

Ni 125 (Arrow Cards) Packet

*This packet contains directions & supporting resources for KNP
Intervention Guide Task Group Ni 125.*

Task group Ni 125 is presented in Webinar 2.

Contents:

- pp 4-8 : Spreadsheet directions
 - Information for teacher about the activities
 - Spreadsheet directions may be placed on the back of the folder
- pp 9-10: Student directions
 - Recommend printing in color to preserve color coding
 - May be placed on front of folders
- pp: Arrow Cards masters

To make a complete set of folders as directed below, print the following quantity of arrow cards on the indicated colors. Note - the colors are chosen to match the folder color sequence but alternative colors may be used. For example, it may be preferable to choose colors that match commercial sets of cards or cards already in use.

- One digit cards (0-9): Print 5 copies on Yellow
- "10" arrow cards: Print 1 copy in Red
- Two digit arrow cards (00-90): Print 3 copies in Red
- Three digit arrow cards (000-900): Print 2 copies in Green
- Four digit arrow cards (0000-9000): Print 1 copy in Purple
- Five digit arrow cards are included in the print packet for extension activities but are not used for these activities.

For access to this resource and the complete KNP collection of standards-based instructional activities and assessments and free PD Webinars, please go to <http://kymath.org> and choose "KY Numeracy Project."

*Prepared by Cindy Aossey
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Directions for making folders:

- Ni 125.0 & Ni 125.1
 - Use a yellow folder or use a manila folder that is labeled "yellow"
 - Place spreadsheet directions for Ni 125.0 & Ni 125.1 on folder back
 - Place student directions (yellow versions) on folder front
 - Contents:
 - Arrow cards 0-9
- Ni 125.2
 - Use a red folder or use a manila folder that is labeled "red"
 - Place spreadsheet directions for Ni 125.2 on folder back
 - Place student directions (red version) on folder front
 - Contents:
 - Arrow cards 0-9
 - Multiple copies of the 10 arrow
- Ni 125.3
 - Use a blue folder or use a manila folder that is labeled "blue"
 - Place spreadsheet directions for Ni 125.3 on folder back
 - Place student directions (blue version) on folder front
 - Contents:
 - Arrow cards 0-9
 - Arrow cards 00-90
- Ni 125.4
 - Use a green folder or use a manila folder that is labeled "green"
 - Place spreadsheet directions for Ni 125.4 on folder back
 - Place student directions (green version) on folder front
 - Contents:
 - Arrow cards 0-9
 - Arrow cards 00-90
 - Arrow cards 000-900

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- Ni 125.5
 - Use a purple folder or use a manila folder that is labeled "purple"
 - Place spreadsheet directions for Ni 125.5 on folder back
 - Place student directions (purple version) on folder front
 - Contents:
 - Arrow cards 0-9
 - Arrow cards 00-90
 - Arrow cards 000-900
 - Arrow cards 0000-9000

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K.C.C.7 Compare two numbers between 1 and 10 presented as written numerals.	Counting & Cardinality	K.C.A.7 Compare numbers	Activities: Exemplary Learning Experiences (*see glossary)	Numeral Identification	0 to 1 YELLOW	Numerals to ten	"I CAN" (*see glossary)	Assessment for Learning (*see glossary)	Student	Interacti	Teacher Notes
<p>NI 125.0 - Arrow Cards</p>	<p>Counting & Cardinality</p>	<p>Compare numbers</p>	<p>Working in groups of 3-5 students, the students will each draw one arrow card* and read it aloud. Students will then order the numbers from smallest to largest. The student who drew the largest numeral gets a point. After each turn, replace the cards in the stack, shuffle and draw again.</p>	<p>Numeral Identification</p>	<p>0 YELLOW</p>	<p>Numerals to ten</p>	<p>... Identify and tell which of two numerals from the range 1 to 5 is greater.</p>	<p>Lay out the "3" and the "5" cards. Ask students to read the numerals and tell which number is greater.</p>	<p>small group</p>	<p>http://kymath.org/intervention/doc/NumeralIdentification</p>	<p>Instructions for Teaching Place Value with Arrow Cards - http://educationworld.com/a_curr/mathchat/mathchat024.shtml</p>
<p>NI 125.1 - Arrow Cards</p>	<p>Counting & Cardinality</p>	<p>Compare numbers</p>	<p>Working in groups of 3-5 students, each student draws 1 arrow card* and reads it aloud. Students order the numbers from smallest to largest. After each turn, replace the cards in the stack, shuffle and draw again.</p>	<p>Numeral Identification</p>	<p>0 to 1 YELLOW</p>	<p>Numerals to ten</p>	<p>... identify and tell which selected numerals from the range 1-9 is greatest.</p>	<p>Lay out the "4," "6" and "9" cards. Ask students to read the numerals and tell which is the greatest. Task can be repeated with different and/or additional arrows.</p>	<p>small group</p>	<p>http://kymath.org/intervention/doc/NumeralIdentification</p>	<p>A brief explanation of place value arrow cards* with links to printable arrows can be found at (see link in NI 125.0 Teacher Note). Durable plastic arrow cards* may be purchased at Educators Outlet (http://educatorsoutlet.com) and are called "Place Value Arrows." Be sure each set of arrow cards contains zero cards for all the place values (0, 00, 000, 0000, etc.).</p>

