



Kindergarten

Color Math

Samples:

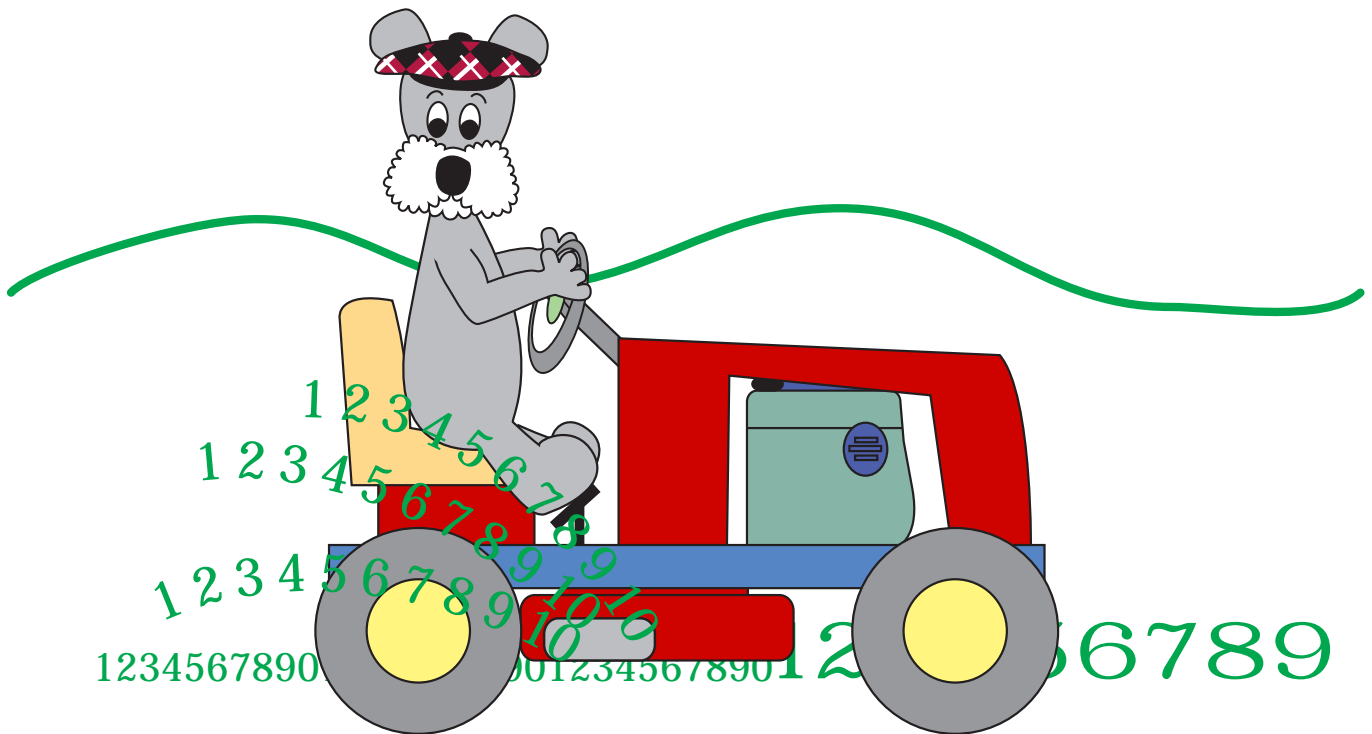
Teacherís Manual: Introduction and lesson plans 1 to 10

Workbook: Lessons 1 to 10

Note: Slight changes may have occurred in the pdf conversion process.

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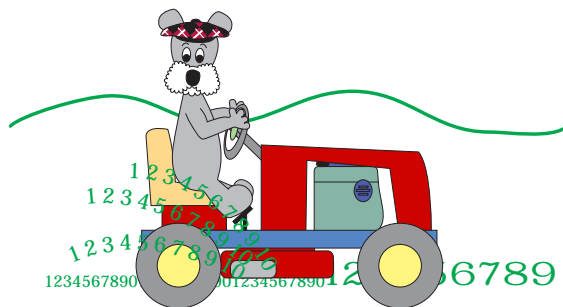
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Prices as of October 2005 (subject to change)

Kindergarten

Color Math



Curriculum 1-59269-135-8.....\$69.95 includes Teacher's Manual, Standard Resource Pack, and workbook

Curriculum with manipulatives
(single student) 1-59269-140-4.....\$79.95

Individual parts of the curriculum:

Teacher's Manual 1-59269-136-6.....\$25.00

Workbook 1-59269-138-2.....List price...\$25.00 **Discounts available for multiple copies**

5-9 copies	\$17.50 each
10-25 copies	\$15.00 each
26-80 copies	\$13.75 each
81+ copies	\$12.50 each

Resource Pack (standard pack 1 to 4 students) 1-59269-137-4.....\$25.00
Classroom Pack (24 students) 1-59269-139-0.....\$150.00

Resource packs are non-consumable.

Manipulatives are available from McRuffy Press
order just what you need. Call for price quotes.

McRuffy Press
PO Box 212
Raymore, MO 64083

Toll-free 888-967-1200
Fax 888-967-1300

sales@mcruffy.com

www.mcruffy.com

Introduction from the Teacher's Manual

Introduction

The McRuffy Kindergarten Color Math is a highly interactive math program that emphasizes a well-balanced variety of skills. Auditory, visual, and tactile methods are used to develop concepts. The curriculum contains a detailed teacher's manual, colorful workbook, and resource pack containing card sets, games, posters, and more. The program also uses popular math manipulatives (sold separately in some packages). An inexpensive kit has been packaged especially for the curriculum.

Curriculum contents

Teacher's Manual
Workbook
Resource Packet

Manipulative kit (sold separately)

Pattern blocks (20)
Colored centimeter cubes (20 - 2 each of ten colors)
Tangram set (seven piece set)
Clock face
Counters (25)
Dice (1)

Quantities are for an individual student. Classroom quantities are available. Individual parts of the manipulative kit are also available from McRuffy Press.

Contact information:

McRuffy Press
PO Box 212
Raymore, MO 64083

Toll-free 888-967-1200
Local 816-331-2500

Fax 888-967-1300
Local 816-331-3868

sales@mcruffy.com

www.mcruffy.com

Item numbers

Curriculum 1-59269-135-8
Curriculum with manipulatives (single student) 1-59269-140-4

Individual parts of the curriculum:

Teacher's Manual 1-59269-136-6
Workbook 1-59269-138-2
Resource Pack (standard pack) 1-59269-137-4
Classroom Resource Pack 1-59269-139-0
Manipulative kit (single student) 820265-00010-8

Objectives

The objectives of the McRuffy Kindergarten Color Math are chosen to match state and national math standards. Skills are not just introduced, but revisited throughout the year to allow for the child's growth in understanding. The early part of the curriculum emphasizes counting and number writing. The later part emphasizes addition and subtraction skills. Along the way, a great variety of concepts emphasizing geometry, visual memory skills, listening skills, place value, and more round out the kindergarten program.

Counting to 100

Number Recognition to 100

Skip counting by tens and fives to 100

Skip counting by twos to twenty

Matching groups to numbers

Counting objects to 25

Counting down from 10 to 1

Moving on a number line

Recognizing and making patterns

Recognizing shapes

Making geometric designs using pattern blocks and tangrams

Visual discrimination skills using geoboard patterns

Comparing numbers using arrows to represent $<$ and $>$

General concepts of time (morning, afternoon, yesterday, etc.)

Calendar activities

Writing times to the hour

Reading times to the hour

Measuring using non-standard units

Visual memory skills

Story problems

Game playing (counting skills, following directions, etc.)

Place value (tens and ones)

Number sentences

Using symbols to represent numbers

Counting coins (pennies, nickels, dimes)

Finding the missing number

Putting numbers in order

Spatial orientation

Left and right

Ordinal numbers 1st to 10th

Addition (sums to 18)

Commutative property of addition ($1+2=2+1$)

Subtraction

Addition and subtraction as inverse operations

Fractions (half)

Attributes

Odd and Even

Number words (zero to ten)

Symmetry

Resource Pack contents

Available in two different arrangements:

- Standard pack for a small group (homeschool or 4 or fewer students)
- Classroom pack for 24 students

Card sets (detailed in the next section)

Copy masters

- Number Writing Sheet
- Calendar
- Writing Sheet
- Number Trail cards
- Geoboard Grid
- Memory Card Recording Form
- Number Line Strips
- Geoboard Grid 2
- Time and Money coins
- Geoboard Grid 3

Games*** (laminated - some are printed two sided in the standard resource pack):

- Number Raceway game board
- Countdown game board
- Number Trail Game Board (laminated)
- Number Trail Cards (laminated)
- Addition and Subtraction Pool game board
- Time and Money game board
- Elephant Trunk game board
- The Half of It game board

Laminated pages:

- Calendar
- Geoboard Grid*
- Geoboard Grid 2*
- Geoboard Grid 3*

Posters (8.5" x 11" paper):

- Basic Shapes
- Basic 3D Shapes
- Pattern Block Shapes
- 7 Days of the Week
- 12 Months of the Year
- Skip Counting by 10s
- Number Words

Number Line strips (laminated 2.125" x 11"):

- 1 to 20 (two parts hinged)*
- 10 to 100 by tens*
- 5 to 100 by fives*
- 2 to 20 by twos*
- Odd/even*

Asterisks indicate classroom pack totals

* 24 (1 set per student)

*** 6 sets per classroom

No asterisk (1 per classroom)

Card Sets

Cards are bagged in the order they are first used. Bags either contain black and white cards or color cards. The standard resource pack contains one set of all the different cards. The classroom pack is customized for 24 students.

Black and white cards:

Number Cards feature a single number per card with the matching number word. Sets are included for numbers 1 to 10, multiples of 10 to 100, multiples of 5 to 100 (using 10ís), 0, and a second set of 1 to 10 for constructing math problems.*

Arrow card: a single card used to compare numbers. The card can be rotated to represent greater than and less than.*

Pattern Letter Cards: the letters ABCD are used to represent patterns. Patterns are AB, ABB, ABC, AABB, ABCC, ABCD, and AAAB.**

Cent sign: a single card used when counting coins.*

Place Value Memory Game cards feature the numbers 15, 18, 29, 32, 34, 37, 41, 46, 47, and 50. The cards match up to color cards with pictures of rods and cubes representing tens and ones.**

Coin Memory Match cards feature numbers with cent signs 25¢, 28¢, 32¢, 33¢, 46¢, 49¢, 51¢, 54¢, 67¢, 68¢, and 76¢. The cards match up with color cards showing groups of dimes and pennies**

Time Memory Match cards feature times to the hour from 1:00 to 12:00. The cards match up to color cards with clock faces.**

Sign cards are single cards with the +, -, and = signs.*

Number Sentence cards are used to play the Addition and Subtraction Pool game. The cards feature addition or subtraction number sentences.***

Number Memory cards feature three numbers per card. These are used to build visual memory skills.**

Number Word Match cards feature the numbers 0 to 10 without words. A second set features only the words. Students play memory games and matching games with the cards.**

Special Cards (color cards that require additional cutting)

Rod cards represent ten centimeter cubes and the tens place in base ten activities. The rods are cut apart on the dashed lines.*

Playing pieces are small strips of colored cards used to play cards. The Number Raceway has a set and a generic set is also available for other games. Plastic game pawns can be used in their place (not included).***

Asterisks indicate classroom pack totals

* 24 (1 set per student)

** 12 (1 set per two students)

*** 6 sets per classroom



Actual
Card
Size

Color cards:

Pattern Cards feature ten each of blue squares, red triangles, green circles, and purple stars. The cards are used to make patterns.*

Happy Face cards are a set of cards with one to ten smiling faces.*

Number Raceway cards are using with the Number Raceway game board. The cards feature pictures of racing cars. The cars have numbers from 1 to 20.***

