



### Nifty Numbers

Count a variety of objects in the classroom such as:

- windows
- children with lace-up shoes
- boys/girls
- children with glasses
- children wearing red, etc

(1.01a)

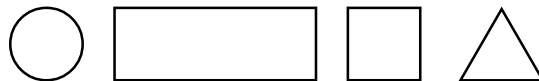


### Brain Teaser

There are four shapes of cookies on the plate. Joe likes cookies that have

- corners
- four sides
- four equal sides

Which cookie will Joe choose?



(3.03)



### Look And See

Play "I Spy" in the classroom to locate and identify plane geometric figures. After naming the object, have the child tell the shape.

**Teacher:** "I spy something round with numbers on it."

**Child:** "Clock, circle."

(3.03)



### Let's Explore

**Questions:** What color are your eyes? Do we have more brown eyes, blue eyes, or green eyes in our classroom?

**Prediction:** Have each child predict which eye color will occur most often.

**Graphing:** Have children draw pictures of their eyes on a small piece of paper. Then each child will place the picture on the graph.

**Discussion:** Talk about the data on the graph. Ask the children specific questions about the graph, focusing on comparison of number of eyes and number of children as well as the most popular color.

**Other Graphing Ideas:** Hair color, how you get to school, or number of members in your family.

(4.01)



### Patterns Galore

Have the children sort themselves into two groups according to various attributes, such as boys - girls, wearing red - not wearing red, button up shirt - pullover shirt, pockets - no pockets. These sorting activities provide a good opportunity to introduce or review concepts of more, less and same.

(5.01)



### Writing About Math

Students make booklets "My Book of 5." On each page write the numeral 5 and glue, draw, or stamp objects in sets of five.

(1.01a)

# Tall Towers

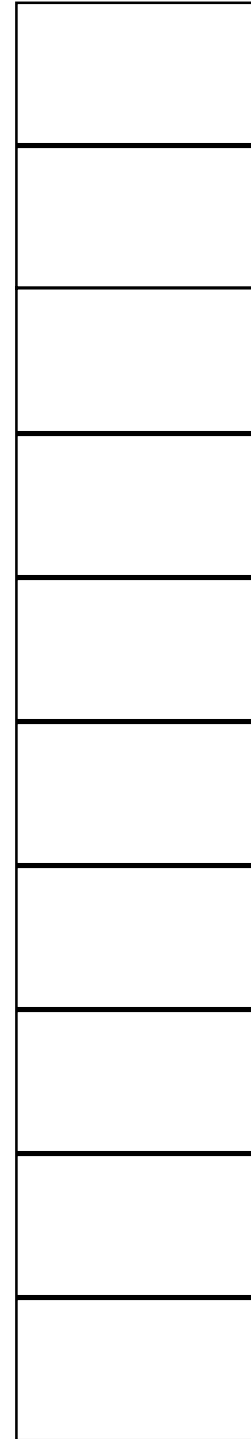
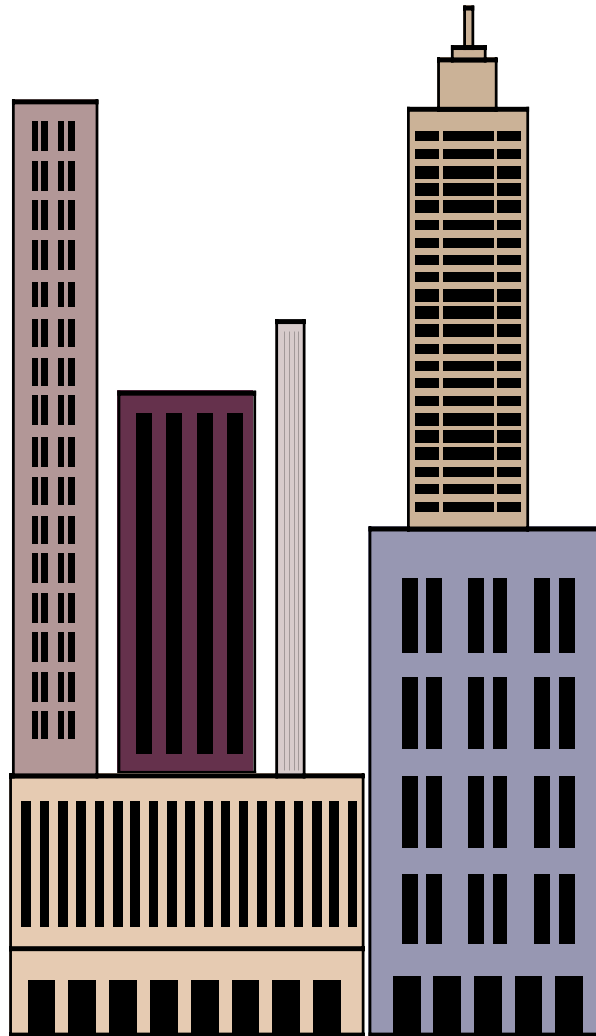
Number of Players: Two