KNP# with Kentucky Common KCAS KCAS KCAS	Setting (situation & materials)	Activities: Exemplary Learning Experiences (*see glossary)	Numerac Construc Numerac	"I CAN" (*see glossary)	Assessment for Learning (*see glossary)	Student Interacti	Teacher Notes
NI 125.2 - Arrow Cards	arrow cards*: one set of single-digit arrow cards per small group and one "10" arrow card per student (see link)	Working in groups of 3-5 students, each student builds a 2-digit number using the "10" and a single digit arrow card*. Each student will read his/her number. Students order numbers from smallest to largest. If desired, have students write their number on a writing space.	Numerac Identification 1 to 2 RED Numerals to twenty	...identify and tell which selected numerals from the range 10 to 19 is greatest.	Show four numeral cards in range 10 to 19 (for example "18," "12," "19" and "16"). Ask students to read the numerals and tell which numeral is the greatest. Task can be repeated with different and/or additional numeral cards.	small group	See teacher note for activity Ni 125.1. Teacher may initially need to model that numbers are built from arrows of different colors, placed so the arrows overlap and all numerals are visible. If students have trouble reading the numbers, the cards can be separated so the value of each number will help the child identify the number he/she built. Students working independently could build 3 - 5 numbers and then order those numbers.

K.NBT.1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or

Number & Operations in Base Ten
Work with numbers 11-19 to gain foundations for place value

Number & Operations in Base Ten
Work with numbers 11-19 to gain foundations for place value

Kentucky Numeracy Project

<http://kentuckymathematics.org>

10/13/2011

NBT.1.NF.3 - Arrow Cards with Common Kentucky	KCAS KCAS KCAS	Setting (situation & materials)	Activities: Exemplary Learning Experiences (*see glossary)	Numeracy Identification 2 to 3 BLUE Construct Numeracy	"I CAN" (*see glossary)	Assessment for Learning (*see glossary)	Student small group	Teacher Notes
1.NBT.1. Count* to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	Number & Operations in Base Ten	arrow cards*: one set of single digit and one set of double digit arrow cards* per small group (see link)	Working in groups of 3-5, each student uses two different color arrow cards* to build a 2-digit number. Each student will read his/her number to the group and show what two arrow cards were used to build the number. Students order the "built" numbers (with layers intact) from smallest to largest. If desired, ask students to take turns counting from one number in the sequence to the next.	Numerals to '100'	...identify and tell which selected numerals from the range 10 to 99 is greatest.	Show four numeral cards in range 10 to 99 (for example "71," "12," "39" and "60"). Ask students to read the numerals and tell which is the greatest. Task can be repeated with different and/or additional numeral cards.	http://kymath.org/intervention/doc/NumeracyProject/ArrowCardsOnesToHundreds.pdf	See teacher note for activity Ni 125.1. Teacher may initially need to model that numbers are built from arrows of different colors, placed so the arrows overlap and all numerals are visible. Teacher may ask for a specific number to be built. If students have trouble reading the numbers, the cards can be separated so the value of each number will help the child identify the number he/she built. Students working independently could build 3 - 5 numbers and then order those numbers. Students may be asked to record numerals in writing and either draw the corresponding arrows or record the expanded form for each number (i.e. 56 = 50 + 6). Students may be asked to find their number on a numeral roll or 100 chart. Teacher may ask students to start counting from their number. Teacher may ask questions such as "What is 1 more/ 1 less than your number?" Similarly 10 more/ 10 less questions could be asked (working toward KCAS standard 1.NBT.5)

KNP#	Setting (situation & materials)	Activities: Exemplary Learning Experiences (*see glossary)	Numerac	Construct	Numerac	"I CAN" (*see glossary)	Assessment for Learning (*see glossary)	Student	Print	Interacti	Teacher Notes
Ni 125.4 - Arrow Cards	arrow cards*: one set of ones, tens and hundreds arrow cards per small group (see link)	Working in groups of 3-5, each student uses three different color arrow cards* to build a 3-digit number. Each student will read his/her number to the group and show what three arrows were used to build the number. Students order the "built" numbers (with layers intact) from smallest to largest.	Numerals to 1,000	3 to 4 GREEN	Numerals to 1,000	...identify and tell which selected numerals from the range 100 to 999 is greatest.	Show five numeral cards in range 100 to 999 (for example "403," "298," "611," "334" and "780"). Ask students to read the numerals and tell which is the greatest. Task can be repeated with different and/or additional numeral cards.	small group	http://kymath.org/intervention/doc/NumeracyProject/ArrowCardsThousandsAndTent	http://www.ictgames.com/arrowCards_revised_v4.html	See teacher note for activity Ni 125.1. Teacher may initially need to model that numbers are built from arrows of different colors, placed so the arrows overlap and all numerals are visible. If students have trouble reading the numbers, the "hundred" arrow can be temporarily removed and student asked to first identify the remaining two digit number. Students working independently could build 3 - 5 numbers and then order those numbers. Students may be asked to record numerals in writing and either draw the corresponding arrows or record the expanded form for each number (i.e. $456 = 400 + 50 + 6$). Teacher may ask questions such as "What is 1 more / 1 less than the number you created?" Similarly, teacher may ask about 10 more/less or 100 more/less (targeting KCAS standard 2.NBT.8). Use the print link for Ni 125.3 for 0 to 999 arrow cards.
2.NBT.3. Read and write numbers to 100 using base-ten numerals, number names, and expanded form.		Number & Operations in Base Ten	KCAS	KCAS	Understand place value						

