Conceptual Learning Materials
Insights into Math Concepts
www.conceptuallearning.com

Sample K-3 Packet

1. Picture of "Perception" exercise after completion
2. Instructions for Missing Numbers (manipulative & workpage)
3. *Sample of Missing Numbers manipulative exercise (for immediate child use)
4. *Sample Missing Number blackline of digital workpage (for immediate child use)
5. Golden Beads (manipulative matching exercises as well as free-response workpage)
6. Hundred Line Instructions
7. *Hundred Line Worksheet (for immediate child use)
8. Problem Solving A
9. *Mixed A (for immediate child use)
10. Money A
11. Time A
12. Thousand Line Instructions
13. *Thousand Line Worksheet (for immediate child use)
14. Order Blue
15. Place Value Match
16. *Place Value Workpage
17. *Numeration Blue and More Numeration Pink
18. Tens Gold
19. Exchange
20. *Thousands Green
21. Problem Solving C
22. Mixed Practice B
23. Geometry Introduction
24. Money C
25. Time C
26. Fraction Match
27. Roman Numerals
28. **Fraction Chart
29. *Fraction Concepts
30. *Decimal Introduction
    *Actual free-response workpage
    **Graphic for child use

K	1	2	3	4	5	6	7	8	www.conceptuallearning.com	Cardstock	Blackline	Digital PDF
■	■								Perception		▓	▓
■	■								Missing Numbers			
■	■								Patterns		▓	▓
■	■								Counting			
■	■								Golden Beads (blue)			
■	■								Golden Beads (pink)			
■	■								Golden Beads (green)			
■	■								Hundred Line & Labels			
■	■								Problem Solving A			
■	■								Mixed Practice A			
■	■								Money A			
■	■								Time A			
■	■	■							Thousand Line & Labels			
■	■								Order (blue)			
■	■								Order (pink)			
■	■								Order (green)			
■	■								Place Value (blue)			
■	■								Place Value (pink)			
■	■								Place Value (green)			
■	■								Numeration (blue)			
	■	■							More Numeration (pink)			
	■	■							Tens (gold)			
	■	■							Exchange		▓	▓
	■	■							Money B			
	■	■							Time B			
	■	■							Problem Solving B			
	■	■							Mixed Practice B			
	■	■	■						Thousands (green)			
		■	■						Problem Solving C			
		■	■						Mixed Practice C			
		■	■						Geometry Introduction			
		■	■						Money C			
		■	■						Time C			
		■	■						Fraction Match			
		■	■						Roman Numerals			▓
			■						Problem Solving D			
			■						Mixed Practice D			
			■	■					Fraction Concepts			
			■	■					Decimal Introduction			

Insights into Math Concepts focuses on concepts rather than on drill and calculations that are readily available from most educational suppliers. Typically, any classroom has students with a wide range of abilities and skill levels, so the levels include work that is on-level, reinforcement, and advanced for the respective grades. For example, the scope and sequence chart shows that "Mixed Practice B" would be challenging for first grade, on-level for second grade, and reinforcement for third grade. Each series has 8 to 30 separate incremented exercises.

Note that the materials come in a variety of formats. All taskcards are available in colorful reusable cardstock, reproducible blackline masters, or more cost-effective digital downloads. Exercises that are manipulated come in colorful cardstock that is to be laminated and cut. Most are also available as a reproducible blackline workpage format and digital workpage PDF downloads as well.

Perception
Cardstock series of 10 separate exercises

- Exercises are printed on heavyweight cardstock. Lamination is recommended if heavy use is anticipated.
- The set consists of 10 workpages. These are printed on 8.5 by 11-inch stock.
- "Answers" are printed on a separate page. They have dotted lines outlining each picture and are designated by the workpage number on the lower right hand corner of each cut-out. Each answer page includes two sets of cut-outs.
- The child removes the cutouts from the envelope and superimposes "cutout" answer over "the empty space" next to their matching pictures.

Missing Numbers

Missing number exercises are available as a set of reusable multi-colored cardstock manipulatives which are laminated and cut as well as a set of reproducible blackline or digital download worksheets which are sold separately.

Instructions for cardstock manipulative version

Each page is printed on a bright-colored cover stock. We use five different colors for 10 exercises so the child will experience a sense of progression as the colors change (lunar blue for 1 & 6, pulsar pink for 2 & 7, orbit orange for 3 & 8, solar yellow for 4 & 9, and rocket red for 5 & 10). The final exercise deals with numbers up to 50.

Laminate and cut each page into five strips and 14 to 16 small rectangles as shown on the right. All the pieces for each exercise may be stored in the same envelope, or the strips can be organized in a rubber band and drawer organizer with the small rectangles placed in a hardware drawer or box. Labels for containers are included.
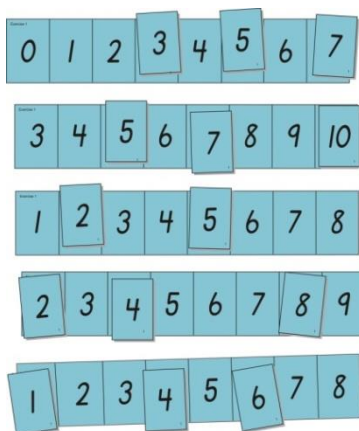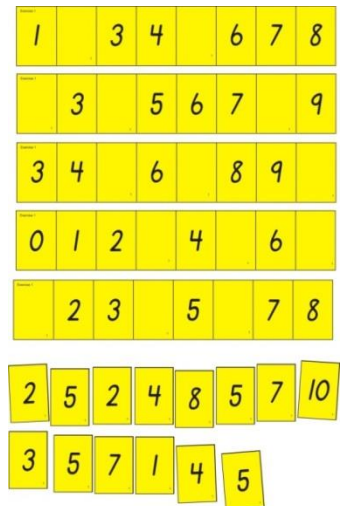
To do the exercise, the child uses the appropriate strips and corresponding numeral cutouts. He or she places the strips in any order on a rug or table. Then he or she searches for the appropriate numerals to place in the "blank" spaces. On successive days, the child choses the next exercise in the series until all ten are completed.

Instructions for blackline or digital download version

Print or reproduce a sheet for each child. Merely use as a free-response exercise by having the child write the missing numbers on his or her own copy.

Child arranges 5 strips on table or rug. . He/she then fills in "missing numbers" with appropriate number rectangle.

