Let's Write

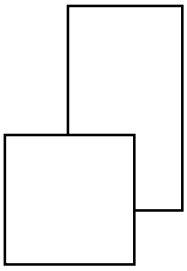
Write a story about three red leaves, four yellow leaves, and two brown leaves.

(1.05)

Seeing Math

Show each drawing briefly. Have students draw from memory. Show once more and allow them to adjust their drawings. "What did you see?"

(Ask several students.)



△○▽

(3.01)

What Do You Think?

Mrs. Mouse cut fruit for the family feast. She cut each apple into 4 pieces.

She cut each banana into 2 pieces. Mrs. Bear carefully placed 12 pieces of fruit on the plate. How many apple pieces and how many banana pieces could be on the plate?

Does this problem have more than one answer?

How do you know?

Record your answers.

(1.05)

Investigations

After collecting leaves, have the children sort them and discuss. Then, ask children to sort them in a different way and describe the rule used. How many different ways can you sort your leaves? Can you sort them into two groups? Can you sort into more than two groups?

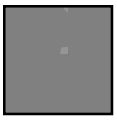
(4.01 - make a Venn diagram activity)

$¢$¢$¢$¢

Estimate how many pennies it will take to cover your leaf. Then cover the leaf and count to see how much your leaf is worth. Whose leaf is worth the most? the least? Are any the same?

Are any leaves worth more than seven dimes?

(1.01a)



Patterns, Patterns, Patterns

85, 80, _____, _____, 65, _____.

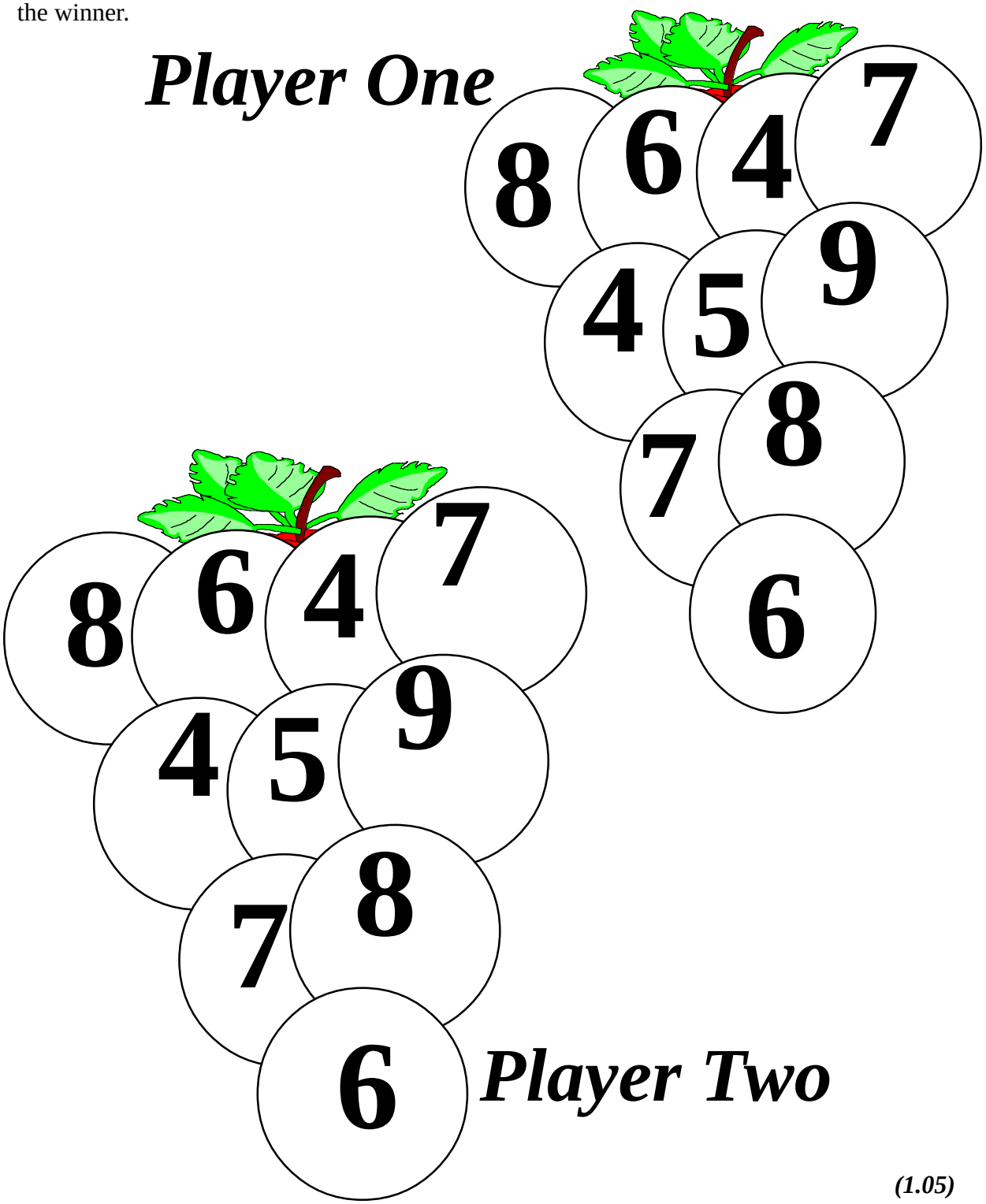
(5.01)