KNP#	Kentucky Common Core State Standards	Setting (situation & materials)	Activities: Exemplary Learning Experiences (*see glossary)	"I CAN" (*see glossary)	Assessment for Learning (*see glossary)	Student	Teacher Notes
Ni 125.5 - Arrow Cards	4.NBT.2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the tens and hundreds places. Recognize that in the multi-digit whole numbers shown, the digit in one place represents ten times what it represents in the place to its right. KCAS KCAS	arrow cards*: one set of ones, tens and hundreds, thousands arrow cards* per group (see link for 125.4 for 1 - 3 digit arrow cards; see link here for 4 and 5 digit arrow cards)	Working in groups of 3-5, each student uses arrow cards* to build a 2 to 4-digit number. Each student will read his/her number to the group and show what arrow cards were used to build the number. Students order the "built" numbers (with the layers intact) from smallest to largest. Repeat making sure all students have opportunities to make numerals with different numbers of digits.	...identify and tell which selected numerals in the range 10 to 9,999 is greatest.	Show five numeral cards in range 10 to 10000 (for example "804," "1398," "76," "3505," "9000"). Ask students to read the numerals and tell which is greatest. Task can be repeated with different and/or additional numeral cards.	small group	See teacher note for activity Ni 125.1. Teacher may initially need to model that numbers are built from arrows of different colors, placed so the arrows overlap and all numerals are visible. The arrow cards* for "ten thousands" and "hundred thousands" may be included. Students may be asked to write the expanded form for each number (i.e. $3,456 = 3,000 + 400 + 50 + 6$). Teacher may ask questions such as "What is 1 more/ 1 less than the number you created?" Similarly, teacher may ask about 10 more/less, 100 more/less, 1000 more/less, etc (targeting KCAS standard 2.NBT.8). Use the print link for Ni 125.3 for 0 to 999 arrow cards.
Number & Operations in Base Ten		Numeral Identification		4 to 5 PURPLE		Interacti	
Generalize place value understanding for multi-digit whole numbers		Numerac		Numerac		Print	

I can identify the numbers 0-5 and determine which is greatest!

Ni 125.0

Materials: Arrow cards 0-5

Directions:

1. Place arrow cards face down in a stack.
2. Each player will draw 1 card and read the number.
3. Players work together to put numbers in order.
4. The player who drew the largest number gets a point.
5. Shuffle cards and replay

I can identify the numbers 0-9 and determine which is greatest!

Ni 125.1

Materials: Arrow cards 0-9

Directions:

1. Place arrow cards face down in a stack.
2. Each player will draw 1 card and read the number.
3. Players work together to put numbers in order.
4. The player who drew the largest number gets a point.
5. Shuffle cards and replay

I can identify the numbers 10 to 19 and determine which is greatest!

Ni 125.2

Materials: Arrow cards 0-9, several "10" arrows

Directions:

1. Give each player a "10" arrow.
2. Place single digit arrow cards face down in a stack.
3. Each player will draw 1 single digit card, place it with the "10" arrow and read the number.
4. Players work together to put numbers in order.
5. The player who created the largest number gets a point.
6. Shuffle cards and replay

I can identify the numbers 10 to 99 and determine which is greatest!

Ni 125.3

Materials: one set of single digit arrow cards and one set of double digit arrow cards.

Directions:

1. Place single digit arrow cards in a stack face down. Place the double digit arrow cards in another stack face down.
2. Each player will draw 1 arrow card from each stack, place cards together to make a number and read the number.
3. Players work together to put numbers in order.
4. The player who created the largest number gets a point.
5. Shuffle cards and replay

I can identify the numbers 100 to 999 and determine which is greatest!

Ni 125.4

Materials: one set of single digit arrow cards, one set of double digit arrow cards, one set of triple digit arrow cards.

Directions:

1. Place each type of arrow card in a stack face down. There will be 3 stacks.
2. Each player will draw 1 arrow card from each stack, place cards together to make a number and read the number.
3. Players work together to put numbers in order.
4. The player who created the largest number gets a point.
5. Shuffle cards and replay

I can identify the numbers 1,000 to 9,999 and determine which is greatest!