Visual Memory Cards 1 to 8 feature pictures of the shapes from the pattern cards. The cards are used with the pattern cards to practice memory skills.**

Place Value Memory Game cards feature pictures of rods and cubes representing the numbers 15, 18, 29, 32, 34, 37, 41, 46, 47, and 50. The cards match up to black and white cards with the numbers.**

Visual Memory Cards 9 to 14 feature pictures of colored centimeter cubes. The cards are used with the centimeter cubes to practice memory skills.**

10 Blue Dots cards each feature a set of 10 dots to use for counting by tens.*

Coin Memory Match cards feature pictures of dimes and pennies representing 25¢, 28¢, 32¢, 33¢, 46¢, 49¢, 51¢, 54¢, 67¢, 68¢, and 76¢. The cards match up to black and white cards with numbers**

Picture cards feature a picture of a cat, moose, elephant, bug, mouse, truck, lawn mower, flower pot, tree, or leaf. The pictures are first used to compare objects.*

Time and Money game cards look like clock faces a large number 1, 2, 3, or 4 in place of the hands. The cards are used to play the Time and Money game.***

Time Memory Match cards feature clock faces showing times to the hour from 1:00 to 12:00. The cards match up to black and white cards showing times.**

Elephant Trunk cards feature numbers 1, 2, 5, and 10 in four different colors, purple, blue, green, and red.***

Attribute cards feature a large shape (circle, square, triangle) in three colors (red, blue, green). An additional white design is on each card (+, hexagon, and star). The cards are used to find and compare attributes.*

The Half of It game cards are used to play the Half of It game. The cards should be cut in half on the dashed lines before playing the game the first time.***

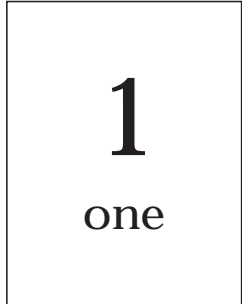
Asterisks indicate classroom pack totals

* 24 sets (1 set per student)

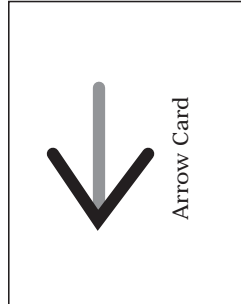
** 12 sets (1 set per two students)

*** 6 sets per classroom

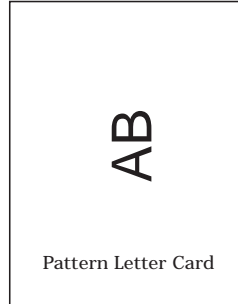
Black and White Cards (shown in order)
 Samples of cards from each set



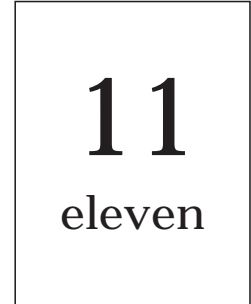
Number (1 to 10)
 10 cards



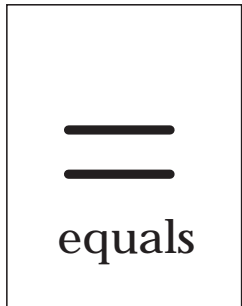
Arrow
 1 card



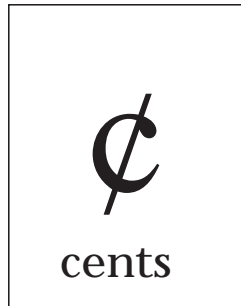
Pattern Letter
 7 cards



Number (11 to 20)
 10 cards



Equals
 1 card



Cents
 1 card



Number
 (30 to 100 by 10is)
 add 10 & 20
 8 cards



Place Value Memory
 (matches with
 color cards)
 10 cards



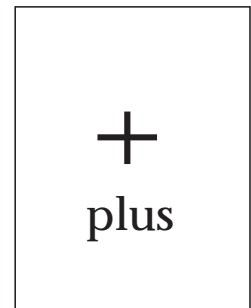
Coin Memory Match
 (matches with
 color cards)
 11 cards



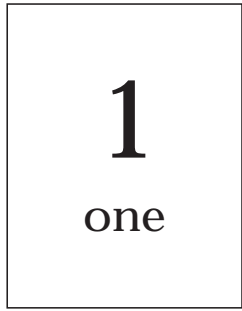
Time Memory Match
 (matches with
 color cards)
 12 cards



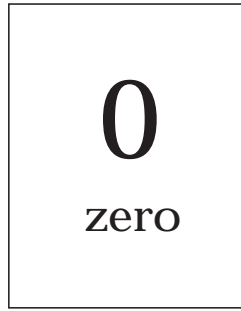
Number
 (25 to 95 by 5is)
 combine with 10is
 8 cards



Plus
 1 card



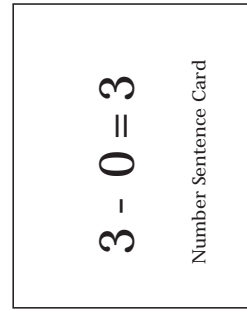
Number (1 to 10)
second set
10 cards



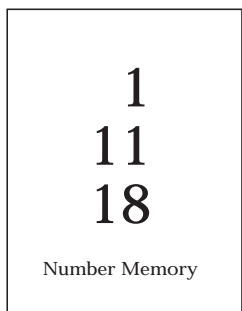
Number (0)
2 cards



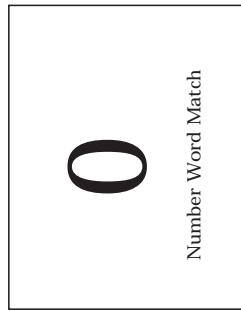
Minus
1 card



Number Sentence
(Addition and
Subtraction Pool Game)
22 cards



Number Memory
7 cards



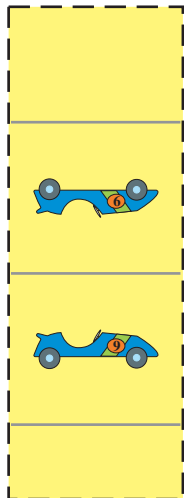
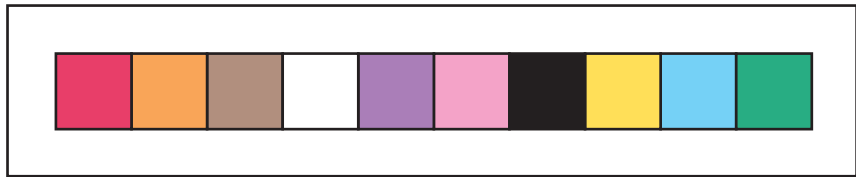
Number Word Match
11 cards with numbers



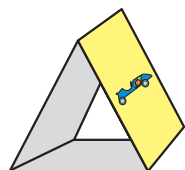
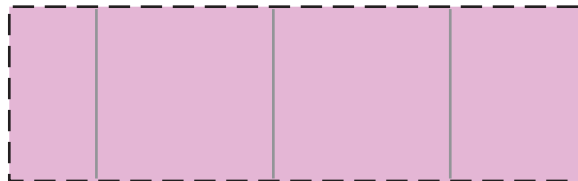
Number Word Match
11 cards with words

Special Cards (color cards, require additional cutting)

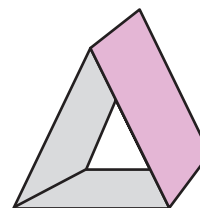
10 Rod Cards
(actual size after
cutting apart)



Playing Pieces
(actual size after
cutting apart)

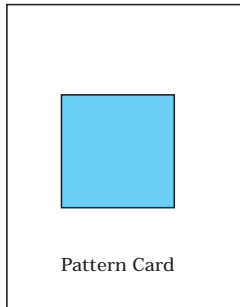


Fold on gray lines.
Tape or glue bottom
to make a tent shaped
playing piece.

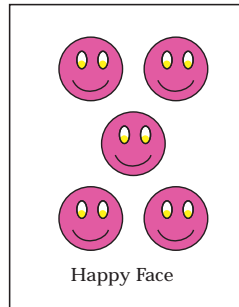


Color Cards (shown in order)

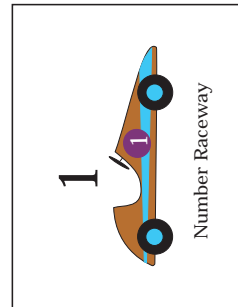
Samples of cards from each set



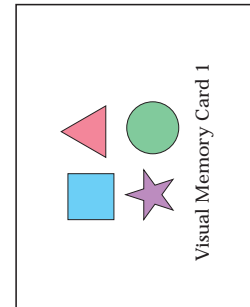
Pattern Cards
40 cards



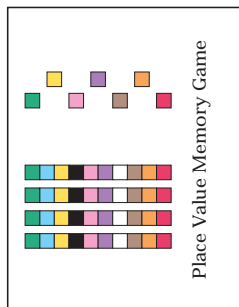
Happy Face
10 cards



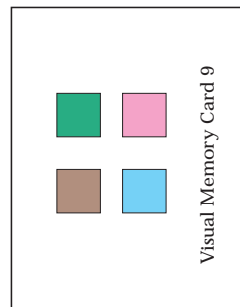
Number Raceway
40 cards



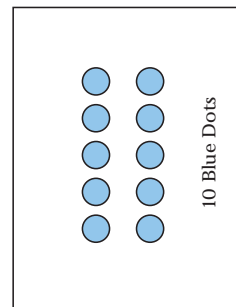
Visual Memory
(1 to 8)
8 cards



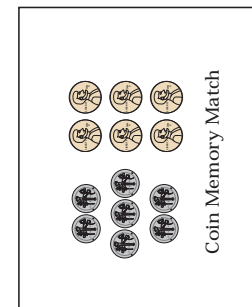
Place Value Memory
(matches with black
and white cards)
11 cards



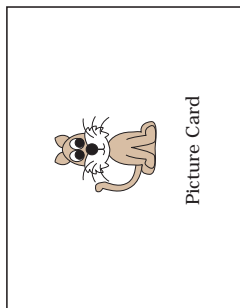
Visual Memory
(9-14)
6 cards



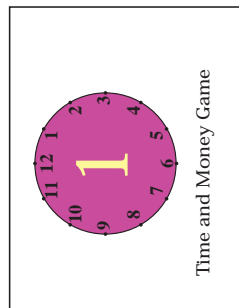
10 Blue Dots
5 cards



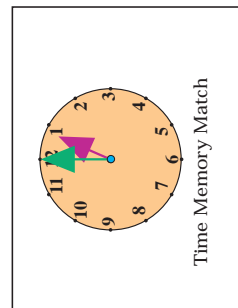
Coin Memory Match
(matches with black
and white cards)
11 cards



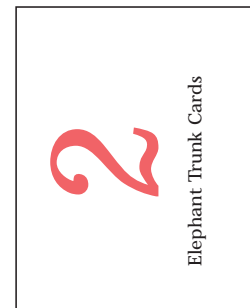
Picture Cards
11 cards



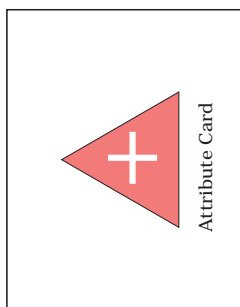
Time and Money
(Game cards)
15 cards



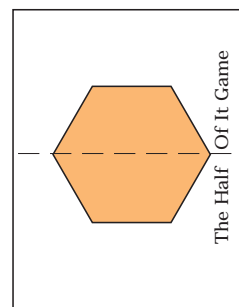
Time Memory Match
(matches with black
and white cards)
12 cards



Elephant Trunk
(Game cards)
16 cards



Attribute Cards
27 cards



The Half of It
(Game cards)
20 cards



Cut cards in half
on the dashed lines

Sample Lesson Plans (Lessons 1-10 out of 160)

Please note the lesson plans are printed black and white.