Picking Grapes

Materials: Game board, one number cube, Unifix cubes

Directions: Roll the number cube and subtract from ten. Cover the difference on a grape on your bunch. Continue play until someone has covered all of his or her grapes. This person is the winner.

Player One



Player Two

(1.05)

Keeping Skills Sharp

1. 8 - 5 ___

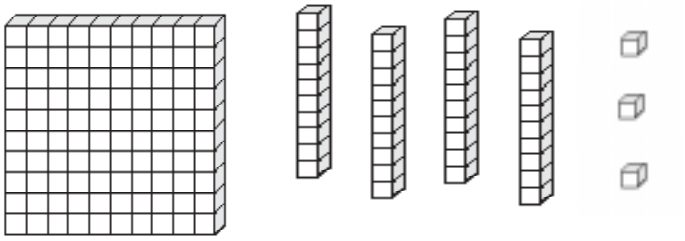
2. 10 - 3 ___

3. 12
   - 4

4. 11
   - 5

5. What is the pattern unit? △ ○ | | △ ○ | | △ ○ | |

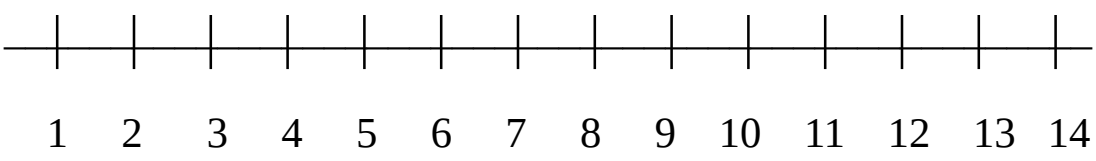
6. Measure this line in centimeters. How long is it?

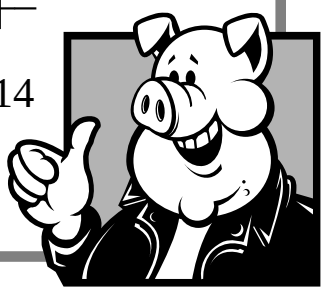
7.  What is this number?

8. There were 48 leaves on the tree. Twenty-six leaves fell off. How many leaves are still on the tree?

Solve this!

Jack Frost is painting leaves. He begins counting at three. He counts five more. Then he counts four more. Next he counts back six. What is his final number?





(1.01c)

To the Teacher

Grade 2
WEEK 13

Investigations:
To collect leaves the students could go on a "leaf hunt" on the school campus. Students could also bring two-three leaves from home. Possible sorting rules could be: red, yellow, brown, etc.; red, not red; holes, no holes. They might sort by types of leaves; one color, two colors. There are many sorting possibilities. Children should sort collections several different ways.

Money, Money Money:
Pennies can be used to cover the leaves. If pennies are not available, the leaves could be covered with unifix cubes, color tiles, beans, etc.

Solve This:
The number line is provided to encourage using number lines as a problem-solving strategy. Locating points on a number line is assessed the first nine weeks.

Mental Math

Directions to Students: Number your paper from 1 to 10. Write your answers as the questions are called out. Each question will be repeated only once.