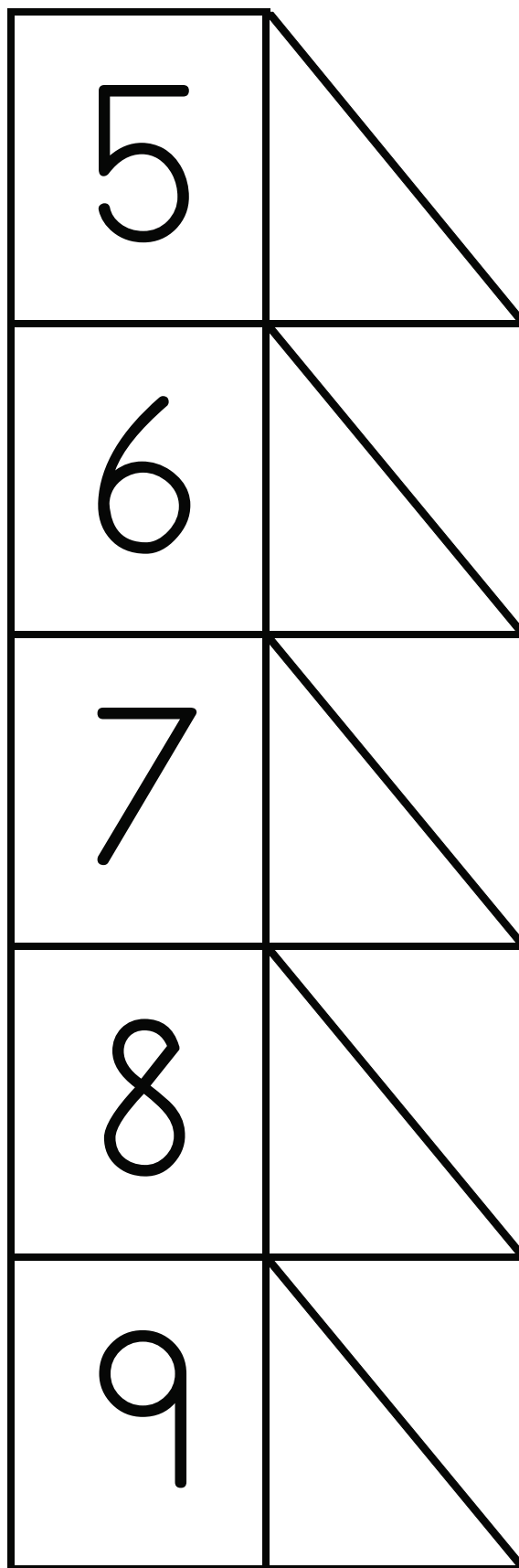
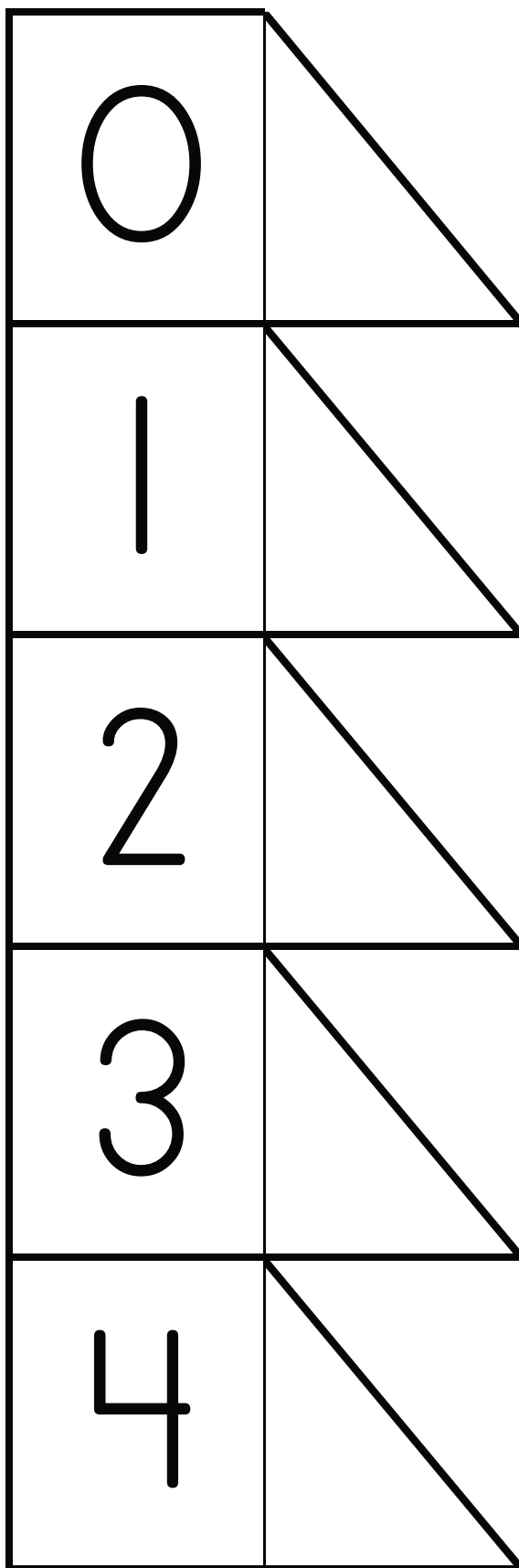
Ni 125.5

Materials: one set of arrow cards including ones, tens, hundreds and thousands.

