7th Seventh	8th Eighth	9th Ninth	10th Tenth

Use what you know about the cubes you colored above to complete the statements below.

- 1 Red is \_\_\_\_\_ in line.
- 2 Black is \_\_\_\_\_ in line.
- 3 Yellow is \_\_\_\_\_ in line.
- 4 Green is \_\_\_\_\_ in line.
- 5 Brown is \_\_\_\_\_ in line.
- 6 The first (1st) cube in line is the color \_\_\_\_\_.
- 7 The third (3rd) cube in line is the color \_\_\_\_\_.
- 8 The sixth (6th) cube in line is the color \_\_\_\_\_.
- 9 Draw a star above the ninth cube in line.
- 10 Mark an X above the fourth cube in line.



# Set A8 ★ Activity 3



## ACTIVITY

### Numeral Card Shuffle

#### Overview

Numeral Card Shuffle is a simple chain-reaction game that provides lively practice with ordinal numbers.

#### Skills & Concepts

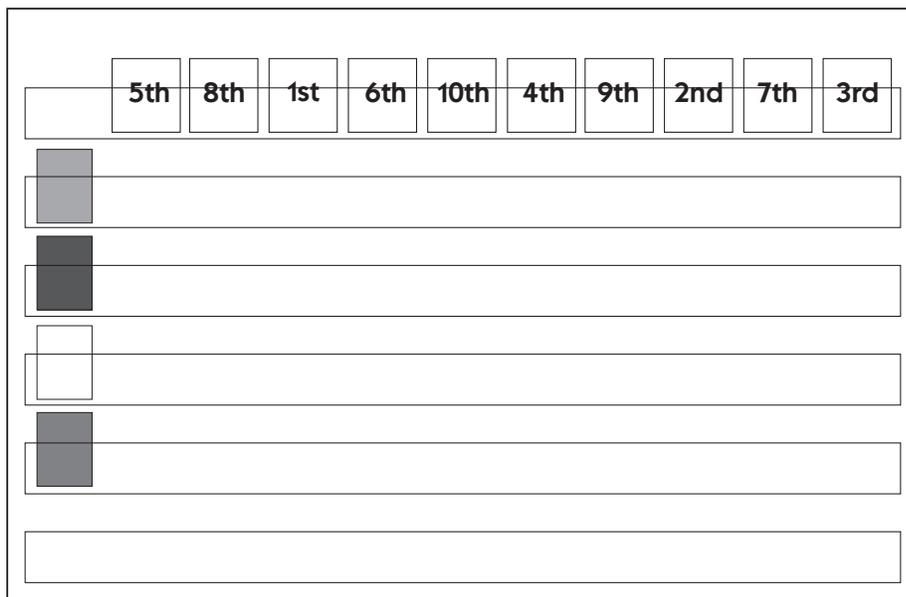
- ★ match the ordinal numbers first, second, third, etc. with an ordered set to at least 10
- ★ use ordinals to identify position in a sequence
- ★ read numerals to 10

#### You'll need

- ★ Ordinal Number Cards (pages A8.12–A8.13, run 1 copy of each sheet on white or buff cardstock, cut cards apart and laminate if desired)
- ★ forty 3" x 5" index cards (see Advance Preparation)
- ★ 1 piece of 2 ½" x 3 ½" construction paper in each of the following colors: red, green, blue, and brown
- ★ pocket chart

**Advance Preparation** Trim the index cards so they measure 3" x 3½". Orient the cards so one of the 3" sides is at the top of each. Write a numeral from 1–10 in red on each of the first 10 cards. Write the numerals in green on the second set of 10, in blue on the third set of 10, and in brown on the last set of 10. Then mix the 40 cards very thoroughly.

Before the lesson starts, place the Ordinal Number cards in mixed order across the top row of the pocket chart. Place the pieces of construction paper along the far left-hand side of the chart, as shown below.



#### Instructions for Numeral Card Shuffle

1. Gather children to your discussion area and seat them so that they can all see the pocket chart. Give them a minute to examine the display quietly and pair-share observations, and then invite a few volunteers to share their ideas with the class. Chances are, someone will observe that the ordinal num-

**Activity 3** Number Card Shuffle (cont.)

ber cards in the top row are out of order. If no one mentions it, bring it up yourself by reading the cards with the class. Are they placed correctly? Why or why not?