Cut along dotted lines and make 5 strips

Exercise 6				8	9	10	11	12
Exercise 6		13	14			17	18	19
Exercise 6	12	13			16	17		
Exercise 6		14	15			17	18	19
Exercise 6	23			25	26			29	30

Cut along dotted lines and make 16 rectangles

5	6	7	12	15	16	14	15
6	6	6	6	6	6	6	6
18	19	13	16	20	24	27	28
6	6	6	6	6	6	6	6

Exercise 6			8	9	10	11	12

Exercise 6	13	14			17	18	19

Exercise 6	12	13			16	17		
Exercise 6								

Exercise 6	14	15			17	18	19	

Exercise 6	23		25	26			29	30
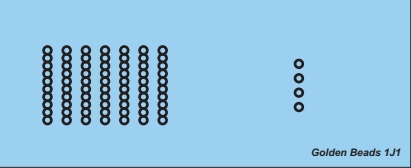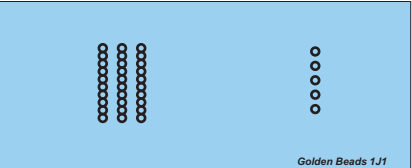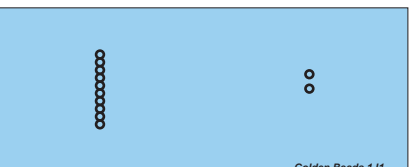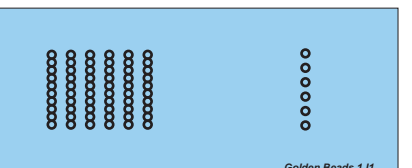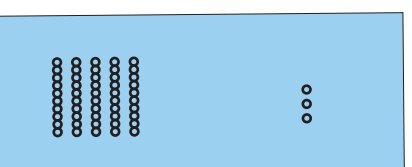
Golden Bead Matching Cards

7 tens and 4 ones
Golden Beads 1J1

2 tens and 3 ones
Golden Beads 1J1

30 + 5
Golden Beads 1J1

10 + 2
Golden Beads 1J1

66
Golden Beads 1J1

53
Golden Beads 1J1

Golden Beads 1J1

Golden beads are base-ten manipulatives made of beads rather than wooden blocks. All Golden Bead cardstock are six-problem matching exercises depicting base-ten graphics, comparable to place value blocks. The first third of the set are place value words, the second third are expanded form, and the last third are numerals themselves. This particular set includes all three.

Each level includes ten exercises that require lamination and cutting.

Reproducible blacklines and Digital Downloads
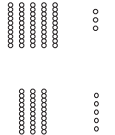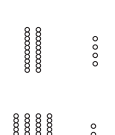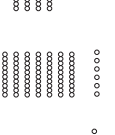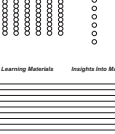
Both reproducible blackline masters and digital download versions of Golden Beads include worksheets involving two-, three-, and four-digit problems (blue, pink, and green). Half are matching, and the other half are free-response.

The first half of Golden Bead Blackline or Digital Download set involves drawing lines to the correct choice.

Name _____ Date _____
Matching version: have students draw lines from pictures on the left to corresponding values on the right.
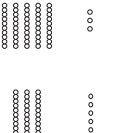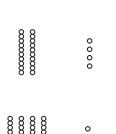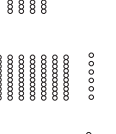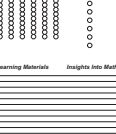
- 2 tens and 4 ones
- 3 tens and 5 ones
- 5 tens and 3 ones
- 4 tens and 2 ones
- 6 tens and 8 ones
- 8 tens and 6 ones

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The second half of Golden Bead Blackline or Digital Download set is free response.

Name _____ Date _____
Free-response version: have students follow the example in the first problem to write appropriate responses for the remaining problems.

5 tens and 3 ones

_____

_____

_____

_____

_____

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Hundred Line and Tags

Note: Child may use either the Montessori hundred chain or the red number line for number line exercises.

Contents

1. Instructions
2. Two pages of white tags (one to use and one for replacement of lost tags). Each "work" is labeled with the same lower case letter in the upper left-hand corner of the tag (a-h). Colored numerals illustrate how blue multiples of 10 and red hundred are used as guides.
3. One additional page of blue multiples of ten and red hundred.
4. Hundred line: three red pages to be cut into "tens". Ten sections are combined to make hundred line. (These are not needed if teacher opts to use hundred chain instead.)
5. Two pages of blank tags
6. Blank hundred board
7. Two pages of hundred board numerals with green units, blue multiples of ten, and red hundreds (one for cutting and one for spare parts)
8. Hundred board with black numerals for a student control
9. Extra blank hundred board to photocopy for written student extensions
10. Suggestions for hundred and thousand chain activities.

Preparation for hundred line and tags

1. Blank tags are separated until teacher or students are ready to write in values. They may be photocopied beforehand if desired.
2. One blank hundred board may be set aside as a master for individual student work. Lamination is optional.
3. Laminate all other cardstock materials.
4. Cut red line along dashed lines. Butt ten sections end-to-end and secure with packing tape from both front and back. Fold number line accordion-style and store in 12-inch organizer or zip bag.
5. Cut and store one set of blue tens and red hundred tags in separate hardware drawer, box, or zip bag for first presentation.
6. Cut and store another set with each of the sets of white tags (a-h) in separate hardware drawers, boxes, or zip bags. You will have one container with only colored multiples of ten and eight containers with a set of multiples of ten and black numerals with a letter. You may use the included adhesive label to identify the contents of each drawer or container.
7. Save remaining blue tags for replacement parts.