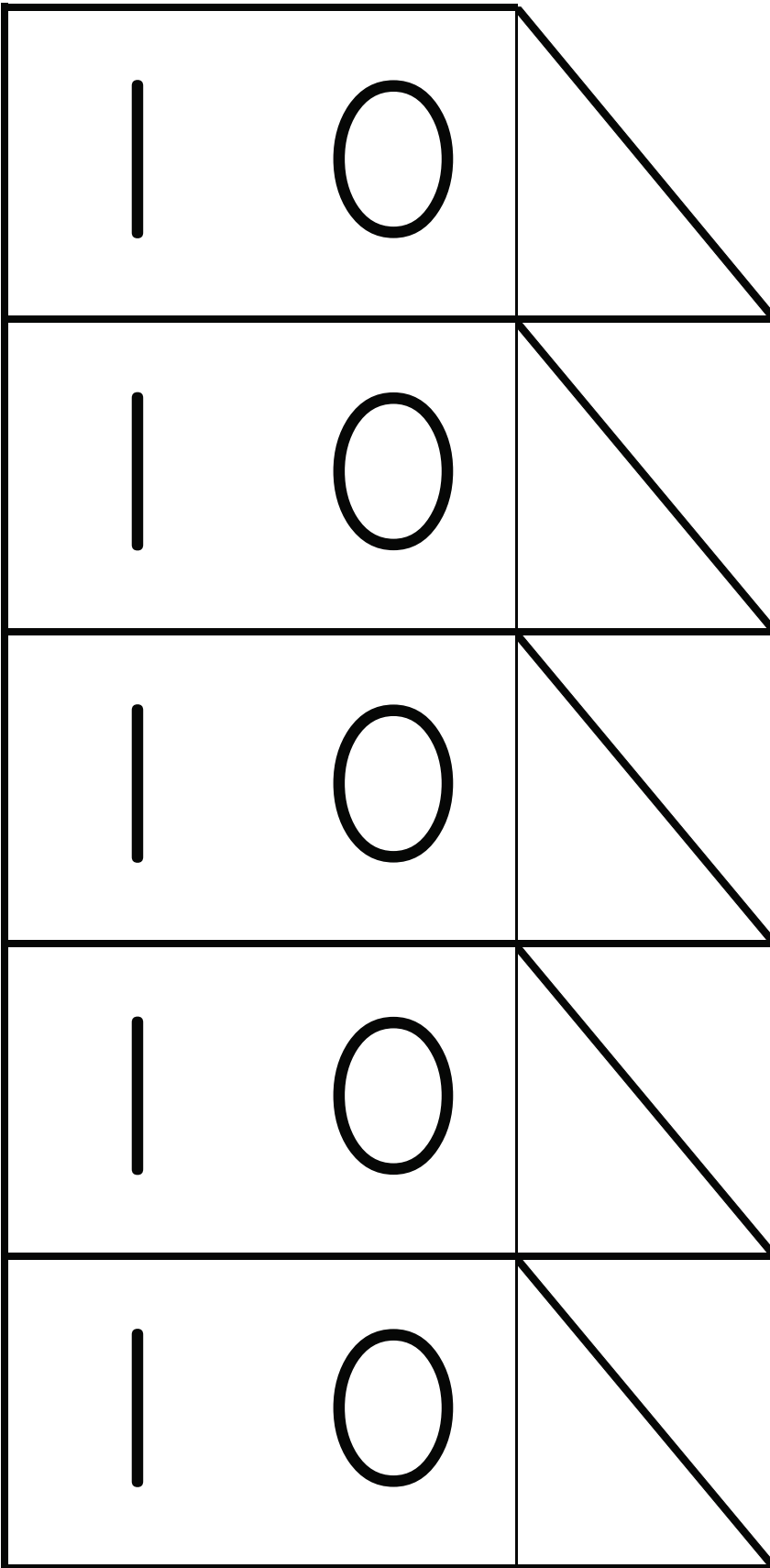
Directions:

1. Place each type of arrow card in a stack face down. There will be 4 stacks.
2. Each player will draw 1 arrow card from each stack, place cards together to make a number and read the number.
3. Players work together to put numbers in order.
4. The player who created the largest number gets a point.
5. Shuffle cards and replay