Lesson 1

Objectives

1. Students will write numbers.
2. Students will count objects.

Materials

Counters

Workbook page

Number cards 1-10

Optional resource: Number Writing sheet (copy master)

Teaching

1. Begin the lesson by asking students to count. You may ask students to count as far as they can or to a preset number (such as 20). Next, use number cards. Show students numbers in random order. Students will say the number.

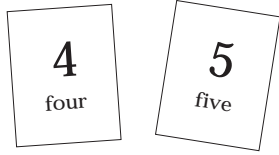
Now you can write some numbers. Have students write "invisible" numbers with their fingers in the air. Next, students will look at the top of the workbook page. The students will trace the numbers on the page. First, they will trace with only a finger. Next, the students will trace the numbers with a pencil.

Underneath each number are shapes. Each number is represented by a group of shapes. Begin introducing or reviewing the names of the shapes. **What shape is under the number 1?** (circle) **How many circles are there?** (1) Repeat with the other shapes: 2-squares, 3-triangles, 4-stars, 5-rectangles. You may also ask students to identify shapes and colors using questions such as: **What shape is purple? What color is the square?**

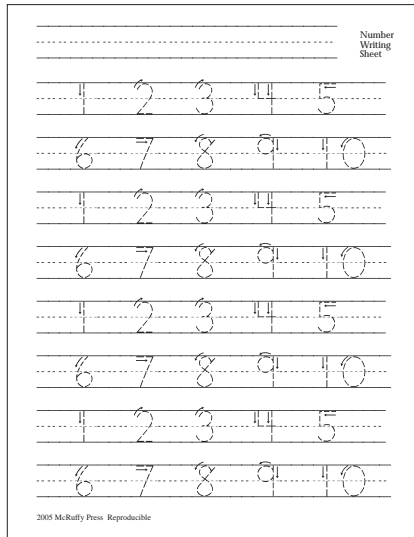
2. Students will work with counters to practice counting skills and grouping. Ask students to make a group of four counters. Next, ask students to use the four counters to make two groups of two counters.

Practice with several other groupings such as making a group of eight counters. Change it into two groups of four counters. Make a group of nine counters. Change it into three groups of three counters.

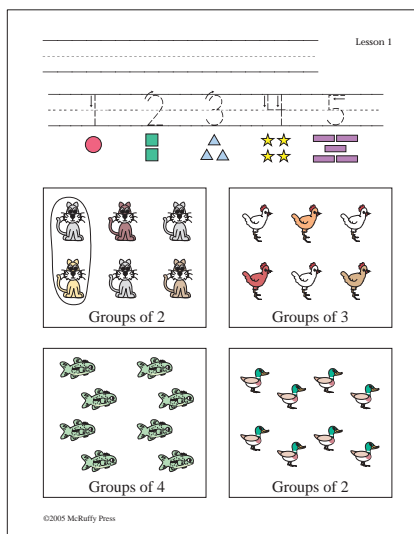
Workbook page (second part): Students will make the pictures of objects into groups. One group of cats is already circled for an example. Students will circle two more groups of two cats, two groups of three chickens, two groups of four fish, and four groups of two ducks.



Number cards



Number Writing sheet
(copy master)



Workbook page

Lesson 2

Objectives

1. Students will write numbers.
2. Students will count objects.

Materials

Counters
Workbook page
Number cards 1-10
Optional resource: Number Writing sheet (copy master)

Teaching

1. Follow the same format as Lesson 1.

Begin the lesson by asking students to count. You may ask students to count as far as they can or to a preset number (such as 20).

Next, use number cards. Show students numbers in random order. Students will say the number.

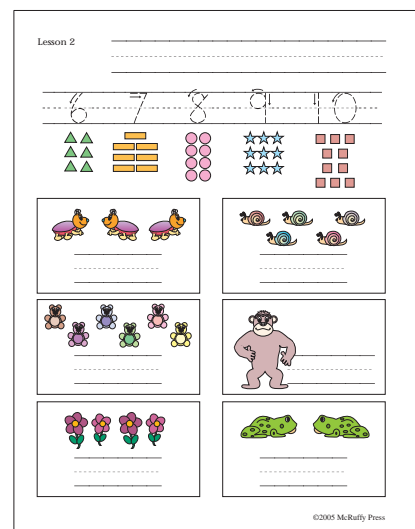
Now you can write some numbers. Have students write "invisible" numbers with their fingers in the air. Next, students will look at the top of the workbook page. The students will trace the numbers on the page. First, they will trace with only a finger. Next, the students will trace the numbers with a pencil.

Underneath each number are shapes. Each number is represented by a group of shapes. Begin introducing or reviewing the names of the shapes. **What shape is under the number 6?** (triangle) **How many triangles are there?** (6) Repeat with the other shapes: 7-rectangles, 8-circles, 9-stars, 10-squares. You may also ask students to identify shapes and colors using questions such as: **What shape is blue? What color is the square?**

Optional resource: You may have students practice number writing during future lessons using the Number Writing copy master.

2. Have students make random groups of counters. Ask students to count them. If counters are various colors, place them in a box or bag. Ask students to draw out a specific number of counters, such as 5, 7, or 10.

Ask questions that require counting, such as how many of the counters in the group are blue? How many are red? Using the second part of the workbook page, have students count the objects in each box and write the number on the line.



Lesson 3

Objectives

1. Students will write numbers.
2. Students will make patterns.

Materials

Pattern cards (set with 10 each, blue squares, red triangle, green circles, purple stars)
Workbook page
Crayons

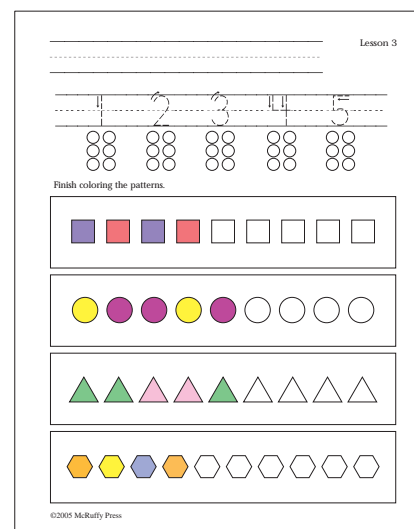
Teaching

1. Students will trace the numbers 1 to 5 on the workbook page. Under each number is a set of six dots. Students will fill in the amount of dots to match the number above it.

Under the number one are some small circles.
Fill in one circle to match the number one.
How many circles will you fill in under the number 2? (2)

Fill in the circles under each number.
The number of circles you fill in should match the number above them.

2. Make a simple pattern with the cards. Put a square, a circle, another square, and another circle in a line. Ask students what shape would come next.

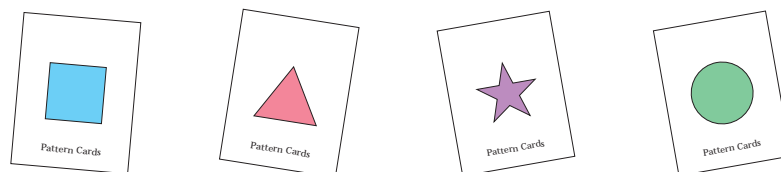


Next, ask students to make a pattern like it using stars and triangles.

Repeat with various patterns such as two stars, one circle, two stars, one circle.

Finally, allow students to make their own patterns with the cards.

Workbook: students will complete the patterns on the bottom of the page by coloring the shapes.



Pattern Cards (blue squares, red triangles, purple stars, green circles)

Lesson 4

Objectives

1. Students will write the numbers 6-10.
2. Students will recognize shapes.

Materials

Workbook page

Basic Shapes and Basic 3-D Shapes posters

Objects shaped like the pictures on the posters such as cubes, cans, cones, and a ball

Optional: play dough or clay

Crayons

Teaching

1. Students will trace the numbers 6 to 10 on the workbook page. Under each number is a set of twelve squares. Students will fill in the amount of squares to match the number above it.
2. Review the names of basic shapes. Two posters are used to display shapes and their names. Students are not expected to read the words, but the words are included to build sight recognition of the words. Students will most likely be familiar with the names of two dimensional shape names: square, circle, triangle, rectangle, and star. Review the shapes with students.

Next, introduce the names of three dimensional shape names: cube, sphere, cone, and cylinder. Ask students what shapes from the first poster they see in the second poster. For example, students will most likely see squares in the cube, a circle in the sphere, a triangle in the cone, and circle or rectangle in the cylinder. This will become clearer when students see real objects or three dimensional shapes.

Ask students to find objects shaped like the shapes on the posters.

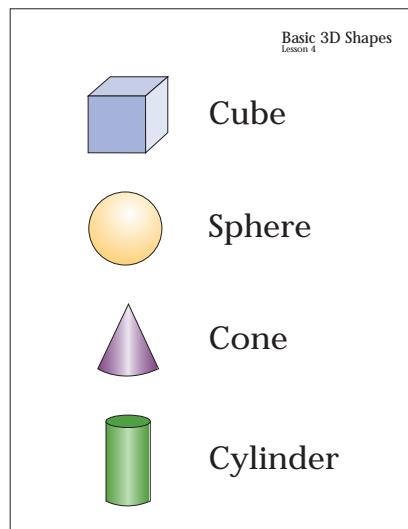
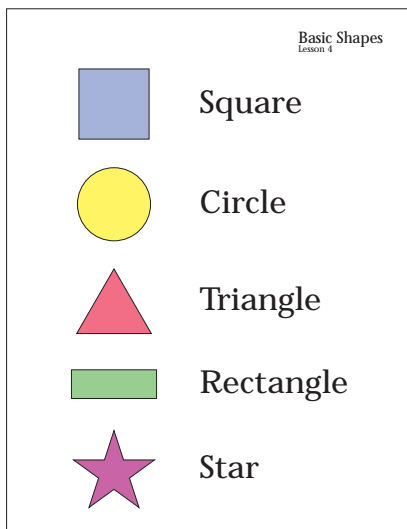
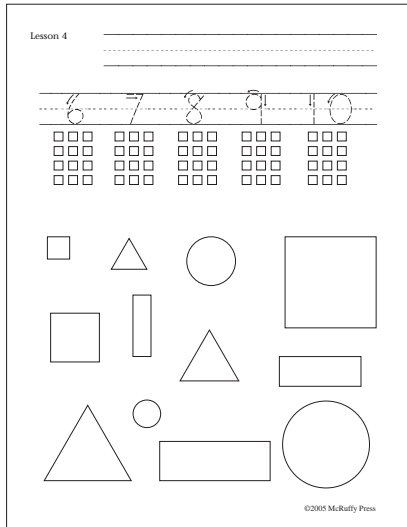
One the bottom of the workbook page, direct the students in an exercise that will involve using listening skills, shape recognition, color recognition, and recognizing an attribute (size). Students will use crayons: red, blue, brown, purple, yellow, green, and orange.

Give students the following instructions:

**Color the smallest circle green. Color the largest square blue.
Color the middle-sized triangle orange. Color the largest rectangle yellow
Color the smallest triangle red.**

Continue with the other shapes: Medium square ñ brown, largest circle red, small rectangle ñ blue, medium circle yellow, small square ñ orange, largest triangle green, medium rectangle ñ purple.

Optional activity: Challenge students to make each shape on the 3-D shapes posters using play dough.



Posters (8.5 x 11 color)

Lesson 5

Objectives

1. Students will write the numbers 1-10.
2. Students will put numbers in order.

Materials

Workbook page
Happy Face cards
Number cards 1-10
Paper, scissors, glue

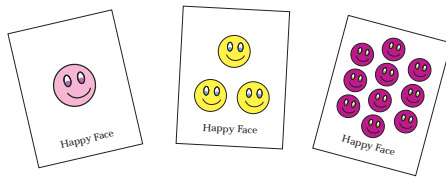
Teaching

1. Students will practice writing the numbers 1-10 on the workbook page.
2. Ask students to count the faces on each Happy Face card. Next, have students match a number card to a Happy Face card. Next, students will arrange the Happy Face cards from 1 face to 10 faces.