Instructions for hundred line and tags

1. In the first presentation guide the child in discovering that the hundred line consists of ten groups of ten. Have the child count by ones or by tens and place the blue tags along the top of the line as show below.
2. In the second session, the child places the blue tags along the top as in the first presentation, and puts the "a" tags along the bottom.
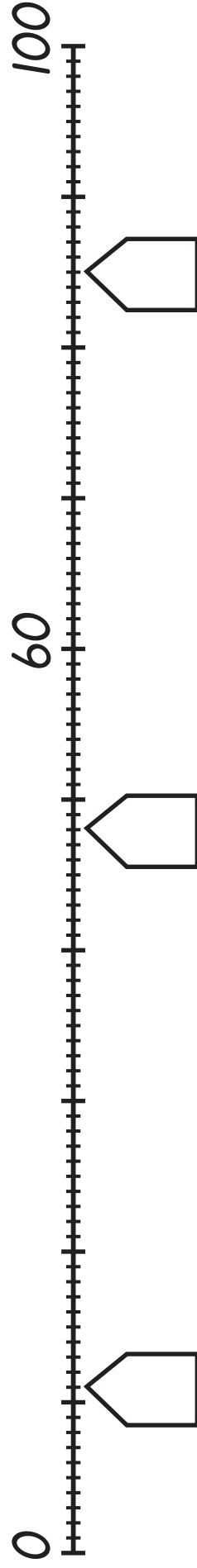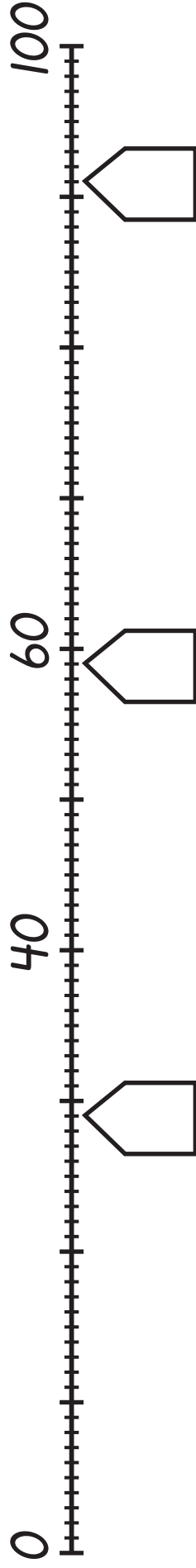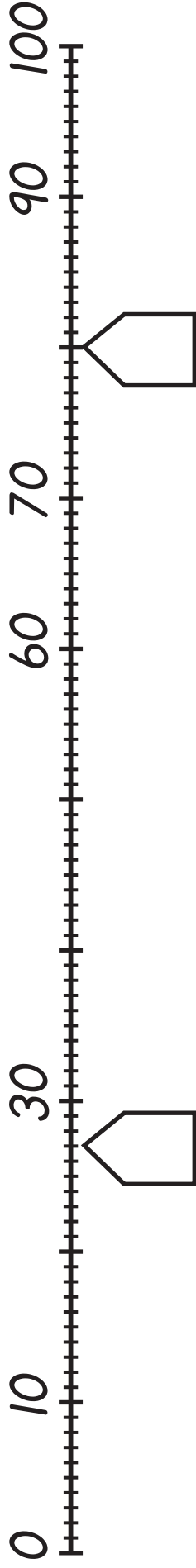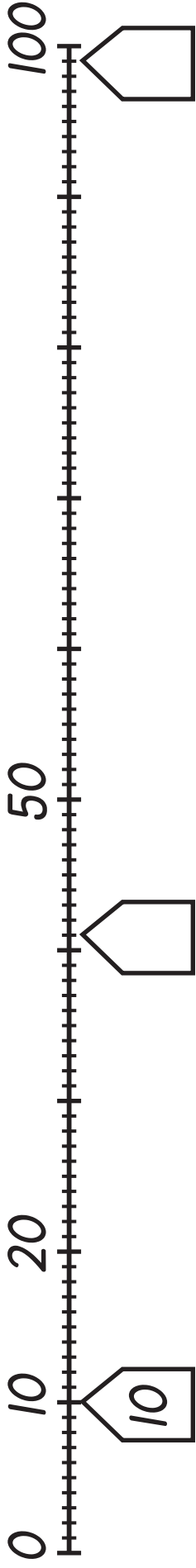3. In subsequent lessons, the child progresses through drawers "b" through "h".
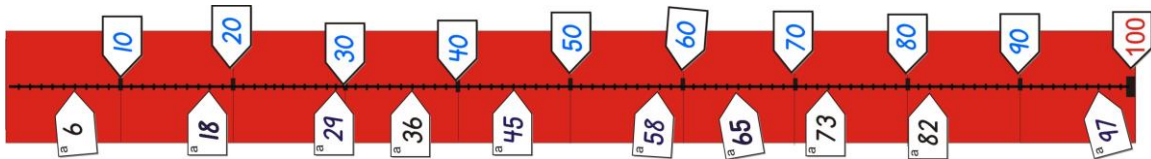
Hundred Board

1. Manipulative option: Laminate all versions of the board. Cut either of the pages with some colored numeral tiles and place in a drawer, box, or zip bag (Some teachers organize in several drawers such as 1-20, 21-40, etc.) Save the other page as a control. The child places the cutout tiles on the appropriate place on the blank board and checks with the control.

2. Workpage option: Use a blank page as a master for photocopying pages on which students may write. The child writes the numerals from 1 to 100 on his or her copy and uses the hundred board with all black numerals as a control. Teacher may devise numerous options for extensions such as evens, odds, and various multiples.

Name _____

Date _____

0   10   20   50   100

0   10   30   60   70   90   100

0   40   60   100

0   60   100

10

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Problem Solving Matching cards are printed with black ink on colored cardstock. Each exercise consists of 6 matching exercises. The 1st card can be placed in any order, but the 2nd and 3rd "answer cards" must be placed with the appropriate question card. The entire set has 15 separate critical thinking exercises, each with six problems. Problem Solving Cards require lamination & cutting.

1st Fred has 4 cats, 3 dogs, and 2 fish. How many pets in all?	2nd $4 + 3 + 2 = \square$	3rd 9
1st Emma has 4 cats, 3 dogs, and 2 fish. How many dogs and cats?	2nd $3 + 4 = \square$	3rd 7
1st Mike has 4 cats, 3 dogs, and 2 fish. How many dogs and fish?	2nd $3 + 2 = \square$	3rd 5
1st Jeff has 4 cats, 3 dogs, and 2 fish. 1 dog ran away. How many dogs left?	2nd $3 - 1 = \square$	3rd 2
1st Jill has 4 cats, 3 dogs, and 2 fish. How many more cats than fish?	2nd $4 - 2 = \square$	3rd 2
1st Pam has 4 cats, 3 dogs, and 2 fish. She wants 10 pets. How many more needed?	2nd $10 - 9 = \square$	3rd 1

Problem Solving reproducible blackline masters and digital downloads have the same problems as the matching cards but come in a free-response format in which children record their own answers. Depending on your printer, it can be printed either in grayscale or color.

Name_____   Date_____

1st Fred has 4 cats, and 2 fish. How many pets in all?	2nd $4 + 3 + 2 = \square$	3rd *9 pets*
1st Emma has 4 cats, 3 dogs, and 2 fish. How many dogs and cats?	2nd	3rd
1st Mike has 4 cats, 3 dogs, and 2 fish. How many dogs and fish?	2nd	3rd
1st Jeff has 4 cats, 3 dogs, and 2 fish. 1 dog ran away. How many dogs left?	2nd	3rd
1st Jill has 4 cats, 3 dogs, and 2 fish. How many more cats than fish?	2nd	3rd
1st Pam has 4 cats, 3 dogs, and 2 fish. She wants 10 pets. How many more needed?	2nd	3rd

Mixed Practice A

Name_____

1) $7 + 10 =$ _____

2) 12 _____ 2 tens
   (>   <   =)

3) _____, 6, 8, 10, _____, _____

4) _____ ¢

5) _____
   (number sentence)

6) $6 + 5 + 4 =$ _____

7)   29   8)
   - 16

   _____

9) $5 + 1 + 4 =$ _____

10) Sam has 2 baseballs,
    4 hats, and 3 basketballs.
    How many balls? _____

Mixed Practice A is a taskcard series that comes in reusable cardstock, reproducible blackline masters, and digital downloads.

Each page of the cardstock version has three taskcards printed in black ink on yellow cover stock. The reproducible blackline is also grayscale printed in black ink, while the digital download may be printed either in color or grayscale depending on the printer used.

The entire series has 15 different exercises encompassing all concepts through first grade.