How many sides:

1. three triangles
2. four squares
3. two rectangles
4. three hexagons
5. 6 + 5

Write the sum:

6. 10 + 7
7. 8 + 3
8. 5 + 7
9. 7 + 2
10. 4 + 8

Keeping Skills Sharp

3	△ ○ ||
7	8 cm
8	143
6	22

Let's Write

Write a story about an inchworm measuring your arm.

(2.01a)

Seeing Math

Copy the nets for the rectangular prism and cylinder from the Blackline Masters. Have students construct the solids. With a partner discuss ways they are alike and different. Then share ideas with the class.

(3.01)

What Do You Think?

Winnie and three other students are lining up for the bus. Their names are Jon, Linny, and Vivian. Linny is last and Jon is first.
Winnie is standing next to Linnie.

(1.05)

Investigations

Have children create a recording sheet by dividing their paper into three parts and labeling as shown:

shorter than 1 inch	about 1 inch	longer than 1 inch

Without using a ruler have children find three things for each category. After placing the objects on the paper, children trace to record or write the names of the objects.

(2.01a)

$¢$¢$¢$¢

Shamone found five coins in her lunch box. How much money could she have?

Is there more than one possible answer?

List at least five possibilities.

(1.01a)

Patterns, Patterns, Patterns

12, 15, _____, _____, 24, _____, _____.

(5.01)

The Inch Run

Materials: Scissors, tape or glue stick, two different colored crayons, inch ruler, this sheet duplicated for each pair of students, number cube.

Directions: Cut out the strips and tape or glue them together to make one long strip. Take turns rolling the number cube. Draw a line the number of inches indicated on the number cube with your crayon. Player A draws a line on side A thenumber of inches rolled. Player B rolls and draws a line on Side B. The winner is the person who reaches the end of the strip first.

Side A					
					Side B

(2.01)

Keeping Skills Sharp

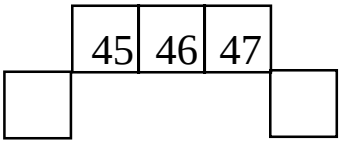
1. 8 + ____ = 11

2. 6 + 6 + 6 = _____

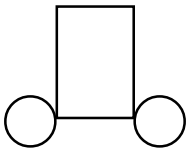
2. 25
+ 7

4. 84
+ 3

5. What's missing?



6. Which shape will this be when it is folded?



7. If * = 10 and • = 1, then what does * * * * • • • • • equal?

8. Thelma had eight crayons. She found four more. Then she gave five away. How many does she have now?

Solve this!

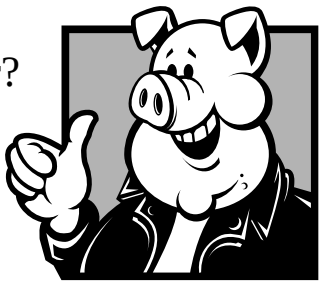
(1.05)

Gilbert's inchworm crawled five inches in one minute. How many inches will he crawl in three minutes?

How many inches will he crawl in 10 minutes?

How many inches will he crawl in 60 minutes or one hour?

Explain how you figured this out.



To the Teacher

Grade 2 WEEK 14

This week has a focus on measuring in inches. This would be a good time to read, Inch by Inch by Leo Lionni. Also How Big Is A Foot by Rolf Myller helps children with the concept of the need for standard measurements.

Investigations:
This would be a good time to show the children "one inch" they have on their body that they can always use to help with estimations. The area between the first two joints on the pointer finger is "about" one inch on a second grader (as well as an adult).

After children have collected their objects, then give them rulers to actually measure the objects to check.

What Do You Think?
Logic problems like this can be solved with students acting out the situation. Nametags can be used to identify the students and classmates can direct their movements.

Solve This:
Children may need a calculator to solve this problem.

Seeing Mathematics:
Use the nets from the Blackline Masters to allow children to create the solid figures. Again, they may need help taping. This activity will take a while so you may want to make them one day and compare the next.

Game of the Week: "The Inch Run"
Variations: The teacher could cut a 12″ x 18″ piece of construction paper into one-inch strips. This could be used as the gameboard instead of the students cutting and pasting the strips.