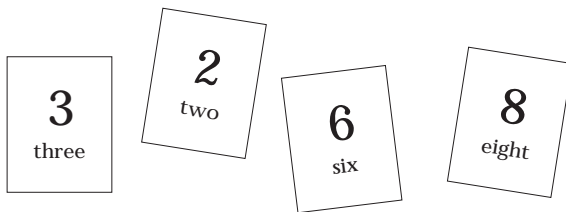
Next, have students count backwards from 1 to 10.

Use the bottom of the workbook page. Students will cut out the boxes (cutting on the dashed lines). Students will then glue the cars in order from 1 to 10 on another piece of paper. Depending on the size of the paper, the cars may need to be arranged in rows.

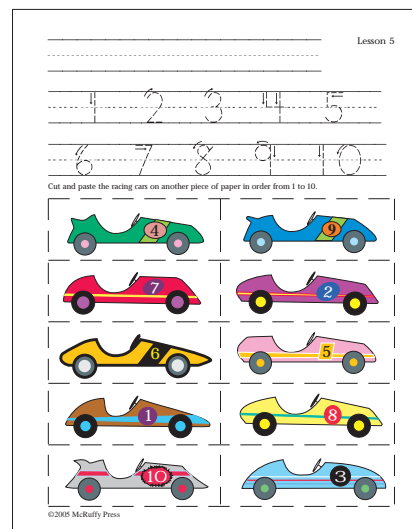
Students may want to draw a raceway scene on the paper.



Happy Face cards (color)



Number cards (black and white)



Lesson 6

Objectives

1. Students will write the numbers 1-10.
2. Students will compare groups.

Materials

Workbook page
Happy Face cards
Counters

Teaching

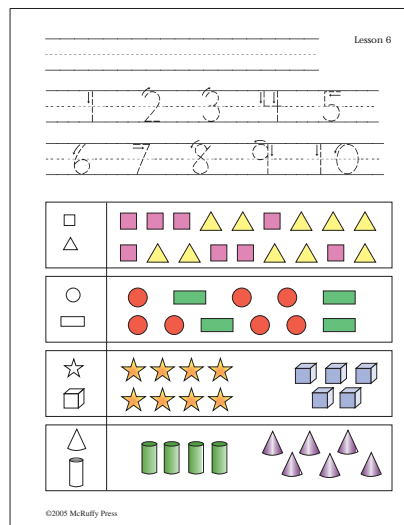
1. Students will trace the numbers 1 to 10 on the workbook page.
2. Students will compare groups of objects. Have students grab a random group of counters. Ask questions using key words to match the characteristics of the counters. Pick an attribute such as shape or color. **Which color do you have the most of? Which color do you have the least of? How many red counters do you have? Do you have more red counters or blue counters?**

Have students separate the groups of counters to make comparisons.

Make a group of four counters. Ask students to make a group of more than four counters. Ask students how many counters are in their group. Ask students to make another group that has more than four counters.

Repeat with the word, less. Have students make groups of less than four counters.

There are four boxes of objects on the bottom section of the workbook page. The first two objects in the first section are not colored. Students will fill in the object that has more of that shape in the other box.



Lesson 7

Objectives

1. Students will write the numbers 1-10.
2. Students will compare numbers.

Materials

Workbook page
Number Line Strip
Counters (2 per student)

Teaching

1. Students will trace the numbers 1 to 10 on the top section of the workbook page.
2. Students will compare numbers on the Number Line strip. The Number Line strip includes numbers up to 20 with a spiral hinge in the center. Students should fold the strip back so only the numbers 1-10 show. Counters are used to mark places on the mat.

Introduce the concept of a number line.

What do you see on the number line?

(numbers, words, boxes, an arrow)

What is the first number on this number line? (1) Put a counter on the number 1 space. As we move along the number line, the numbers become larger. We say the numbers are greater. The number 2 is greater than the number one. The number three and all the other numbers on the line are also greater than one. Can you put a counter on a number that is greater than 3?

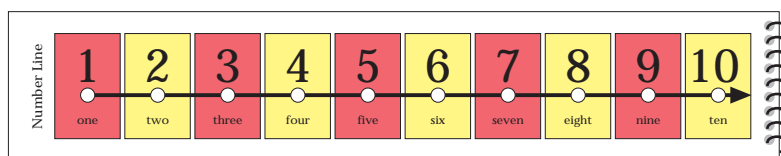
Move a counter to the number 5. Is the number 4 greater than the number 5? (no) Four is not greater than five because it comes before it. We can say that four is less than five. What other numbers on the number line are less than five?

We use the words less than and greater than to describe sets of numbers or groups of objects.

Pick numbers and ask students to place a counter on a number. Next, ask them to place a second counter on a number less than the first number. Repeat with greater than. Finally, alternate between greater than and less than.

Worksheet: **Look at the rows of shapes. Inside each shape are two numbers. We'll begin with the circles. What color is the first circle (red) What two numbers are in the first circle? (6 and 3)**

Which number is greater than the other one? (6) Put an X on the six to mark that it is greater. Look at the middle circle. Put an X on the number that is greater than the other. Look at the last circle. Put an X on the number that is greater than the other.



Number Line Strip

Now let's look at the next row. What shapes are in the middle row? (squares) In this row you will put an X on the number in each square that is less than the other one. What two numbers are in the first square? (5 and 2) Which number is less? Put an X on the number that is less than the other number. Do the same with the next two squares, but wait for instructions before marking the numbers in the triangles. (Allow students to finish the row with squares.)

Now we'll mark numbers in the triangles. Listen for directions on which number to mark in each triangle.

In the red triangle, mark the number that is greater than the other number.
 In the green triangle, mark the number that is less than the other number.
 In the blue triangle, mark the number that is greater than the other number.

Lesson 7

1 2 3 4 5

6 7 8 9 10

3 6	9 4	8 10
5 2	10 7	5 8
1 3	6 2	8 4

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Lesson 8

Objectives

1. Students will write the numbers 1-10.
2. Students will indicate greater than or less than using arrows.

Materials

Workbook page
Counters
Arrow card (1 per student)

Teaching

1. Students will trace the numbers 1 to 10 on the top section of the workbook page.
2. Students will compare groups using an arrow to indicate greater than or less than.
The arrows are used as precursors to the greater than and less than signs. The curriculum will be consistent in having the arrow always point to the smaller number.

Have students make two unequal groups of counters. Start by making a group of three counters and a group of five counters.

Which group is greater in number, the group of three or the group of five? (5)
Which group is less in number, the group of three or the group of five? (3)

Point the arrow to the group that is less than the other group. Show students how to arrange the groups in a horizontal row spaced apart enough to fit the arrow card between them. See the workbook page for an example.

Repeat with other groups. **Remember, the arrow should always point toward the smallest group.**

On the workbook page, students will compare the groups of objects in each box and draw an arrow pointing to the group that is less than the other one.

Lesson 8

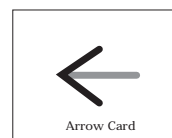
Tracing practice for numbers 1 through 10.

Draw an arrow pointing to the group that is less than the other group.

Comparison exercises:

- Group of 3 turtles vs. Group of 5 ducks
- Group of 2 birds vs. Group of 3 swans
- Group of 4 rabbits vs. Group of 3 cats
- Group of 4 mice vs. Group of 1 mouse

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Arrow card (black and white)

Lesson 9

Objectives

1. Students will learn the names of pattern block shapes.
2. Students will create pictures with pattern blocks.

Materials

Workbook page
Pattern Blocks Shapes poster
Pattern blocks

Teaching

1. Use the poster to introduce the names of the pattern block shapes. **Today we are going to be working with some shapes. The shapes are called pattern blocks. Before we begin working with pattern blocks, we need to learn the names of the different pieces.** Begin by asking students to look at the poster and point out any shapes that they already know the names of. Students should recognize the square and triangle. Students are not expected to be able to read the words on the poster, but the words are included to create print awareness.

How many sides does a triangle have? (3) How many sides does a square have? (4)

The yellow shape is a hexagon. How many sides does a hexagon have? Count them with the students. (6)

The red shape is a trapezoid. How many sides does it have? (4) It has the same number of sides as a square. How is the shape of the trapezoid different from the square? (One side is longer on the trapezoid. The corners are not the same.)

There are two kinds of pattern blocks that have the same name. Point to the rhombuses on the poster. **There is a blue rhombus and a tan rhombus. Sometimes people call this shape a diamond shape, but in math we call this shape a rhombus.**

How is the shape of the rhombus like the square and trapezoid? (The rhombus has four sides like the others.) **How are the shapes of the rhombuses different from the square?** (Students may give a general description, such as they are flatter or diamond shaped.) **How are the rhombuses different from the trapezoid?** (All the sides are the same length in the rhombuses.)

Review the shape names again, this time by having students pick out a pattern block piece when you point to it on the poster and say its name. Finally, say the names in random order and have students respond by picking up the piece.

In the top section of the workbook page is an outline of each of the shapes. Students will write numbers on the shapes in response to your instructions.

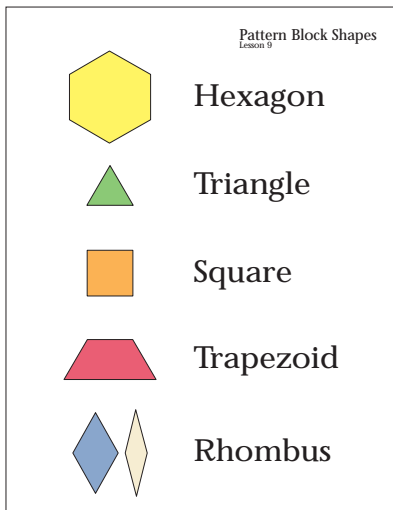
Look at the shapes at the top of the workbook page. Find the hexagon. Write the number 1 on the hexagon. Write the number 2 on the triangle. Write the number 3 on the square. Write the number 4 on the rhombus. Write the number 5 on the trapezoid.

2. Students will use pattern block pieces to make the butterfly, rabbit, and turtle on the workbook page. After students have made the animals using the pieces indicated by the colors, ask students to try to make the animals using other pieces.

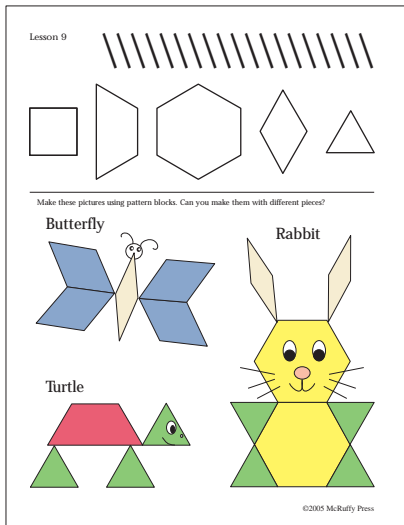
What shape was not used in any of the pictures of animals? (square)

Make an animal design using at least one square pattern block.

Allow students additional time to explore and create with pattern blocks.



Pattern Block Shapes poster
8.5" x 11" color



Lesson 10

Objectives

1. Students will write the numbers 1-10.
2. Students will put numbers and sets in order.

Materials

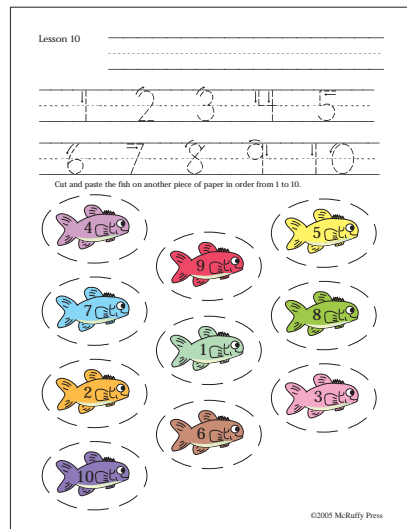
Happy Face cards
Number cards 1-10
Paper, scissors, glue

Teaching

1. Students will practice writing the numbers 1-10 on the workbook page.
2. Ask students to count the faces on each Happy Face card. Next, have students match a number card to a Happy Face card. Next, students will arrange the Happy Face cards from 1 face to 10 faces.