**Students** *It's supposed to start with the number that has a 1 in it.*

*It should start with first, and then go second, third, fourth, like you count the numbers in order.*

2. Work with help from the students to rearrange the ordinal number cards so they are in the correct order. Then show them a few of the numeral cards you have prepared; enough so they can see that there is a different numeral on each card, and some of the numerals are written in different colors. Insert the cards back into the stack, and shuffle the whole collection of 40 as the students watch. Then set 10 cards into each row, facedown, as children count with you.

3. Turn the first numeral card in the first row face-up. Read it with the children.

**Students** *It says 5!*

*It's a blue 5.*

*Maybe it should go in the blue row.*

**Teacher** *We have a problem here. Does 5 come first when you are counting the numbers from 1 to 10?*

**Students** *No! One comes first, not 5!*

*5 should come fifth, because it goes 1, 2, 3, 4, 5.*

4. Explain that the card you just turned over has to be moved so that it is in the correct place, with respect to color and order. In the example above, the card would have to be placed fifth in the blue row. Work with input from the students to move the card to the correct location and insert it, face-up. In order to do this, you will need to remove the card that is currently in that spot.

5. Show the newly displaced card to the class. Where does this card belong?

**Students** *It's a red 9!*

*It has to go almost last in the red row!*

*It has to go ninth because 9 is ninth!*

6. Call on a volunteer to move the card to the correct location and insert it face up. This will displace another card, which will have to be moved in turn. Continue in this fashion, calling on a new volunteer to work with the newly displaced card each time. The illustration below shows how your chart might look halfway through the game.

**Activity 3** Number Card Shuffle (cont.)

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
Black	1		3	4		6	7		9	
Dark Gray	1	2		4		6		8		
Medium Gray			3		5		7			10
Light Gray	1				5	6			9	10

7. Continue as long as children's focus holds. If interest wanes mid-way through, leave the chart the way it is, and return to it the next day, turning over and replacing one card with another until all 40 cards have been turned face-up and placed where they belong.

**Extensions**

- Repeat this activity with your class several times. Each time you revisit the game, mix the deck very thoroughly and place all the cards into the chart facedown. You can also switch the order of the color cards each time if you like.
- Create a new version of the game by making a set of 40 numeral cards that go from 11–20 instead of 1–10. This provides especially good practice for children who are still learning to read teen numbers. You might also create sets of cards that go by 10s to 100, or even by 100s to 1,000.
- Once your students are familiar with Numeral Card Shuffle, have them line up near the chart. Ask the first child in line to turn over the first card, place it where it belongs on the chart, hand the displaced card to the next child in line, and go to the end of the line. Have the second child place the second card where it belongs, hand the newly displaced card to the next student in line, and go to the end of the line. Continue until all the cards have been turned face up and placed correctly. Playing the game this way heightens the chain-reaction effect, and some children enjoy bettering their time as a class with each repetition.
- Make Numeral Card Shuffle available to pairs or small groups of children during Work Places.

**INDEPENDENT WORKSHEET**

See Set A8 Independent Worksheets 1–3 for more practice with ordinal numbers.

## Numeral Cards Page 1 of 2

**3rd**

**6th**

**2nd**

**5th**

**1st**

**4th**

# Numeral Cards Page 2 of 2

**8th**

**10th**

**7th**

**9th**



NAME \_\_\_\_\_

DATE \_\_\_\_\_

# Set A8 ★ Independent Worksheet 1



## INDEPENDENT WORKSHEET

### Ordinal Numbers

1 Trace the words and numerals.

*first*      *1st*

*first*      *1st*

*second*      *2nd*

*second*      *2nd*

*third*      *3rd*

*third*      *3rd*

*fourth*      *4th*

*fourth*      *4th*

*fifth*      *5th*

*fifth*      *5th*

*sixth*      *6th*

*sixth*      *6th*

*seventh*      *7th*

*seventh*      *7th*

*eighth*      *8th*

*eighth*      *8th*

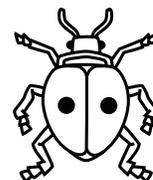
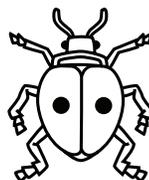
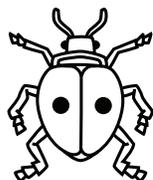
*ninth*      *9th*