Money Match
A, B, and C
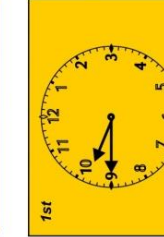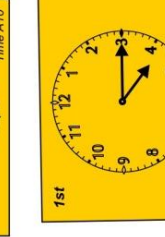
1st (two nickels) — *Money A10*	**2nd** popcorn — *2 nickels* — *Money A10*	**3rd** 10¢ — *Money A10*
1st (nickel & penny pairs) — *Money A10*	**2nd** keys — *2 nickels, 3 pennies* — *Money A10*	**3rd** $0.13 — *Money A10*
1st (four pennies) — *Money A10*	**2nd** ice cream cone — *1 dime, 1 nickel, 3 pennies* — *Money A10*	**3rd** $ .18 — *Money A10*
1st (dime & nickel) — *Money A10*	**2nd** pizza slice — *1 dime, 2 nickels* — *Money A10*	**3rd** 20¢ — *Money A10*
1st (three nickels) — *Money A10*	**2nd** apple — *3 nickels* — *Money A10*	**3rd** $ .15 — *Money A10*
1st (nickels & pennies) — *Money A10*	**2nd** milk & cookies — *3 nickels, 4 pennies* — *Money A10*	**3rd** $ 0.19 — *Money A10*

Money Match A, B, and C are grade-appropriate three-way matching exercises printed on a full-size color cardstock page. Each fifteen-exercise set is gradually incremented in difficulty and covers all concepts appropriate for its respective level. Shown is level A which is printed in black ink on peach-colored cover stock. It focuses mainly on dimes, pennies, nickels, and a few bills. Early on it introduces all coins and goes on to evaluate the value of a combination of coins, different ways to compose the same value, simple change concepts, and some bills.
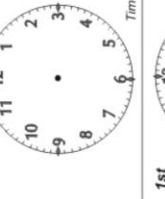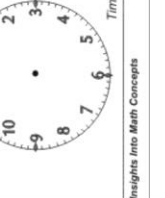
The cardstock matching version requires lamination and cutting. Also available is a reproducible free-response workpage version. The digital PDF version which may be printed either in grayscale or in color.

Time Blacklines and Digital PDFs (A, B, & C)

Name _____ Date _____

1st	2nd	3rd
(clock) Time A10	10 o'clock	10:00 Time A10
(clock) Time A10	_____	_____ Time A10
(clock) Time A10	15 minutes to 12	_____ Time A10
(clock) Time A10	quarter after ____	9:15 Time A10
(clock) Time A10	quarter to ____	_____ Time A10
(clock) Time A10	15 minutes after 4	_____ Time A10

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Time reproducible blackline masters and digital downloads are used to make free-response worksheets that correspond with their cardstock matching card counterparts.

Time Matching Cards (A, B, and C)

1st	2nd	3rd
(clock) Time A10	10 o'clock	10:00 Time A10
(clock) Time A10	7 thirty	7:30 Time A10
(clock) Time A10	15 minutes to 12	11:45 Time A10
(clock) Time A10	quarter after 9	9:15 Time A10
(clock) Time A10	quarter to 10	9:45 Time A10
(clock) Time A10	15 minutes after 4	4:15 Time A10

Each cardstock Time matching card set has 10 exercises incremented in difficulty. Time A focuses on hour, half hour, and quarter hours. Each exercise is printed on a colorful full-page cover stock which requires lamination and cutting.

Thousand Line and Tags

Note: Child may use either the Montessori thousand chain or the green number line for number line exercises.

Contents

1. Instructions & adhesive organizational labels for hardware drawers or other storage containers
2. Two identical pages of white tags (one to use and one for replacement of lost tags). To assist in organizing exercises, each "work" is labeled with the same green lower case letter in the upper left-hand corner of the tag (a-h). Colored numerals illustrate how red multiples of 100 and the green 1000 are used as guides.
3. One additional page of red multiples of 100
4. One page of multiples of ten for optional use
5. Three green pages to be cut into "hundreds". Ten sections are combined to make thousand line.
6. Two identical pages of blank tags for extensions. These may be photocopied if the teacher wishes.
7. Two pages of numeral cards (Page 1 is an introduction and one's through fours, and Page 2 is five's through nine's.)
8. Grid for counting or for operations. This may be photocopied for children to write on their own copies as desired.

Preparation

1. Reproducible blank tags and operations grid are separated until ready for use.
2. Laminate all other cardstock materials.
3. Cut green number lines along dashed lines. Butt ten sections end-to-end and secure with packing tape from both front and back. Fold number line accordion-style and store in 12-inch organizer or zip bag.
4. Cut and store one set of red tags in separate hardware drawer, box, or zip bag for first presentation.
5. Cut and store another set of red tags along with each of the sets of white labels (a-h) in separate hardware drawers, boxes, or zip bags. Save remaining red tags for replacement parts.
6. Cut optional set of blue ten tags if desired. A set may be stored in each container, or they may be stored separately for occasional use.

Instructions for use

1. In the first presentation, guide the child in discovering that a hundred consists of ten groups of ten and the entire thousand line consists of ten groups of a hundred. Have the child count by hundreds and place the red tags along the top of the line as show below. For a more detailed lesson, the child may place a set of "tens" in the first hundred section or in all hundred sections.
2. In the second session, the child places the red tags along the top as in the first presentation, and puts the "a" labels along the bottom.
3. In subsequent lessons, the child progresses through drawers "b" through "h".
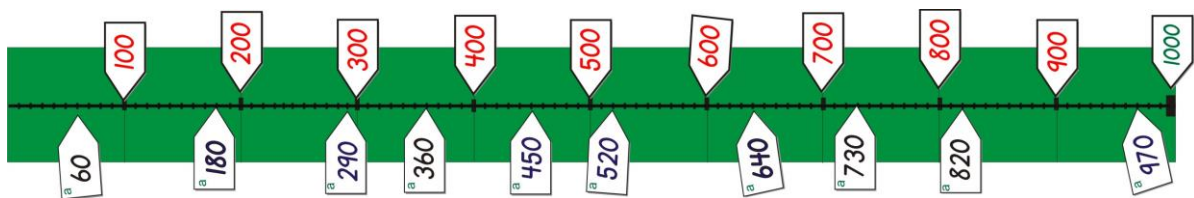
Numeral Cards