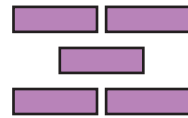
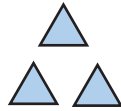
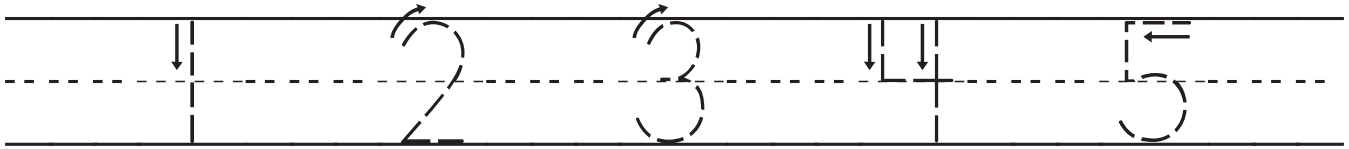
Next, have students count backwards from 1 to 10.

Use the bottom of the workbook page. Students will cut out the ovals (cutting on the dashed lines). Students will then glue the fish in order from 1 to 10 on another piece of paper. Depending on the size of the paper, the fish may need to be arranged in rows. Students may want to draw an underwater scene on the paper.



Sample Workbook Pages (Printed in color)

Lesson 1



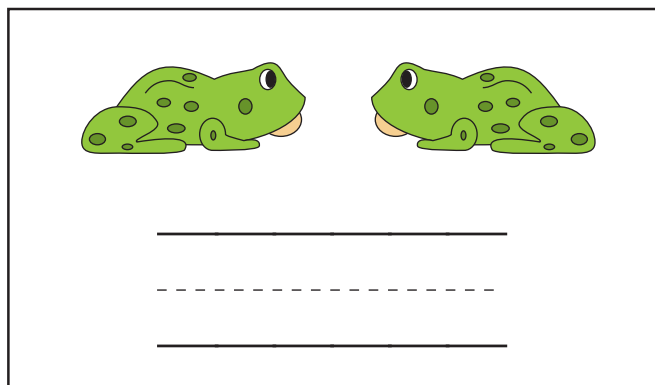
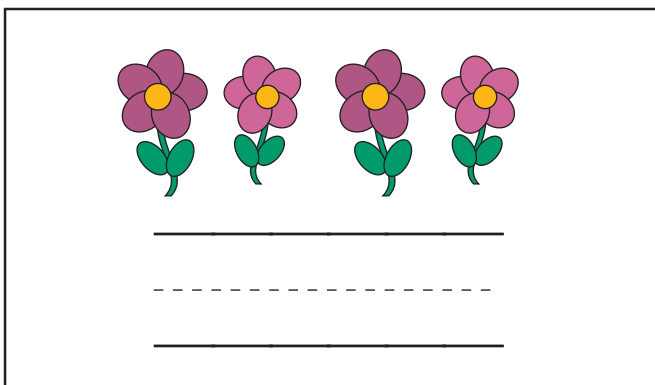
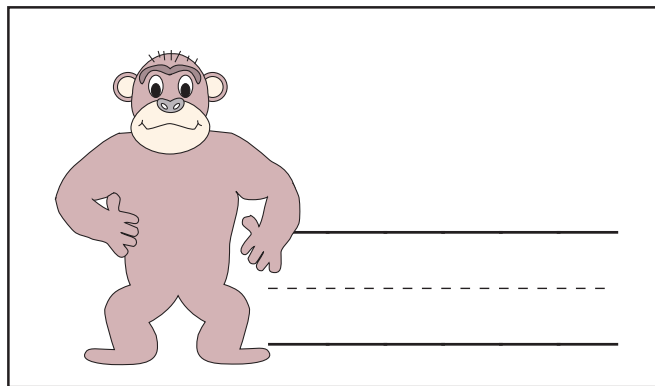
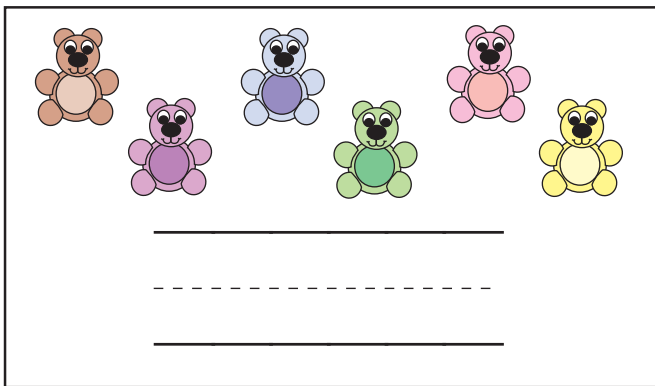
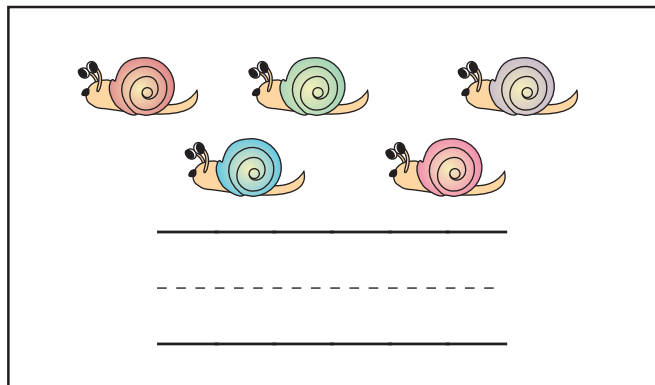
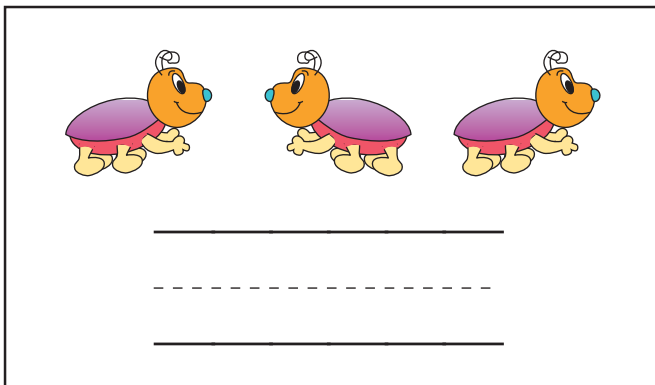
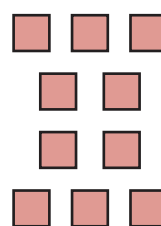
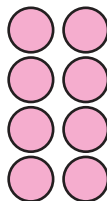
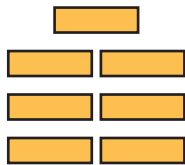
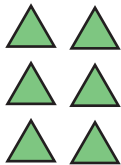
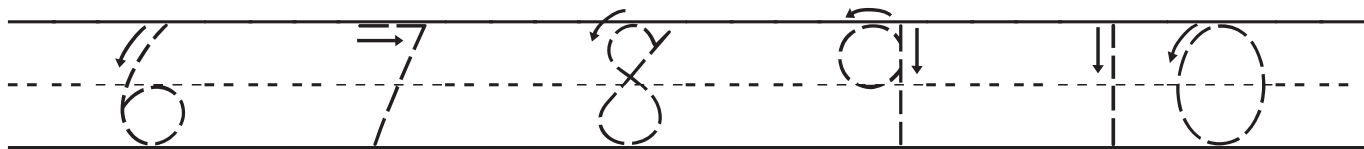
Groups of 2