*ninth*      *9th*

*tenth*      *10th*

*tenth*      *10th*

2 Put an X on the **second** bug. Color the **first** bug red. Put a hat on the **third** bug.





NAME \_\_\_\_\_

DATE \_\_\_\_\_

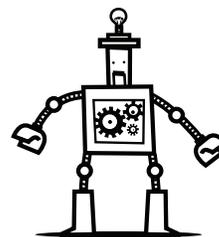
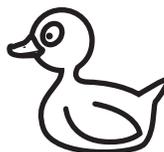
# Set A8 ★ Independent Worksheet 2



## INDEPENDENT WORKSHEET

### Ordinal Number Mix-Ups & Fix Ups

1 Rob lined up his toys on the shelf. Draw a line between each toy and the number that shows its place on the shelf.



third  
(3rd)

fifth  
(5th)

second  
(2nd)

fourth  
(4th)

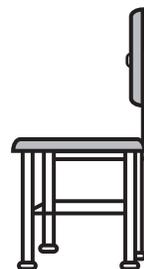
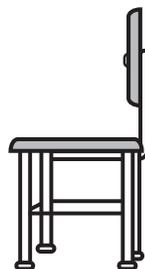
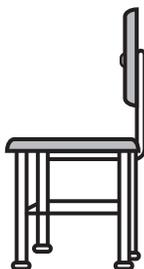
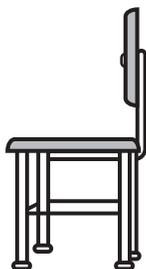
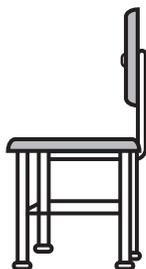
first  
(1st)

sixth  
(6th)

2 Follow the instructions to fill the chairs below.

- a Draw a teddy bear in the fourth chair.
- b Draw a bug in the second chair.
- c Draw a duck in the fifth chair.
- d Draw a flower in the first chair.
- e Draw a star in the third chair.

3 Trace the ordinal number under each chair.



1st

2nd

3rd

4th

5th



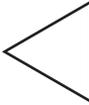
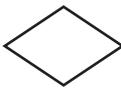
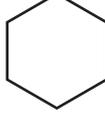
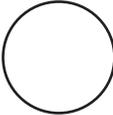
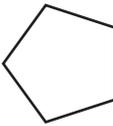
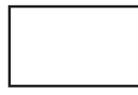
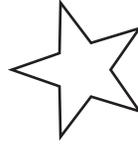
NAME \_\_\_\_\_ DATE \_\_\_\_\_

# Set A8 ★ Independent Worksheet 3



## INDEPENDENT WORKSHEET

### Shape Line-Up

									
Triangle	Square	Rhombus	Hexagon	Circle	Pentagon	Trapezoid	Ellipse	Rectangle	Star

1 Using the shapes lined up above, circle the word needed to fill in the blank in each sentence below.

<p><b>Example</b></p> <p>The square is _____ in line.</p> <p>first      second      third (1st)      (2nd)      (3rd)</p>	<p><b>a</b></p> <p>The triangle is _____ in line.</p> <p>first      second      third (1st)      (2nd)      (3rd)</p>	<p><b>b</b></p> <p>The hexagon is _____ in line.</p> <p>second      third      fourth (2nd)      (3rd)      (4th)</p>
<p><b>c</b></p> <p>The trapezoid is _____ in line.</p> <p>fifth      sixth      seventh (5th)      (6th)      (7th)</p>	<p><b>d</b></p> <p>The rhombus is _____ in line.</p> <p>second      third      fourth (2nd)      (3rd)      (4th)</p>	<p><b>e</b></p> <p>The rectangle is _____ in line.</p> <p>eighth      ninth      tenth (8th)      (9th)      (10th)</p>

2 My favorite shape in line is the \_\_\_\_\_. It is standing \_\_\_\_\_ in line.