1. Also included are two pages of numeral cards. These are to be laminated and cut. If desired, the top portion of Page 1 (the first 1000, 100, 10, and 1) may be used as a separate introductory lesson; otherwise, save these for replacement parts.
2. The cut 1000's, 100's, 10's, and 1's may be stacked according to size and secured with a rubber band or placed in a slotted seat chart.
3. To use, the child organizes the cards on a table or rug. The appropriate cards may be used to compose numbers as shown.
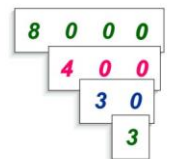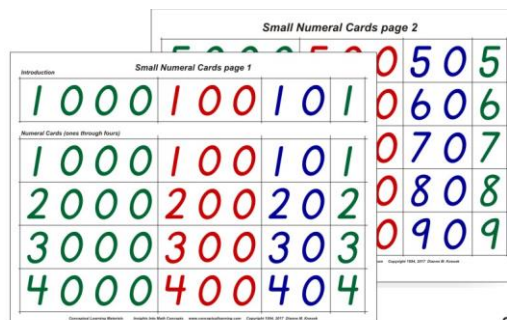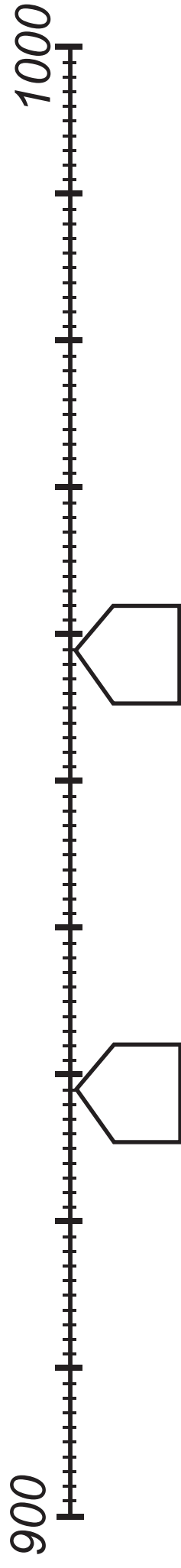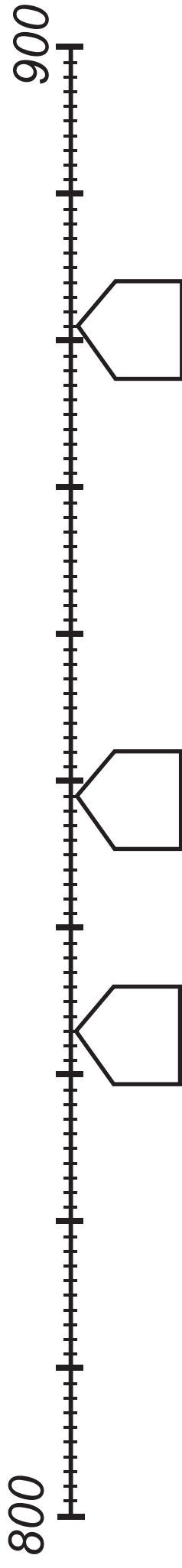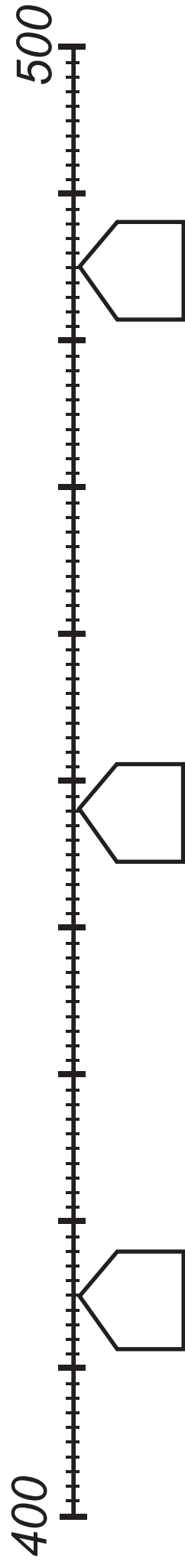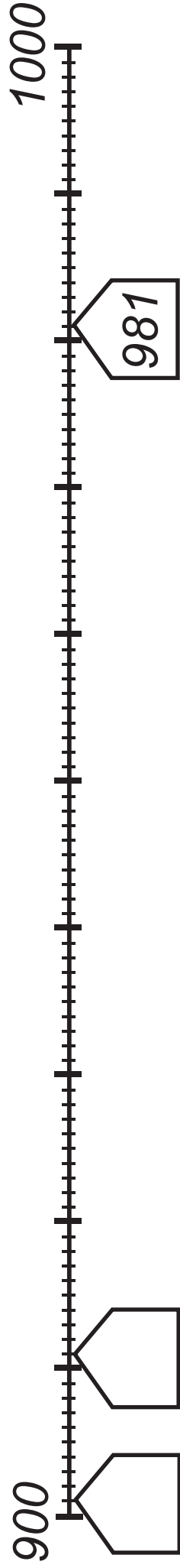

8 thousands, 4 hundreds, 3 tens, and 3 ones means 8000 + 400 + 30 + 3 and can be written as 8,433.

Operations Grid

Also included is a reproducible grid that can be used for counting exercises or operations.

900   1000

981

400   500

800   900

900   1000

10

Order Blue, Pink, and Green

49	51	53	55	57	59
Order 11A	Order 11A	Order 11A	Order 11A	Order 11A	Order 11A
61	63	65	67	69	71
Order 11B	Order 11B	Order 11B	Order 11B	Order 11B	Order 11B
73	75	77	79	81	83
Order 11C	Order 11C	Order 11C	Order 11C	Order 11C	Order 11C
85	87	89	91	93	95
Order 11D	Order 11D	Order 11D	Order 11D	Order 11D	Order 11D

Cardstock version

Order denotes a sequencing exercise of various types. Order Blue sequences two-digit numerals, while Order Pink sequences three-digit and Order Green sequences four-digit numerals. Each exercise is four sequences of six values. The cardstock manipulative version is printed on a full page which is then laminated and cut. Most series include 10 separate exercises, but Order Blue is comprised of 15 exercises to also allow work with even and odd numerals.

Reproducible Blackline or Digital PDF Download

Blackline and digital versions are reproducible free-response worksheets that correspond to the cardstock counterparts.

Name				Date	
	51		55	57	59
Order Blue 11A	Order Blue 11A	Order Blue 11A	Order Blue 11A	Order Blue 11A	Order Blue 11A
61		65	67	69	
Order Blue 11B	Order Blue 11B	Order Blue 11B	Order Blue 11B	Order Blue 11B	Order Blue 11B
	75		79		83
Order Blue 11C	Order Blue 11C	Order Blue 11C	Order Blue 11C	Order Blue 11C	Order Blue 11C
85	87	89			
Order Blue 11D	Order Blue 11D	Order Blue 11D	Order Blue 11D	Order Blue 11D	Order Blue 11D

Rows A, B, C, and D represent 4 independent sequences. Student is to "write in" missing numerals.

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Insights into Math Concepts

Conceptual Learning Materials

Place Value Match (Blue, Pink, and Green)

261 *Place value 5D*	1 + 200 + 6 *Place value 5D*
162 *Place value 5D*	60 + 2 + 100 *Place value 5C*
612 *Place value 5D*	2 + 600 + 10 *Place value 5C*
801 *Place value 5D*	800 + 1 *Place value 5C*
810 *Place value 5D*	800 + 10 *Place value 5C*
180	100 + 80 *Place value 5C*

561 *Place value 5C*	60 + 1 + 500 *Place value 5C*
156 *Place value 5C*	6 + 100 + 50 *Place value 5C*
615 *Place value 5C*	600 + 5 + 10 *Place value 5C*
278 *Place value 5C*	70 + 200 + 8 *Place value 5C*
872 *Place value 5C*	800 + 70 + 2 *Place value 5C*
287 *Place value 5C*	7 + 80 + 200 *Place value 5C*

60 + 1 + 500   **561**

6 + 100 + 50

600 + 5 + 10

70 + 200 + 8

800 + 70 + 2

7 + 80 + 200

1 + 200 + 60

60 + 2 + 100

2 + 600 + 10

800 + 1

800 + 10

100 + 80

Name_____

5, 6, _____, _____, _____, 10

12, 11, _____, _____, _____

15, _____, _____, 18, _____

31, 30, _____, _____, _____

39, _____, _____, 42, _____

35, _____, _____, _____, 39

45, 44, _____, _____, _____

37, 38, _____, _____, _____

82, _____, _____, _____, 78

87, _____, _____, _____, 91

4, _____, _____, 1 _____

96, _____, _____, 99, _____

May use golden beads, hundred chain, hundred board, or stamp game.

Numeration 11

Blue Numeration (2-digit)
Exercise 11 out of 18

Name_____

>, <, or =

500 + 20 + 3 **>** 521

300 + 60   306

800 + 5   850

691   600 + 90 + 10

600 + 30 + 2   600 + 20 + 3

400 + 3 +60   400 + 60 + 3

506   500 + 60

300+40+7   20 +1+400

600 + 0 + 5   600 + 50

10 tens   110

10 hundreds   1000

May use golden beads or stamp game.