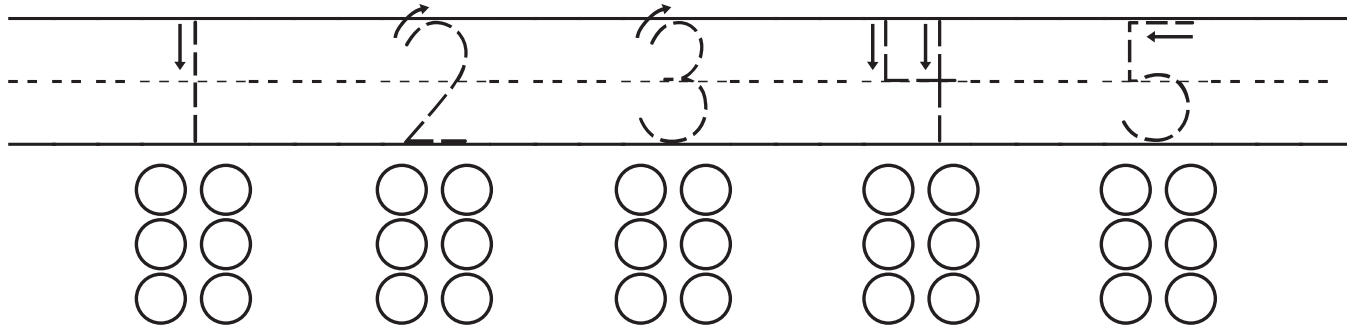
Groups of 3

Groups of 4

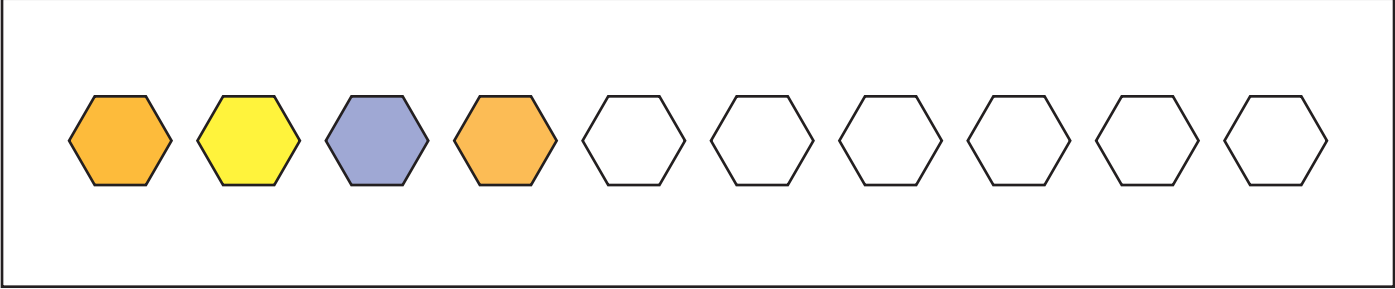
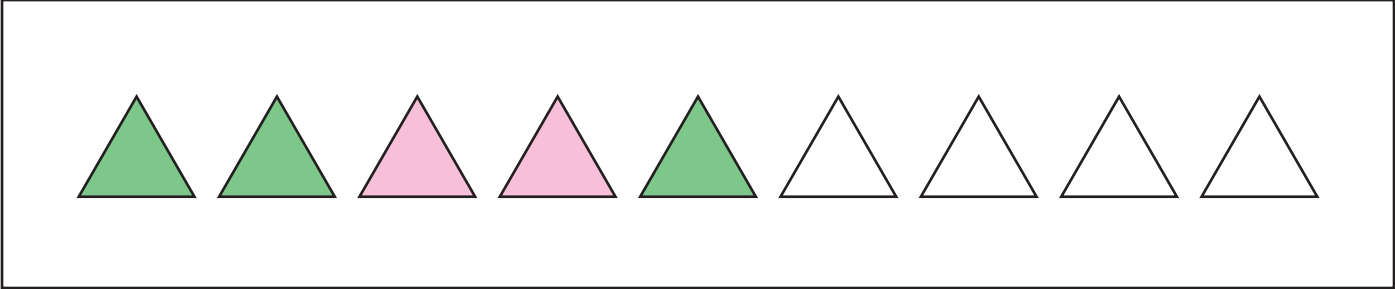
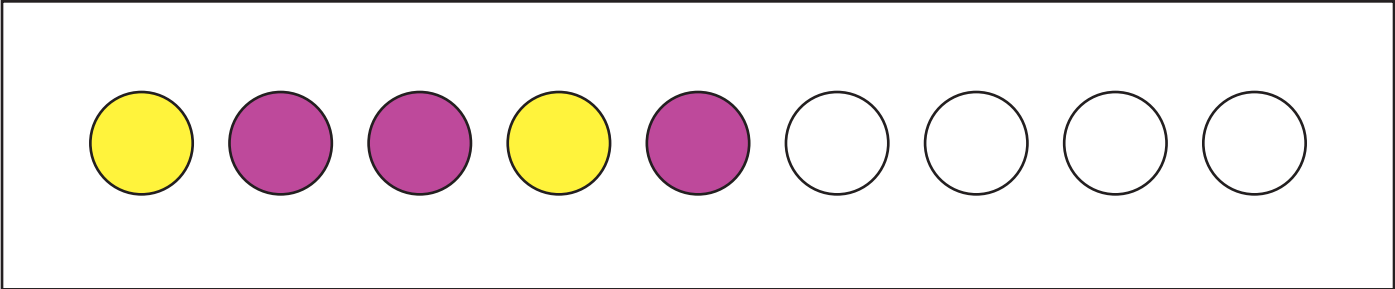
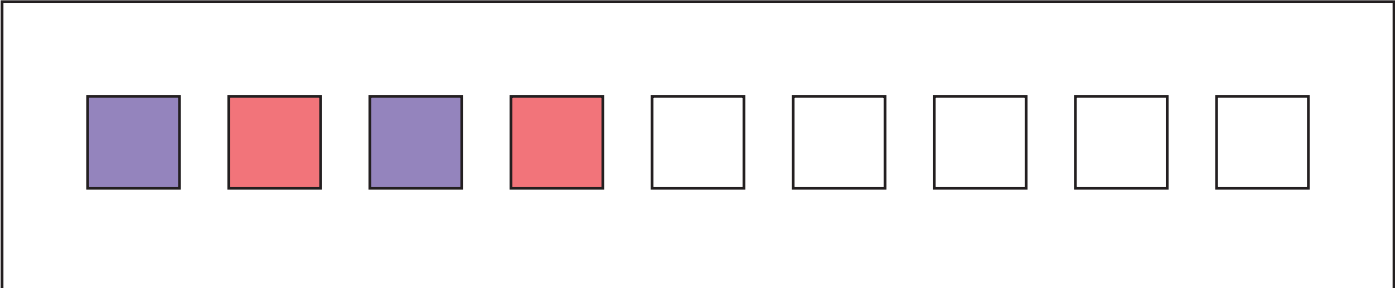
Groups of 2

Lesson 2

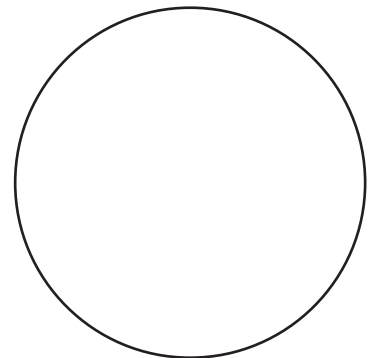
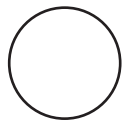
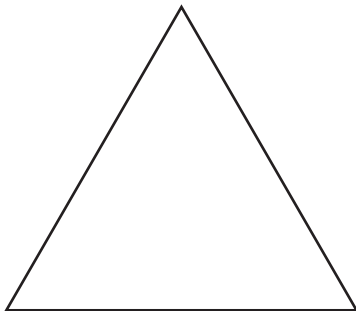
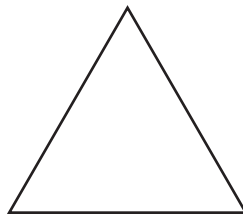
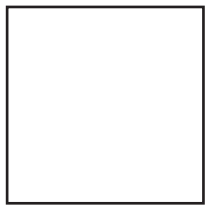
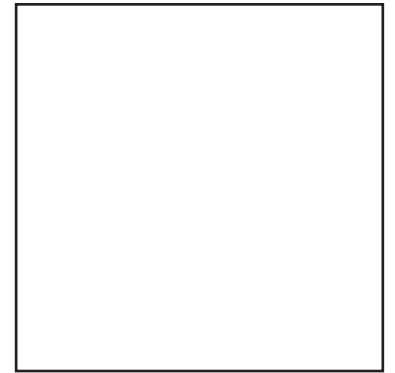
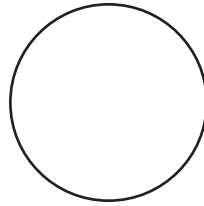
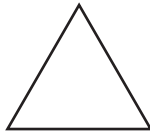
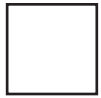
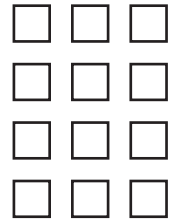
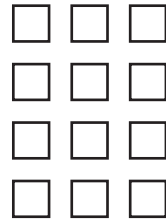
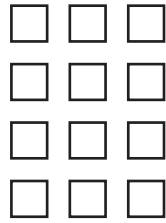
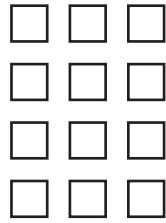
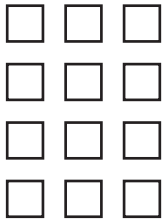
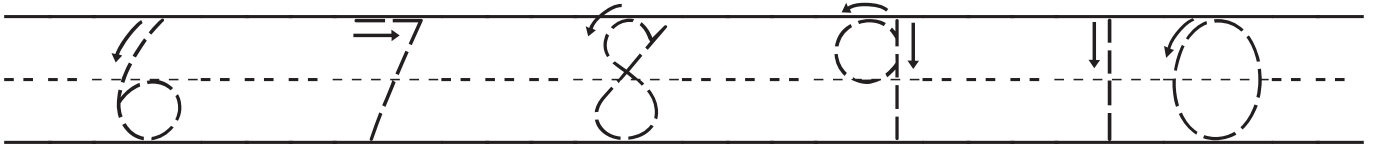


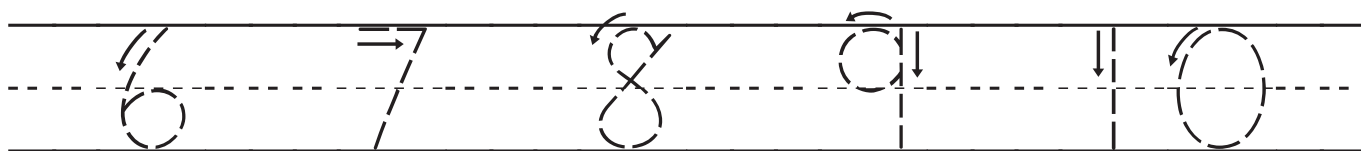
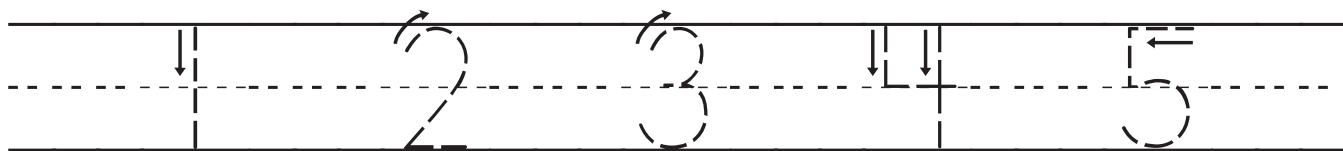


Finish coloring the patterns.