Partners share a strip. After rolling the number cube the student cuts the strip that number of inches. The second student rolls and cuts the number of inches rolled. When the strip is gone, each student glues the pieces on a sheet of paper and records that measurement. The winner is the person with the largest piece.

Mental Math

Directions to Students: Number your paper from 1 to 10. Write your answers as the questions are called out. Each question will be repeated only once.

What number is:	*Write the sum:*
1. 4 doubled	
2. 6 doubled	6. 7 + 4
3. 10 doubled	7. 8 + 5
4. 2 doubled	8. 6 + 7
5. 3 + 9	9. 20 + 2
	10. 8 + 3

Keeping Skills Sharp

3	54, 58
18	cylinder
32	45
87	7

Let's Write

With a partner, write four different number puzzles. Put these into a class book or in a center for others in the class to solve.

Use the riddle in "What do you think?" to get started.

(1.05)

Seeing Math

(2.01)

1. Draw a line about four centimeters long.
2. Draw a line about four inches long.
3. Draw a line about ten centimeters long.
4. Draw a line about ten inches long.
5. Which is longer: an inch or a centimeter? About how many times longer?

What Do You Think?

Jerry is trying to guess how many dinosaurs are in a jar. The teacher has given three clues. They are:

1. There are more than 54
2. There are fewer than 60
3. It is an even number

What are the two possibilities?

(1.01c)

Investigations

Supply each table with some yarn. Have children agree as a group on the length of yarn to cut to be one-centimeter. Have each child cut one-centimeter of the yarn, then check using a centimeter cube or ruler. When the length of yarn has been made exactly one centimeter, have the children search the room for something one-centimeter long. Share.

(2.01)

$¢$¢$¢$¢

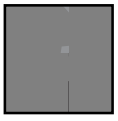
Pat earned quarters for shoveling snow. He plans to go to the store. He can buy

- gum for one quarter
- gummy worms for two quarters
- a marker for four quarters
- a drink for four quarters

What can he buy for ten quarters?

What else could he buy for ten quarters?

(1.01a)



Patterns, Patterns, Patterns

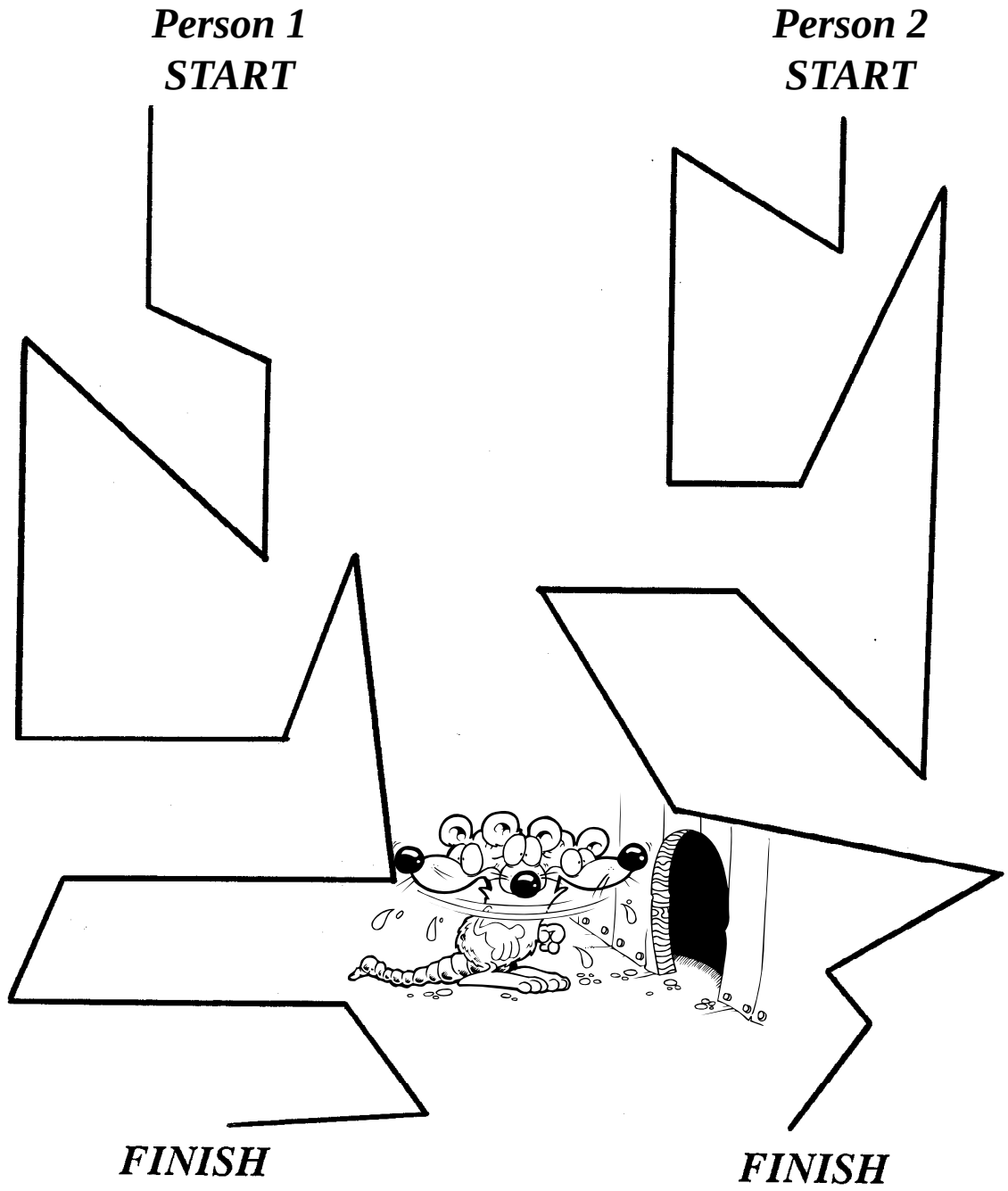
Four shells on the beach, up came a wave. Eight shells! Another wave, 12 shells. If the pattern continues, how many shells after three more waves? How did you solve this problem?