More Numeration 5

Tens "Gold"

Name_____

59 + 10 = _____

65 - 10 = _____

23 - 10 = _____

76 + 10 = _____

23 - 10 = _____

17 + 10 = _____

77 + 10 = _____

61 - 10 = _____

13 - 10 = _____

52 + 10 = _____

70 + 10 = _____

82 - 10 = _____

After Seguin Board B (tens) and introduction to subtraction
May use golden beads, stamp game, or bead frame

Tens 14

Tens Gold

Children learn that tens are "magic' and can make all operations easier. The 30-exercise set features place value applications, calculations by making tens, and as addends and subtrahends in two- and three-digit problems. The set also explores patterns, multiples of ten and rounding.

As is the case with all taskcard sets, Tens is available as reproducible cardstock taskcards, reproducible blackline masters, or digital PDF downloads.

Programs

Tens was originally designed for use with Montessori didactic materials, has also been embraced by traditional programs – either whole group or individualized.

1st	2nd
8 tens, 12 ones *Exchange 1*	**9 2** *Exchange 1*
8 tens, 14 ones *Exchange 1*	**9 4** *Exchange 1*
8 tens, 19 ones *Exchange 1*	**9 9** *Exchange 1*
1 ten, 22 ones *Exchange 1*	**3 2** *Exchange 1*
1 ten, 12 ones *Exchange 1*	**2 2** *Exchange 1*
1 ten, 32 ones *Exchange 1*	**4 2** *Exchange 1*
4 tens, 16 ones *Exchange 1*	**5 6** *Exchange 1*
4 tens, 13 ones *Exchange 1*	**5 3** *Exchange 1*
4 tens, 20 ones *Exchange 1*	**6 0** *Exchange 1*
4 tens, 23 ones *Exchange 1*	**6 3** *Exchange 1*

"Exchange" Matching Cards

Each Exchange exercise is printed on a full page. It entails matching regrouped values with the original. The purpose is to prepare the child for any operation in which regrouping is required.

Normally, it is introduced with place value blocks or other hands-on place value materials, but the child is soon able to abstract the process. The last several exercises are three-part matching exercises that introduce the notation normally used when regrouping two- and three-digit addition and subtraction problems.

Exchange is available only as a cardstock matching exercise. Cardstock manipulatives require lamination and cutting.

Name_____ Date_____

May use golden beads, stamp game, or bead frame.

1) 8 thousands, 6 hundreds, 5 tens, 3 ones = _____

2) 9 thousands, 8 hundreds, 4 tens, 2 ones = _____

3) 9 thousands, 4 tens, 2 ones = _____

4) 9 thousands, 4 hundreds, 2 tens = _____

5) 9 thousands, 4 hundreds, 2 ones = _____

6) 9 thousands, 2 tens = _____

7) 5 tens, 3 ones, 6 thousands, 8 hundreds = _____

8) 9 ones, 5 thousands, 6 hundreds, 1 ten = _____

9) 7 thousands, 2 ones, 8 tens, 4 hundreds = _____

10) 6 hundreds, 2 tens, 8 thousands, 9 ones = _____

11) 6 tens, 8 thousands, 9 ones = _____

12) 3 ones, 3 thousands = _____

Thousands 2

Available in colorful cardstock, reproducible blackline masters, & digital PDF downloads

Problem Solving Match
Levels A, B, C, D, and E

Problem Solving Matching cards are printed with black ink on colored cardstock. The "1st card" can be placed in any order, but the "2nd" and "3rd" cards must be placed with the appropriate question cards. Level C in printed on ivory cardstock which is to be laminated and cut. Another option is to use the 1st card as a free-response exercise and the remaining cards as a control. Problem Solving C has 20 exercises.

1st	2nd	3rd
There are 8 slices in each pizza. How many slices are in 4 pizzas? *Problems C1*	$4 \times 8 = \square$ *Problems C1*	32 *Problems C1*
There are 8 slices in each pizza. How many pizzas are needed for 15 slices? *Problems C1*	$15 \div 8 \le \square$ *Problems C1*	2 *Problems C1*
Ted and Bob each ate 3 slices. Sue and Ted ate 2 apiece. How many pieces were eaten? *Problems C1*	$3 + 3 + 2 + 2 = \square$ *Problems C1*	10 *Problems C1*
Each pizza cost $7.99. How much do 3 pizzas cost? *Problems C1*	$7.99 x 3 *Problems C1*	$23.97 *Problems C1*
There are 8 slices in each pizza. How many slices are in $\frac{1}{4}$ pizza? *Problems C1*	$8 \div 4 = \square$ *Problems C1*	2 *Problems C1*
One pizza costs $7.99. How much change is received from a $10 bill? *Problems C1*	$10 - 7.99 *Problems C1*	$2.01 *Problems C1*

Problem Solving reproducible masters and digital downloads have the same problems as the matching cards, but come in a free-response worksheet format on which children record their own answers. Reproducible blacklines come in black ink on white paper, but digital downloads may be printed either in black and white or in color depending on the user's printer.

Name_____ Date_____

1st	2nd	3rd
There are 8 slices in each pizza. How many slices are in 4 pizzas? *Problems C1*	$4 \times 8 = \square$ *Problems C1*	32 slices *Problems C1*
There are 8 slices in each pizza. How many pizzas are needed for 15 slices? *Problems C1*	*Problems C1*	*Problems C1*
Ted and Bob each ate 3 slices. Sue and Ted ate 2 apiece. How many pieces were eaten? *Problems C1*	*Problems C1*	*Problems C1*
Each pizza cost $7.99. How much do 3 pizzas cost? *Problems C1*	*Problems C1*	*Problems C1*
There are 8 slices in each pizza. How many slices are in $\frac{1}{4}$ pizza? *Problems C1*	*Problems C1*	*Problems C1*
One pizza costs $7.99. How much change is received from a $10 bill? *Problems C1*	*Problems C1*	*Problems C1*

**Mixed Practice
A, B, C, D, & E**
Level B 14 of 15

Incremental overview of all

level-appropriate skills. Great

as diagnostic assessment or

as cumulative review.

Level B

Name_____

1) $800 + 5 + 60 =$ _____

2) $4 + 60$ _____ $70 + 0$
         (>   <   =)

         _____
              (number sentence)

3)   69, 67, 65, _____, _____, _____

4)   **What number comes
         before 350?** _____

5)   **You have 3 nickels. How
         much do you need to
         have 25¢ ?**_____

6)   **How much is half of 20¢ ?**

         _____

7) $341 - 9 =$ _____

8)   **Mary has one half. Sue
         has one third. Who has
         more?** _____

9)   10)   5 8 2
                -    6 5
                _____

_____
(fraction)

Mixed Practice 14

Geometry Introduction

1st	2nd	3rd
Point	Intersection of lines	
		A
	Geometry 1	Geometry 1

1st	2nd	3rd
Point	Any exact location	
		•A
Geometry 1	Geometry 1	Geometry 1

1st	2nd	3rd
Line	Straight path that extends in both directions without end.	A B
Geometry 1	Geometry 1	Geometry 1

1st	2nd	3rd
Line segment	Part of a line. It has two endpoints.	A B
Geometry 1	Geometry 1	Geometry 1

1st	2nd	3rd
Ray	Part of a line that has one endpoint and extends in the other direction without end.	A B
Geometry 1	Geometry 1	Geometry 1

1st	2nd	3rd
Plane	Flat surface that extends forever without end.	
Geometry 1	Geometry 1	Geometry 1

Cardstock version

Appropriate for grades 3, 4, and 5, Geometry Introduction spans lower and upper elementary levels. The fifteen-exercise cardstock version is printed on a full page which is then to be laminated and cut. Labels for containers and answer keys are included.