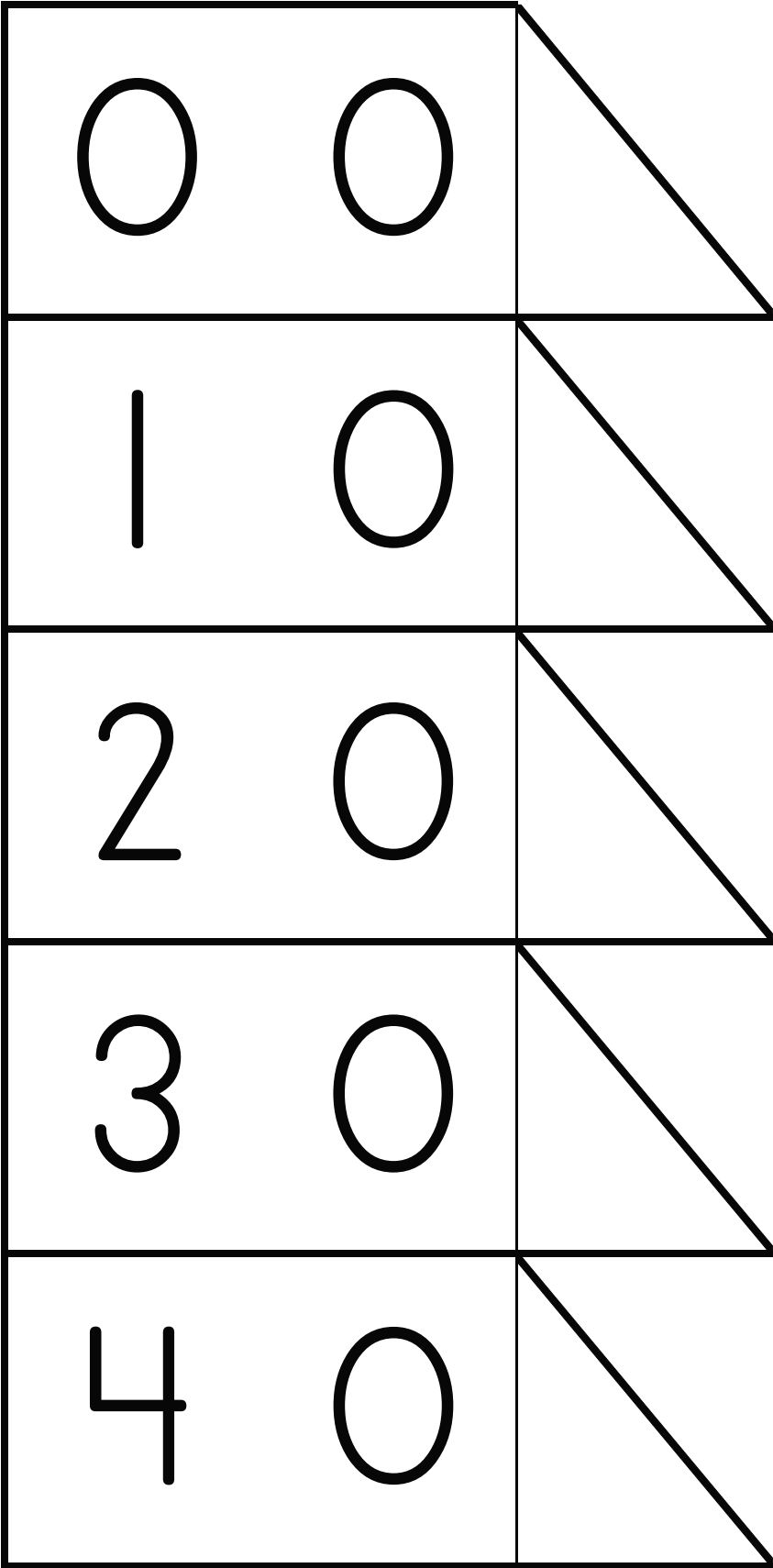
Cut arrows on the dark lines. If desired, print each place value on a different color.



Print multiple "ten" arrows to focus on teen numbers (activity Ni 125.2)



Cut arrows on the dark lines. If desired, print each place value on a different color.



Cut arrows on the dark lines. If desired, print each place value on a different color.

5	0	
6	0	
7	0	
8	0	
9	0	

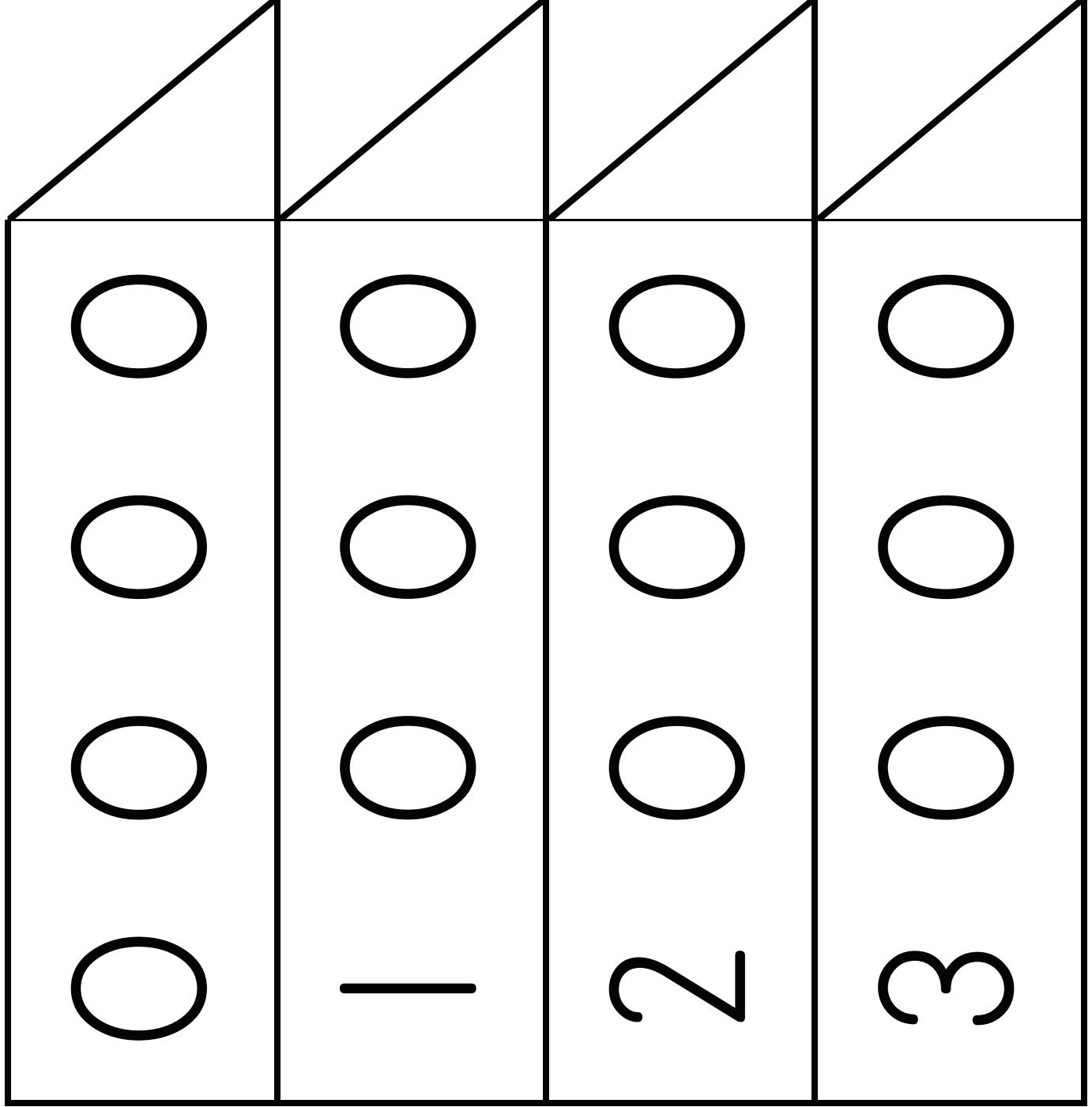
Cut arrows on the dark lines. If desired, print each place value on a different color.