(5.01)

The Centimeter Maze

Materials: Game board, number cube, two overhead markers or crayons of different colors, centimeter ruler

Directions: Choose a path. Roll the number cube and draw a line on your path that many centimeters long. Take turns, the first person to get to the end wins. If you roll a six you lose your turn.



(2.01a)

Keeping Skills Sharp

1. 17 - 8

2. 16 - 9

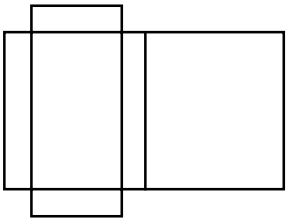
3. 13 - 7 = _____

4. 15 - 6 = _____

5. What's missing?

82	83		85	86

6. What shape will this be when it is folded?



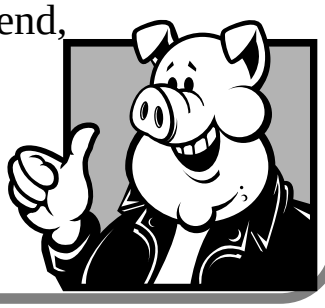
7. If ☆ = 100 ⁂ = 10 and 🖌 = 1, then what does ☆☆☆ ⁂⁂⁂⁂⁂⁂ 🖌🖌 equal?

8. Three ducks are out for a swim. They find nine treats. If they share them equally, how many will each duck have?

Solve this!

(1.05)

Larry, Sherry, Tim and Becki each had a candy bar that was ten centimeters long.
Larry took a bite of his and it left seven centimeters on his candy bar.
Sharry took a four centimeter bite of her candy bar.
If Larry, Sharry, Tim and Becki put their candy bars end to end, how long would it be?



To the Teacher

Grade 2
WEEK 15

This week the focus is on the centimeter and its relationship to the inch. The book Ten Beads Tall is a good one to share this week.

Investigations:
This activity allows children to think and visualize the centimeter and then check their group predictions.

Seeing Mathematics
The relationship of the inch and centimeter is explored here. Hopefully the children will see that it takes about two (more precisely $2\ ^1/_2$) centimeters to make an inch.

Let's Write:
Teachers may want to model a riddle together as a class before having the children write their own. These riddles could be shared at a later time and solved by the class.

Solve This:
Children may need to use Cuisenaire Rods or cut strips of paper to represent the candy bars. Some may be able to solve the problem abstractly.