Reproducible Blackline or Digital PDF Download

Blackline and digital versions are reproducible free-response worksheets that correspond to the cardstock counterparts. Answer key is included.

Name_____		Date_____
Word bank: ray, polygon, line, solid, line segment, lines, plane, point		
Point	Intersection of_____	
	Geometry 1	Geometry 1
_____	Any exact location	•A
Geometry 1	Geometry 1	Geometry 1
_____	Straight path that extends in both directions without end.	A B
Geometry 1	Geometry 1	Geometry 1
_____	Part of a line. It has two endpoints.	A B
Geometry 1	Geometry 1	Geometry 1
_____	Part of a line that has one endpoint and extends in the other direction without end.	A B
Geometry 1	Geometry 1	Geometry 1
_____	Flat surface that extends forever without end.	
Geometry 1	Geometry 1	Geometry 1

Money Match
A, B, and C

Cardstock version

Money Match C is printed on ivory cardstock in black ink. Each level contains 15 incremented exercises, and the entre set includes all money concepts at the respective levels. The sets also include answer keys and organizational labels for containers.

Reproducible Blackline or Digital PDF Download

Money Reproducible blackline masters are free-response workpages that correspond to the cardstock counterparts. Digital PDF downloads will be available in fall of 2019.

Name _____ Date _____

Insights Into Math Concepts   Hands-on Development Sets for School and Home   Copyright 2004   Dianne M. Knesek   Money C14

Time Match
A, B, and C

Cardstock version

Time C is printed on solar yellow cover stock in black ink. Each level contains 15 incremented exercises, and the entre set includes all time concepts at the respective levels. Specifically, Time C covers time to the minute, time intervals, and calendar work into previous and subsequent months. The sets also include answer keys and organizational labels for containers.

Reproducible Blackline or
Digital PDF Download

Time reproducible blackline masters are free-response workpages that correspond to the cardstock counterparts. Digital PDF downloads will be available in fall of 2019.
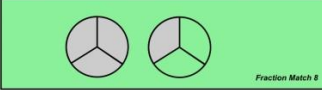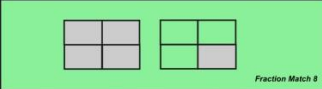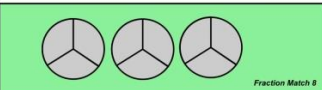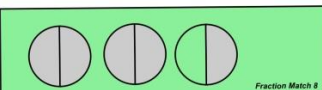
Fraction Match

Fraction Matching cards were created as preparation for more abstract fraction work. Despite previous work with fraction manipulatives, many children do not understand concepts such as improper fractions, equivalent fractions, fraction of a set, and fractions on a number 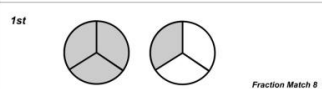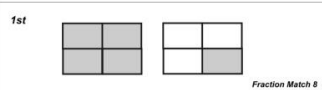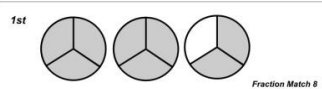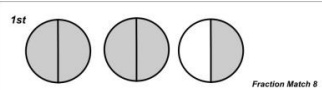line. Fraction Match addresses these concepts through pictures. The series includes 15 incremented exercises, answer keys, and organizational labels.

	2nd One and one third	3rd $1\frac{1}{3}$
	2nd One and one fourth	3rd $1\frac{1}{4}$
	2nd Two and two thirds	3rd $2\frac{2}{3}$
	2nd Two and one half	3rd $2\frac{1}{2}$
	2nd One and three fourths	3rd $1\frac{3}{4}$
	2nd One and five sixths	3rd $1\frac{5}{6}$

Fraction Match reproducible masters and digital downloads have the same problems as the matching cards, but come in a free-response worksheet format on which children record their own answers.

Name_____   Date_____

1st	2nd one and one third	3rd $1\frac{1}{3}$
1st	2nd ____ and one _____	3rd $\frac{1}{\_}$
1st	2nd ____ and _____	3rd $\frac{\_}{\_}$
1st	2nd ____ and _____	3rd $\frac{\_}{\_}$
1st	2nd ____ and _____	3rd $\frac{\_}{\_}$
	2nd ____ and _____	3rd $\frac{\_}{\_}$

Roman Numerals
Exercise 8 of 15

Roman Numerals is an incremented 15-exercise set that covers Roman Numeral–Arabic values up to 3000. Early exercises emphasize basic equivalencies as well as the similarly with base 10 expanded form. For example 139 = 100 +30 + 9 Arabic and C + XXX + IX Roman (CXXXIX).

8	VIII		119	CXIX
36	XXXVI		148	CXLVIII
49	XLIX		232	CCXXXII
65	LXV		250	CCL
93	XCIII		349	CCCXLIX
105	CV		380	CCCLXXX

Roman Numeral reproducible masters have the same problems as the matching cards, but come in a free-response worksheet format which includes both Arabic to Roman and Roman to Arabic. Digital PDF download worksheets will be available in fall of 2019.

Name_____ Date_____

Write the Roman numeral that corresponds with the standard numeral given. The first one is done for you.

8	VIII
36	
49	
65	
93	
105	
119	
148	
232	
250	
349	
380	

Name_____ Date_____ B12

Write the Arabic (standard) numeral that corresponds with the Roman numeral given. The first one is done for you.