0	0	0	
1	0	0	
2	0	0	
3	0	0	
4	0	0	

Cut arrows on the dark lines. If desired, print each place value on a different color.

5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	

Cut arrows on the dark lines. If desired, print each place value on a different color.



Cut arrows on the dark lines. If desired, print each place value on a different color.

4

0

0

0

5

0

0

0

6

0

0

0

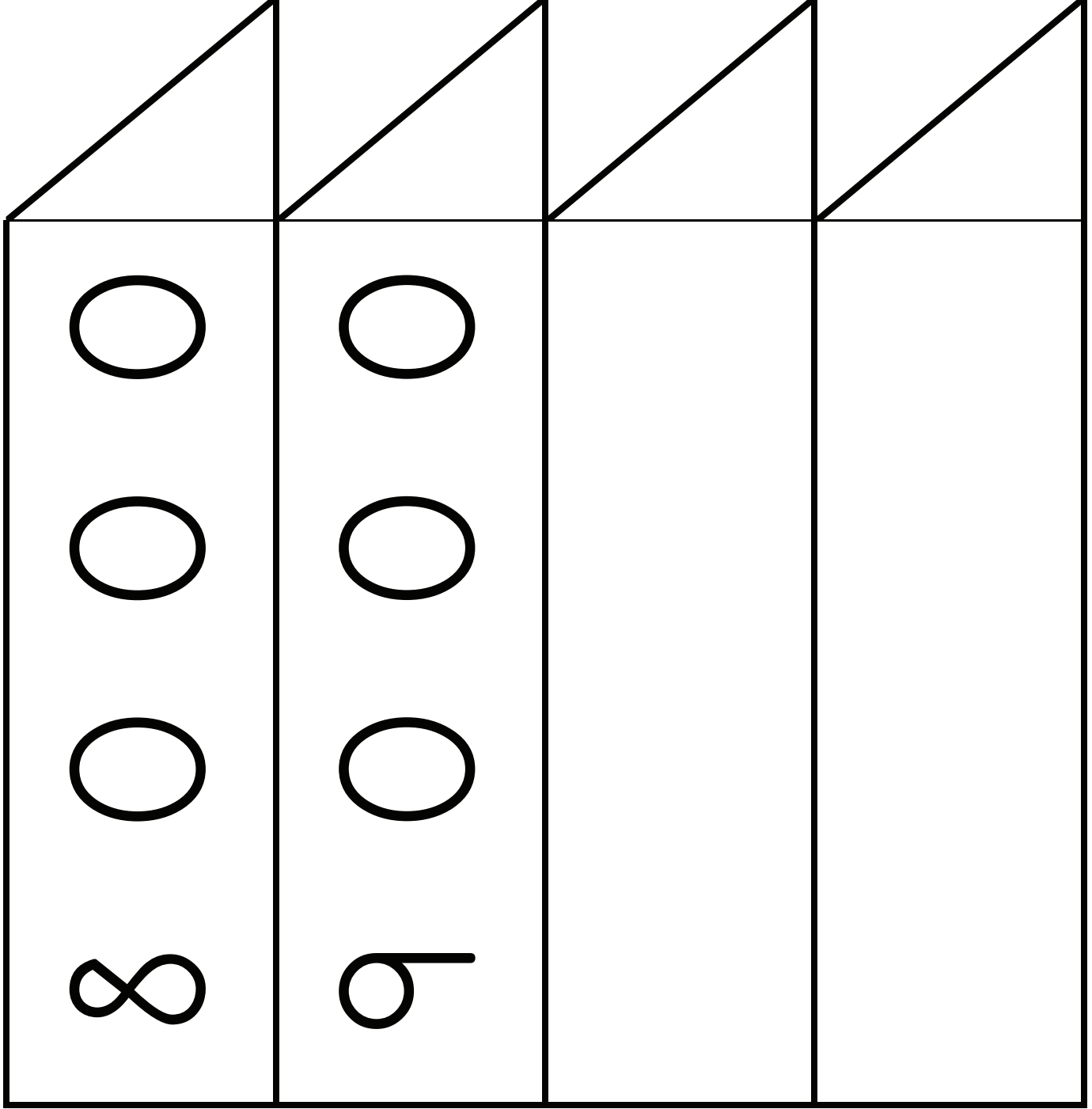
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0