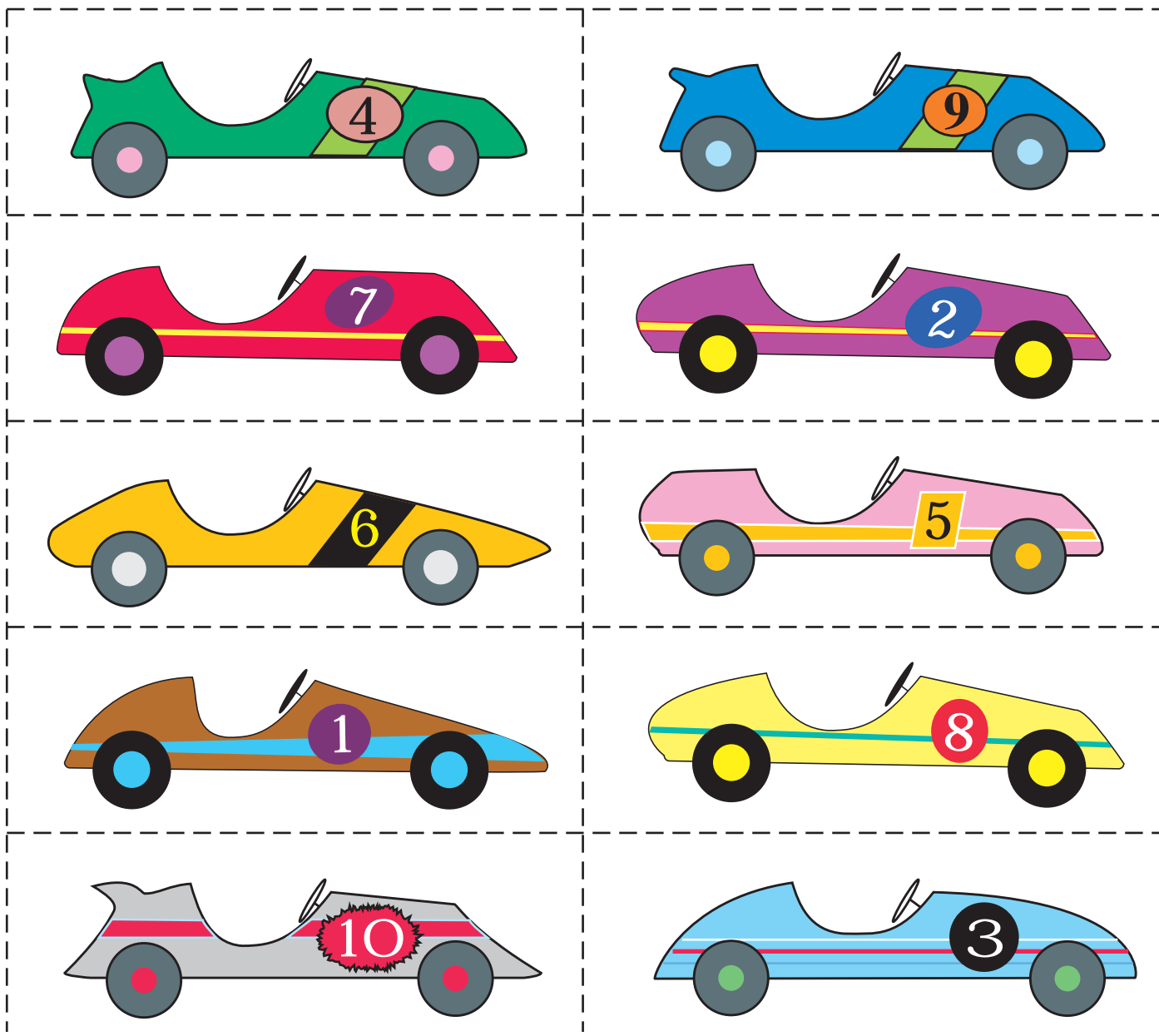


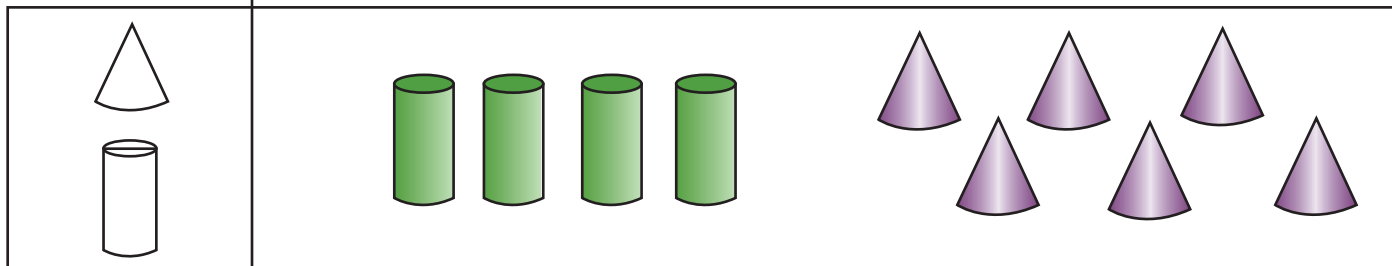
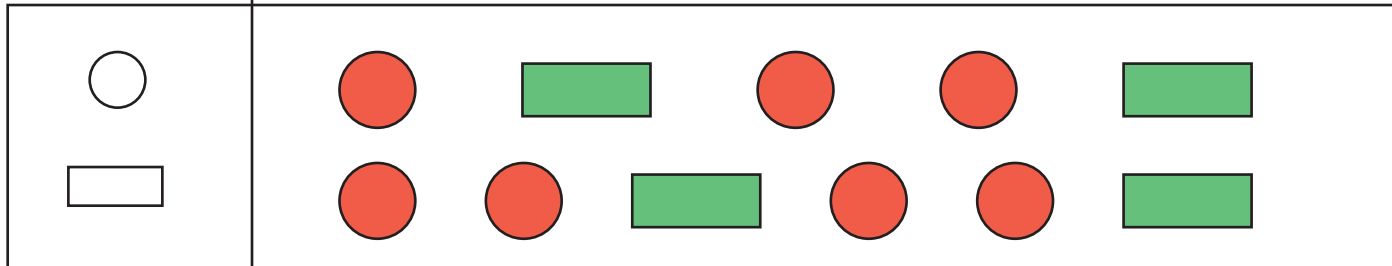
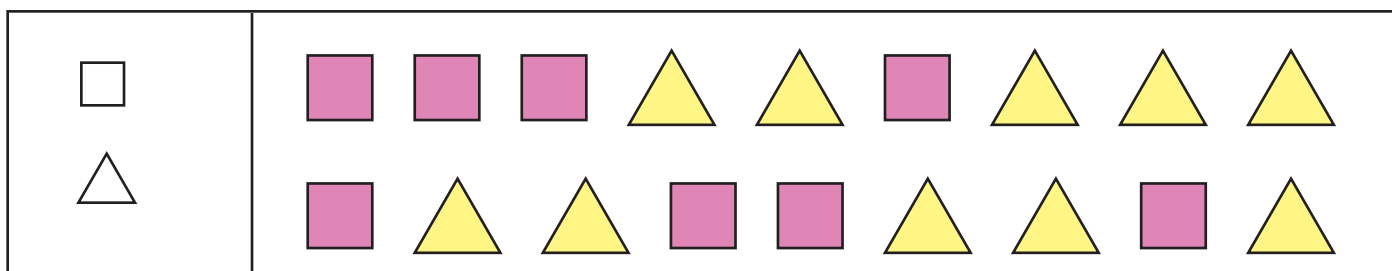
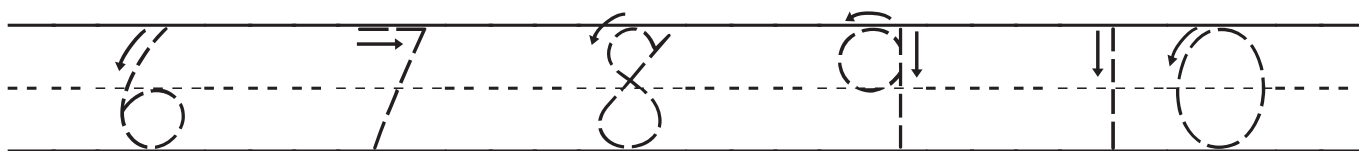
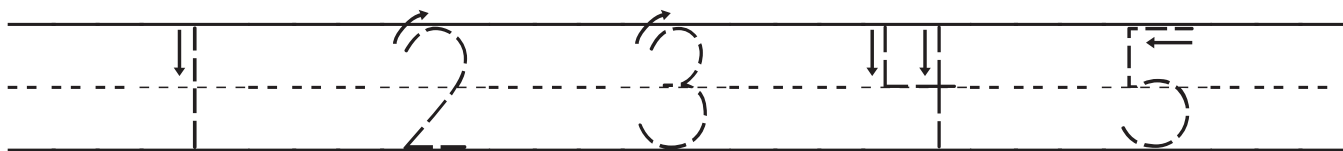
Lesson 4

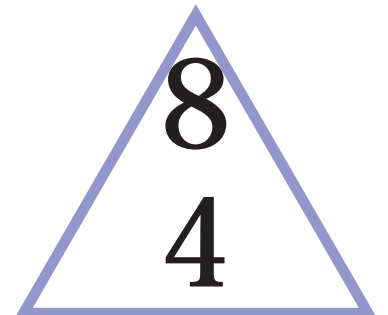
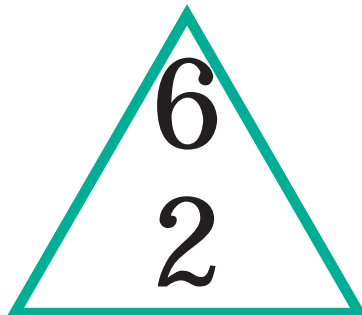
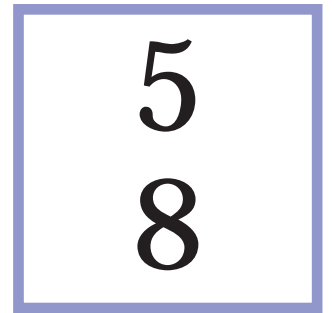
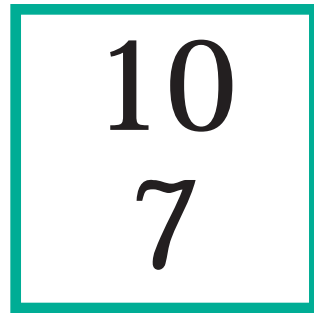
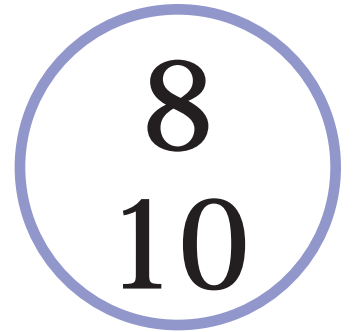
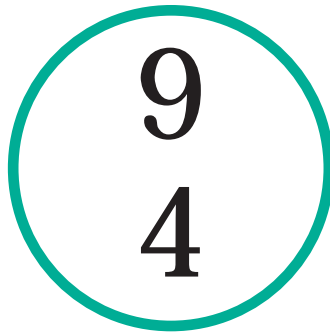
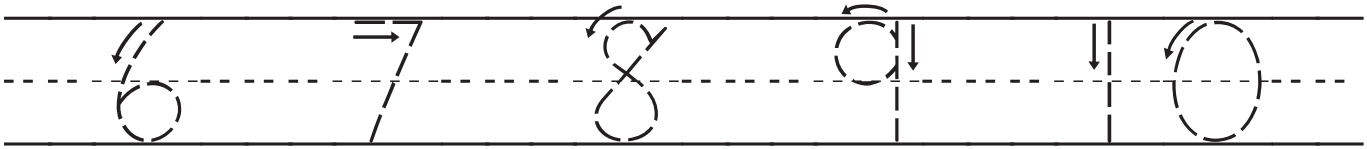
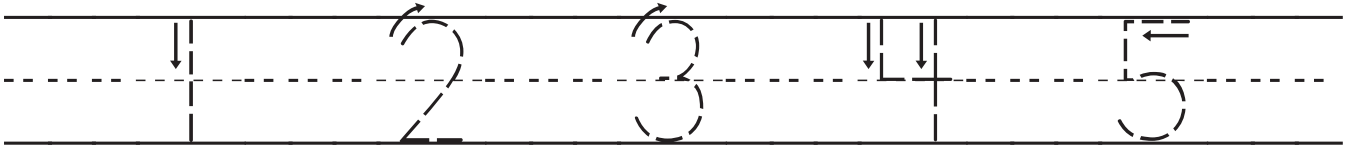
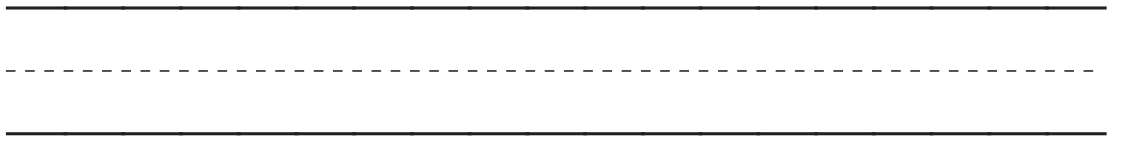


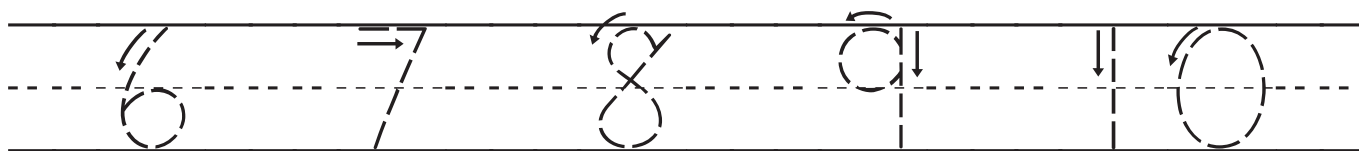
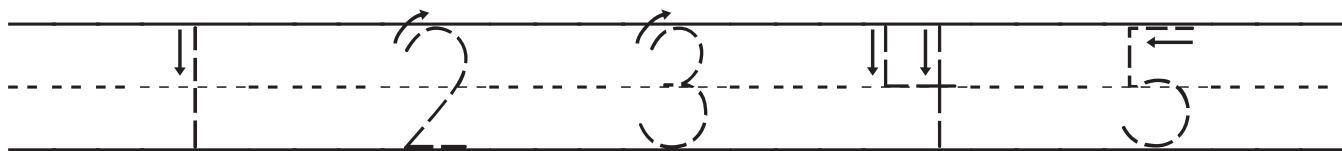


Cut and paste the racing cars on another piece of paper in order from 1 to 10.