VIII	8
XXXVI	
XLIX	
LXV	
XCIII	
CV	
CXIX	
CXLVIII	
CCXXXII	
CCL	
CCCXLIX	
CCCLXXX	

1

$\frac{1}{2}$	

$\frac{1}{3}$		

$\frac{1}{4}$			

$\frac{1}{5}$				

$\frac{1}{6}$					

$\frac{1}{7}$						

$\frac{1}{8}$							

$\frac{1}{9}$								

$\frac{1}{10}$									

$\frac{1}{11}$										

$\frac{1}{12}$											

$\frac{1}{13}$												

$\frac{1}{14}$													

$\frac{1}{15}$														

$\frac{1}{16}$															

$\frac{1}{17}$																

$\frac{1}{18}$																	

$\frac{1}{19}$																		

$\frac{1}{20}$																			
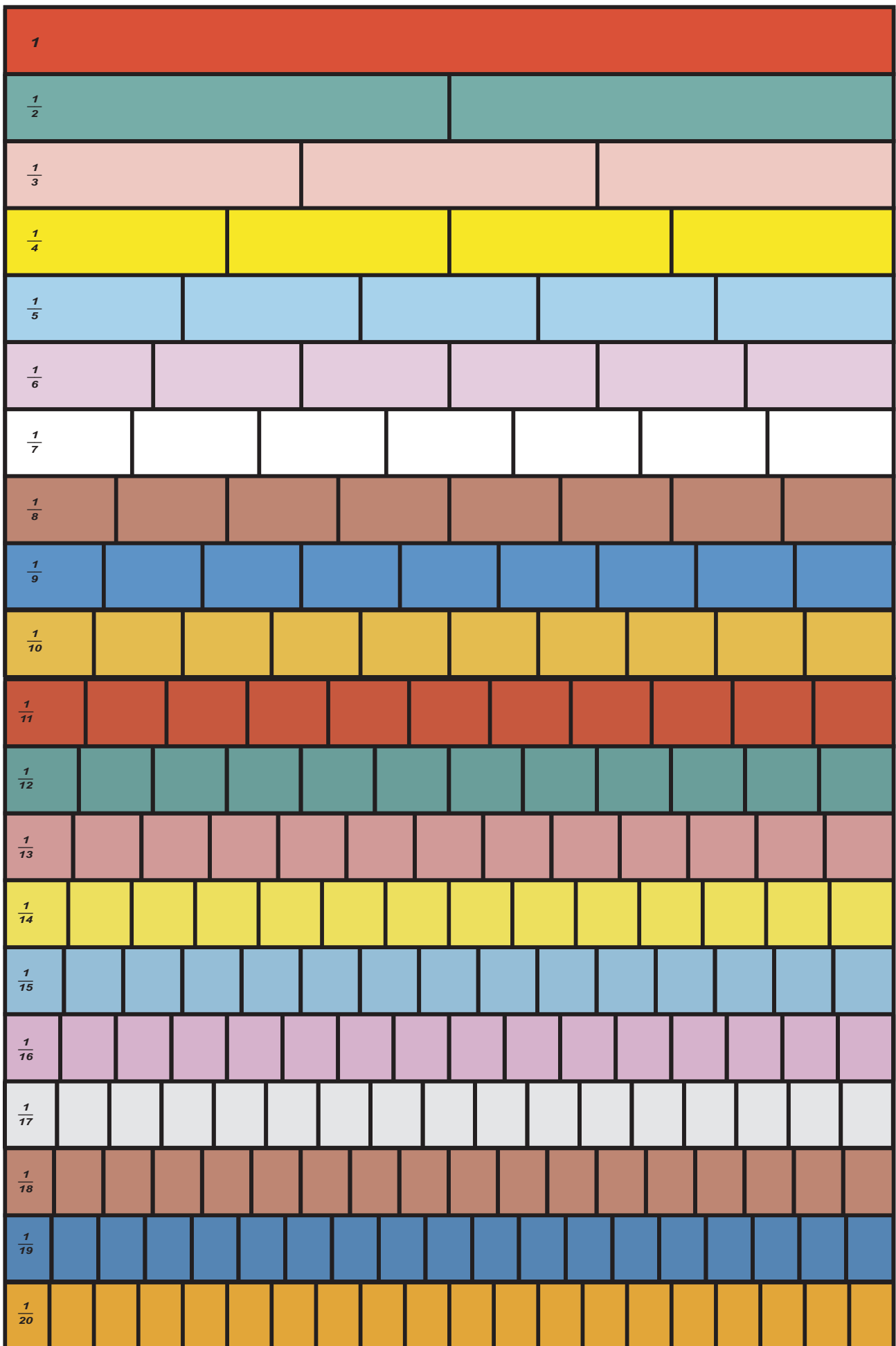
Fraction Concepts is graphic full-page bridging material encompassing all basic fraction concepts: equivalency, comparisons, reducing, improper to mixed numbers, mixed to improper, renaming, fraction of a group, addition and subtraction of like fractions, basic multiplication and division of fraction by whole number, and word problems, and answer keys. It is available in all three formats.

Name_____ Date_____

$$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$$

$$\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$$

One pencil plus another pencil equals two pencils. Likewise, $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$. Three video games plus two video games equals five video games In the same way $\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$. To add or subtract fractions with the same denominators , merely add or subtract the numerators. The denominators remain the same.

Add or subtract the following fractions. Simplify answer when possible.

1) $\frac{1}{5} + \frac{2}{5} = \underline{\frac{3}{5}}$

2) $\frac{4}{6} + \frac{1}{6} = \underline{\hspace{1cm}}$

3) $\frac{1}{8} + \frac{3}{8} \quad \underline{\hspace{1cm}}$

4) $\frac{5}{9} + \frac{1}{9} = \underline{\hspace{1cm}}$

5) $\frac{1}{7} + \frac{3}{7} = \underline{\hspace{1cm}}$

6) $\frac{1}{5} + \frac{4}{5} = \underline{\hspace{1cm}}$

7) $\frac{1}{3} + \frac{2}{3} = \underline{\hspace{1cm}}$

8) $\frac{3}{6} + \frac{2}{6} = \underline{\hspace{1cm}}$

9) $\frac{4}{8} - \frac{3}{8} = \underline{\hspace{1cm}}$

10) $\frac{2}{7} + \frac{1}{7} + \frac{3}{7} = \underline{\hspace{1cm}}$

11) $\frac{5}{6} - \frac{3}{6} = \underline{\hspace{1cm}}$

12) $\frac{2}{9} + \frac{3}{9} + \frac{3}{9} = \underline{\hspace{1cm}}$

13) $\frac{7}{9} - \frac{5}{9} = \underline{\hspace{1cm}}$

14) $\frac{2}{8} + \frac{1}{8} + \frac{2}{8} = \underline{\hspace{1cm}}$

15) $\frac{4}{5} - \frac{1}{5} = \underline{\hspace{1cm}}$

16) $\frac{2}{10} + \frac{1}{10} + \frac{3}{10} = \underline{\hspace{1cm}}$

17) $\frac{5}{6} - \frac{1}{6} = \underline{\hspace{1cm}}$

18) $\frac{8}{9} + \frac{1}{9} = \underline{\hspace{1cm}}$

Fraction Concepts 11

Decimal Introduction is full-page bridging material encompassing two- and three-place decimals: fraction to decimal, decimal to fraction, comparisons, rounding, simple operations, and answer keys. It is available in all three formats.

Name_____ Date_____

Convert to decimal

1) $3\frac{8}{10}$ =   *3.8*

2) $3\frac{8}{100}$ = _____

3) $44\frac{2}{10}$ = _____

4) $44\frac{22}{100}$ = _____

5) $44\frac{2}{100}$ = _____

6) $\frac{11}{100}$ = _____

7) $\frac{11}{10}$ = _____

8) $\frac{62}{100}$ = _____

9) $\frac{3}{100}$ = _____

10) $\frac{3}{10}$ = _____

11) $9\frac{6}{10}$ = _____

12) $9\frac{6}{100}$ = _____

13) $9\frac{60}{100}$ = _____

14) $9\frac{63}{100}$ = _____

15) $1\frac{17}{10}$ = _____

16) $1\frac{17}{100}$ = _____

17) $3\frac{88}{100}$ = _____

18) $3\frac{2}{10}$ = _____

Introduction to Decimals 6