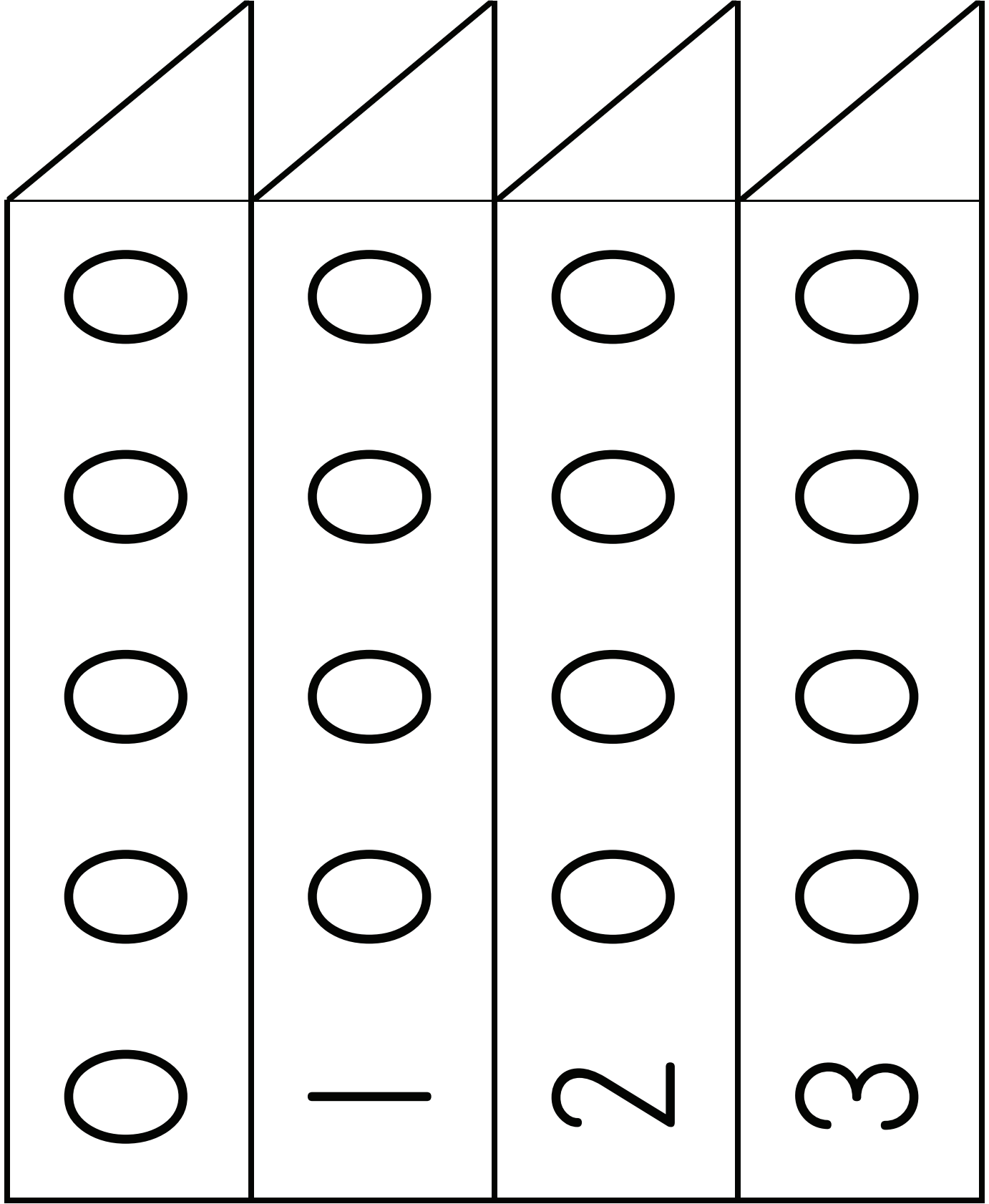
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Cut arrows on the dark lines. If desired, print each place value on a different color.



Cut arrows on the dark lines. If desired, print each place value on a different color.



Cut arrows on the dark lines. If desired, print each place value on a different color.

4

0

0

0

0

5

0

0

0

0

6

0

0

0

0

7

0

0

0

0

Cut arrows on the dark lines. If desired, print each place value on a different color.

8

0

0

0

0

9

0

0

0

0