Materials: Connecting cubes, markers, and a deck with three sets of cards numbered 1- 9, gameboard

Directions: Players each draw a digit card and build a tower with that many cubes. Compare towers. The player with the taller tower wins one marker. The first player to earn ten markers wins the game. (Markers may be beans, two-color counters, other cubes, etc.)



*Player 1*



*Player 2*

(1.01d)



Dear Parents,

Parents and children have wonderful memories of sitting together and sharing a good book. Very few have such memories of math flash cards or pages of math problems. There are ways to make learning mathematics at home both fun and beneficial.

Where is mathematics in the home? It's everywhere! Think about ways you and your family can learn mathematics in your home.

- sorting silverware - placing a knife, fork and spoon at each place at the table
- setting the alarm clock
- calling someone to come inside "in ten minutes"
- changing channels on the TV - going up and down
- keeping a schedule of after-school activities
- counting number of steps in your house
- recognizing numbers on and shapes of signs as you travel

Your first grader will benefit more from hands-on involvement than from strictly paper and pencil activities. Effective learning takes place when a child has the opportunity to experience how numbers work as they build number concepts. At school we will strive to provide these types of meaningful experiences for learning. Help us make your child aware of these mathematical connections in all parts of their daily life.

Sincerely,

# To the Teacher ..

Grade 1

WEEK  
1

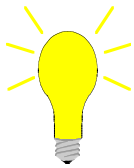
## About this week

### Patterns Galore:

As children make comparisons they need to verbalize the differences by attribute. Comparing, sorting, and classifying are prerequisites for patterning.

### Writing About Math:

Make booklets by stapling newsprint between construction paper covers, or use the “Burrito Book” directions in the *Blackline Masters* section.



These weekly activities provide rich opportunities for assessment. Assessment is an integral part of instruction and is designed to put you in touch with students’ thinking. Your observations, informal interviews, and students’ drawings are important sources of information.

🍏 Remember to start a folder with each student’s work. A date stamp is a quick way to label each piece. Students enjoy stamping their own papers.

🍏 Talk with others in your system about how they keep ongoing, anecdotal records. Some teachers keep cards on each child; others prefer a chart with all students listed on one page. The goal is for you to be able to describe clearly what your students understand. Assessment should involve multiple instances and many different formats.

### Mental Math

1. Put one finger on your nose and one finger on your belly button. Write how many body parts you are touching.
2. Show me five; write the number that is one less than five.
3. How many elbows and knees do you have all together?
4. How many clocks are in our classroom?
5. How many toes are on one foot?
6. What number comes after five?
7. How many sides on a square?
8. What number comes next: 4, 5, 6, \_\_\_\_?

### Powerful Potpourri

This week’s Powerful Potpourri is a parent letter that you may duplicate and send home.