Game of the Week: "The Centimeter Maze"
For this game, you will need to copy the page for each pair of players. Demonstrate game on the overhead. It may be difficult for some students to draw the lines within the white spaces. To save paper the gameboards could be laminated and students use overhead markers to draw lines.

Mental Math

Directions to Students: Number your paper from 1 to 10. Write your answers as the questions are called out. Each question will be repeated only once.

1. How many tens are in 53?
2. In the number 45, which digit is in the ones place?
3. In the number 87, which digit is in the ones place?
4. In the number 98, which digit is in the tens place?
5. 6 tens + 7 ones
6. 8 tens + 2 ones
7. 4 tens + 5 ones
8. 9 tens + 8 ones
9. 3 tens + 8 ones
10. 2 tens + 10 ones

Keeping Skills Sharp

9	74, 84
7	rectangular prism
6	362
9	3

Let's Write

Write a story about

3 + 6 + 5.

(1.05)

Seeing Math

Create overhead transparencies of the nets for a cube, a rectangular prism, a cylinder, and a cone.

Flash the nets on the overhead individually and allow children to think about which solid they will be when folded. Discuss.

(3.02)

What Do You Think?

Have children estimate how many unsnapped Unifix cubes it will take to fill a sandwich size Ziploc bag. The bag must be full and must be able to be zipped shut. Now put in ten Unifix cubes and have children refine their estimates. Finish filling the bag and snap into 10's and 1's to count. This could then be repeated with other sizes of bags.

(1.01e)

Investigations

Print your name. How many letters in your name have a line of symmetry? What letters would have more than one line of symmetry?

(3.03a)

$¢$¢$¢$¢

Gwen has 48¢. How much would she have if she found a dime?

two dimes? three dimes?

How much would she have

if she lost a dime? two dimes?

three dimes?

(Remember to begin with 48¢ each time.)

(1.01a)

Patterns, Patterns, Patterns

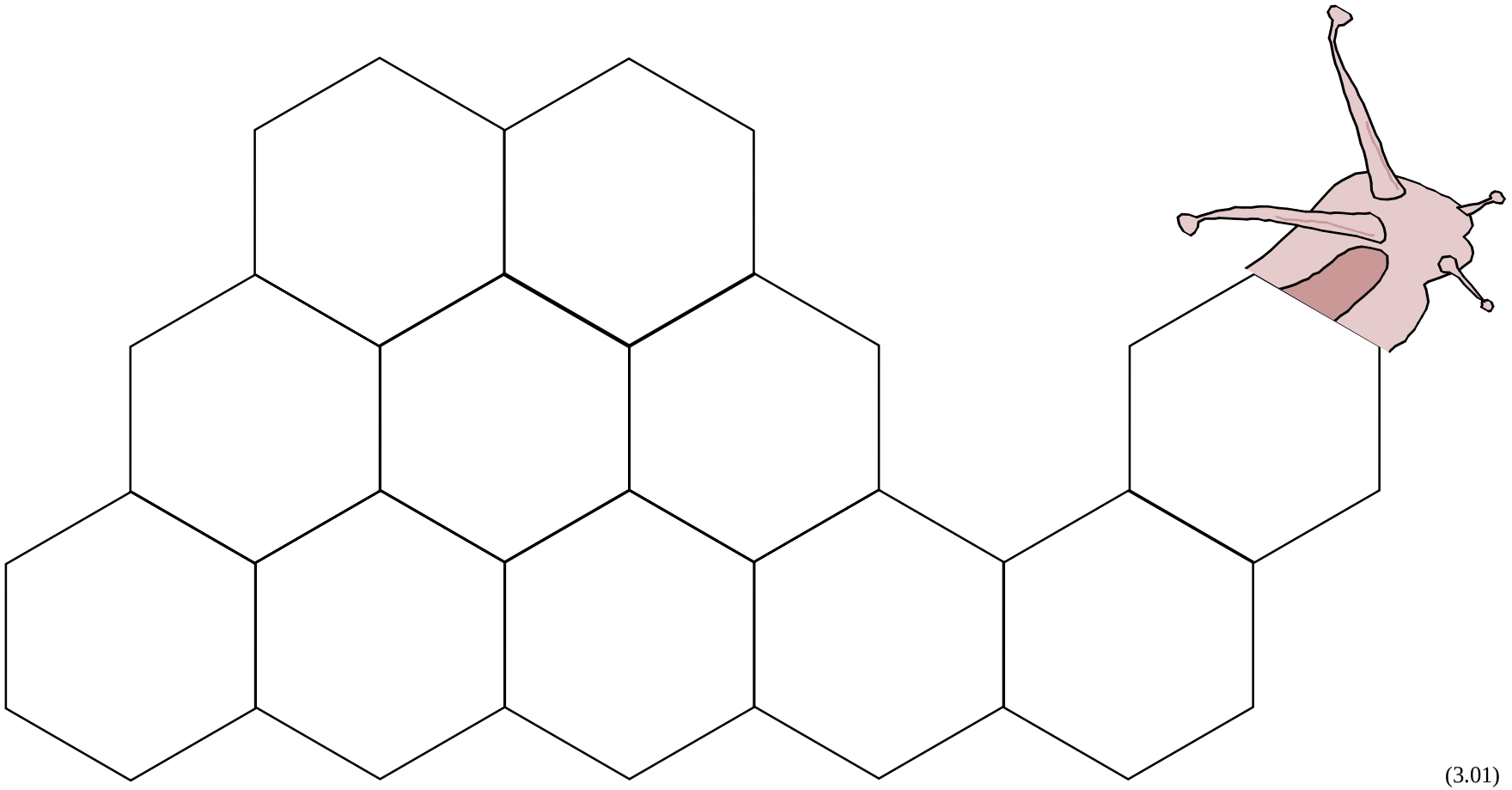
What is the rule?