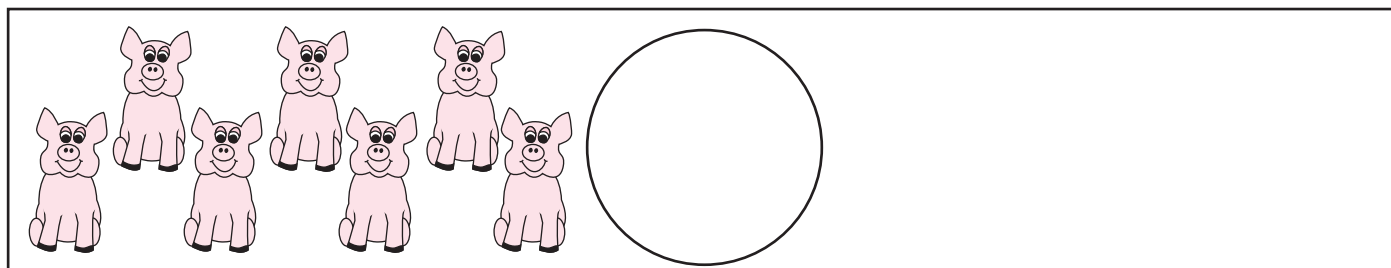
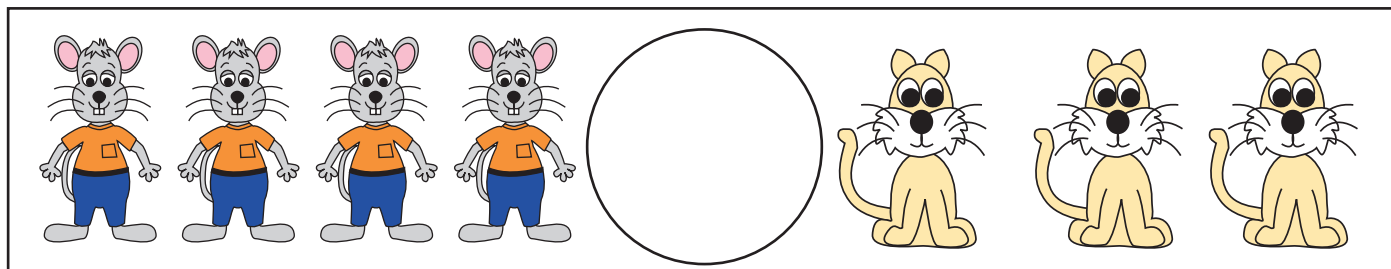
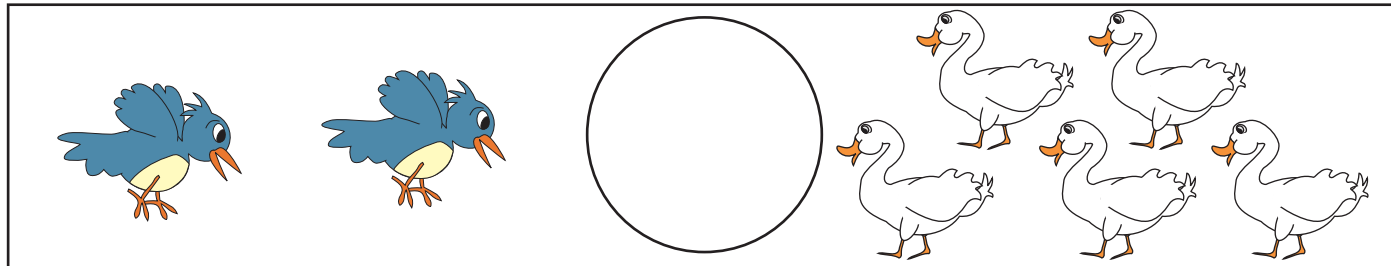
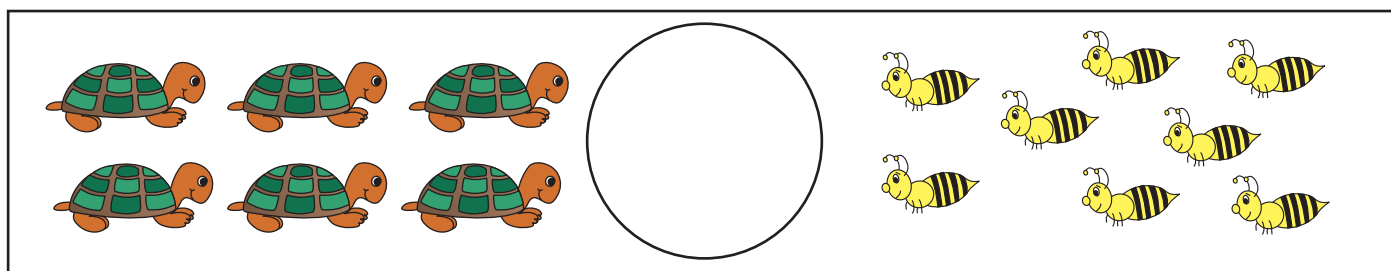


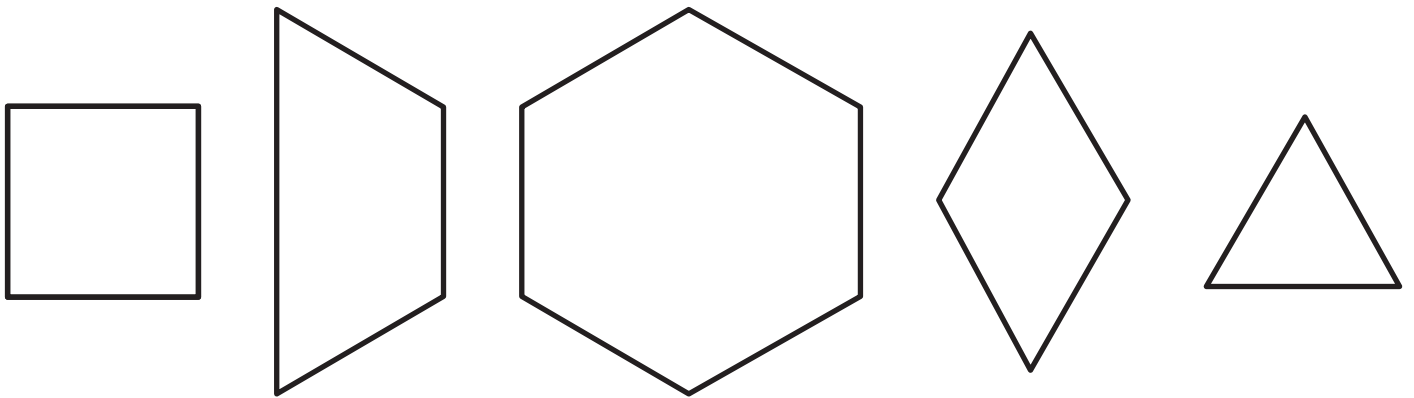






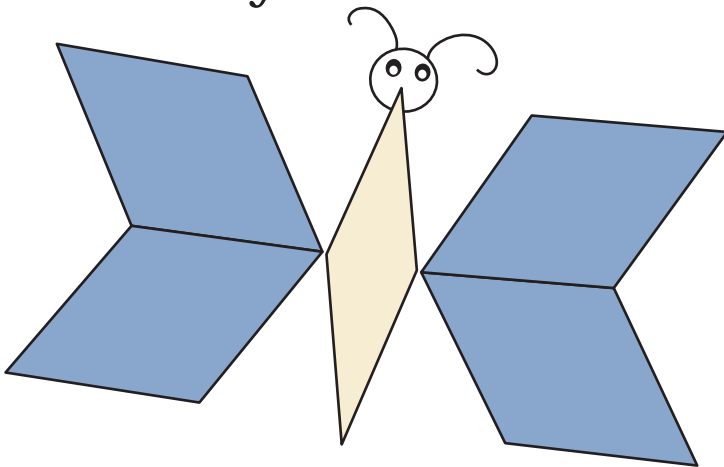
Draw an arrow pointing to the group that is less than the other group.



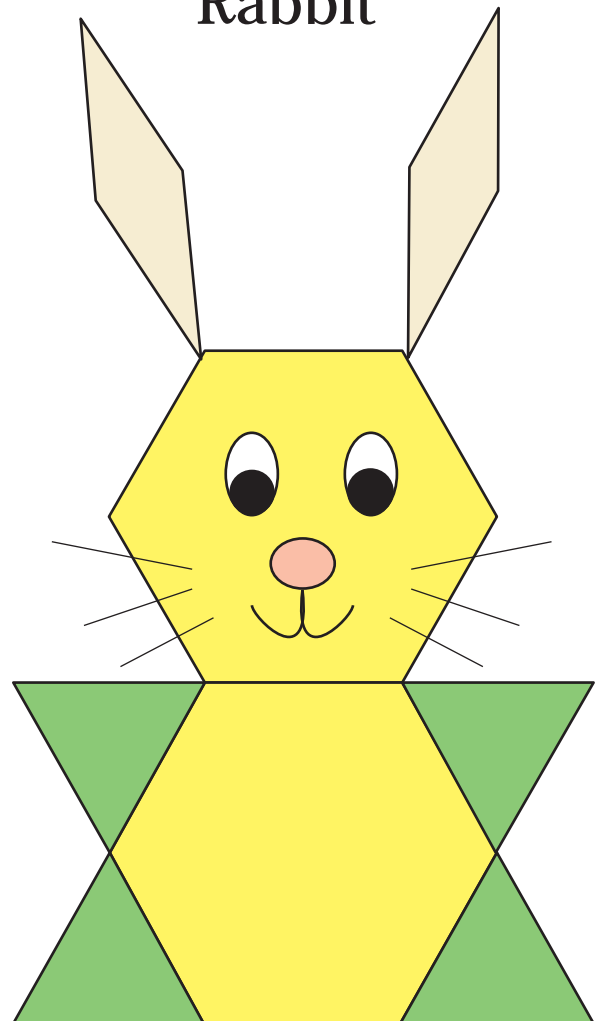


Make these pictures using pattern blocks. Can you make them with different pieces?

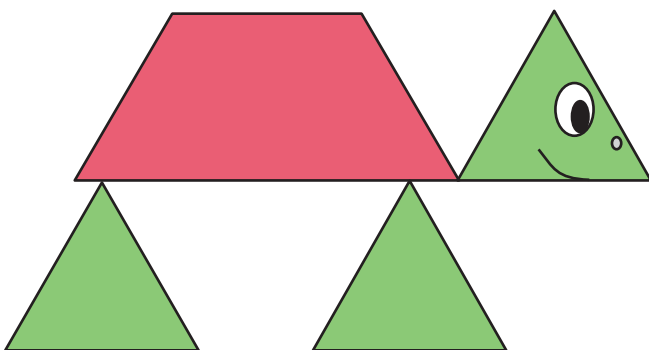
Butterfly



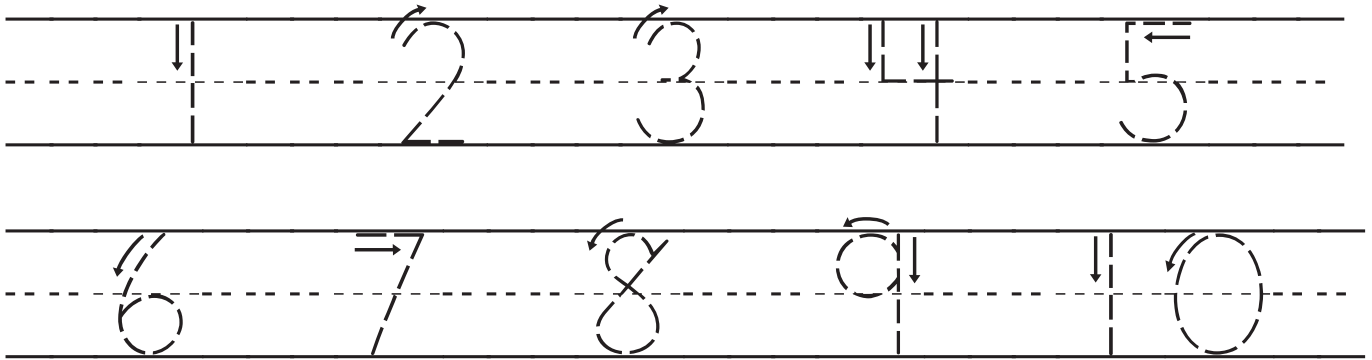
Rabbit



Turtle



Lesson 10



Cut and paste the fish on another piece of paper in order from 1 to 10.