110, 120, 130, _____, _____, _____

(5.01)

SNAIL NIM

Number of Players: Two
Materials: Gameboard, pattern blocks
Directions: Players take turns placing triangles, parallelograms, trapezoids and hexagons on the snail. The person who places the last block loses.
Variation: Person who places the last block wins.



(3.01)

Keeping Skills Sharp

1. 6 + ___ = 14

2. ___ + 8 = 17

3. 42
   + 10

2. 86
   - 10

5. What's missing?

86	87	88		90

6. What shape is a spool of thread?

7. Use the symbols to show 424.
   ❍ = 100 ❑ = 10 T = X

_____ Write on the line

8. Gena had four stuffed dogs on her bed. How many stuffed dog legs were on her bed?

Solve this!

(1.05)

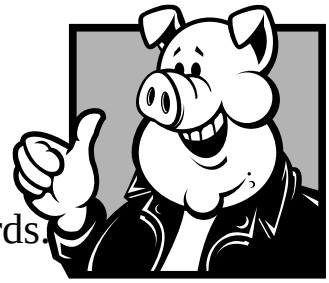
There were eight children playing. Half of them wore hats and half wore gloves.

How many hats were there?

How many gloves?

How many pairs of gloves?

Explain your answer using numbers, pictures, and words.



To the Teacher

Grade 2
WEEK 16

Investigations:
After students have identified letters with symmetry they might use this new "alphabet" to write words or sentences. The same might be done with the "non-symmmetric alphabet.."

Seeing Mathematics:
For this activity you will need to prepare overhead transparencies of the nets of the geometric solids. These are found in the Blackline Masters section.

What Do You Think?
To provide opportunities for estimating, you may want to fill the bag with other objects you have in your classroom as well. Children need many opportunities with a variety of materials to help build number sense.

Number Concentration:
Lay your concentration cards face down in five rows of six. Take turns turning over three cards. The number must be matched with the number word and the picture of the number. Three cards make a match. Before playing the game with cards face down, you may want to let children make the matches face up since they are matching three cards. (Objective 1.04)

Mental Math

Directions to Students: Number your paper from 1 to 10. Write your answers as the questions are called out. Each question will be repeated only once.

	Write the value:		***Write the sum:***
1.	4 nickels	6.	8 + 6
2.	5 dimes	7.	5 + 9
3.	2 nickels + one penny	8.	12 - 4
4.	3 dimes + 4 pennies	9.	16 - 8
5.	6 dimes + 8 pennies	10.	9 - 5

Keeping Skills Sharp

8	89, 98
9	cylinder
52	❍❍❍❍ ❑❑ ××××
76	16