### Nifty Numbers

Produce sounds for children to count such as:

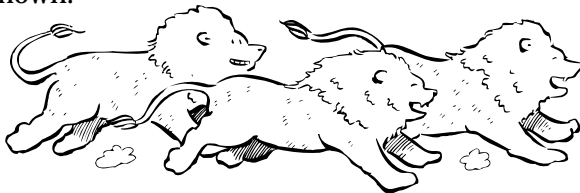
- claps/snaps/taps
- dropping objects into a container
- bouncing a ball
- ringing a bell
- playing a drum, etc

(1.01a)

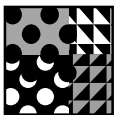


### Look And See

Have a relay race in which students race to name geometric shapes (2- and 3-d) as they are shown.



(3.02)



### Patterns Galore

Call five children to the front of the room. Have the class sort the five children into two groups and explain their rule. Sort again in a different way. Sort children without telling them the attribute and have them figure out the rule.

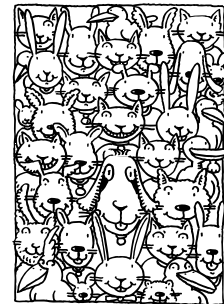
(5.01)



### Brain Teaser

Sue wanted to buy a pet. She was choosing among a dog, a bird, a cat, and a rabbit. She chose a pet that:

- is furry
- has four legs
- does not hop
- says “meow”



Which pet did she choose?

(5.01)



### Let's Explore

Use school and classroom rules as the basis for a sorting activity. Sort into two categories -- **Rules for Safety** and **Rules to Help Us Learn**. Ask students to generate and classify rules in these categories. *Examples:* Walk in the classroom and store bookbag in an appropriate place are **Rules for Safety**. Walk quietly in the hallway and listen to directions when they are given are **Rules to Help Us Learn**.

(5.01)

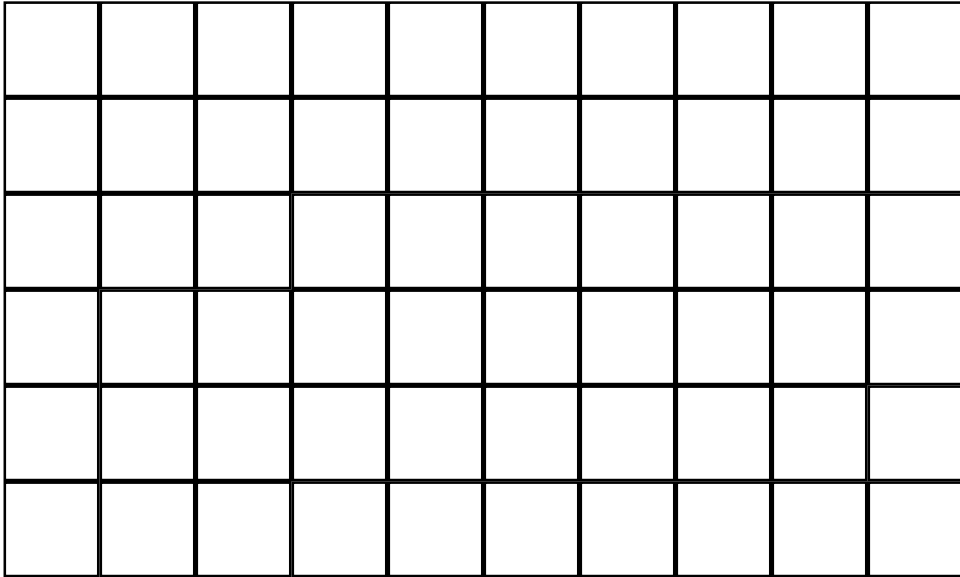


### Writing About Math

As a shared writing activity, generate a list of ways students were sorted in Patterns Galore. Have students record and illustrate one of the ways in their journals.

(5.01)

# Color Caper



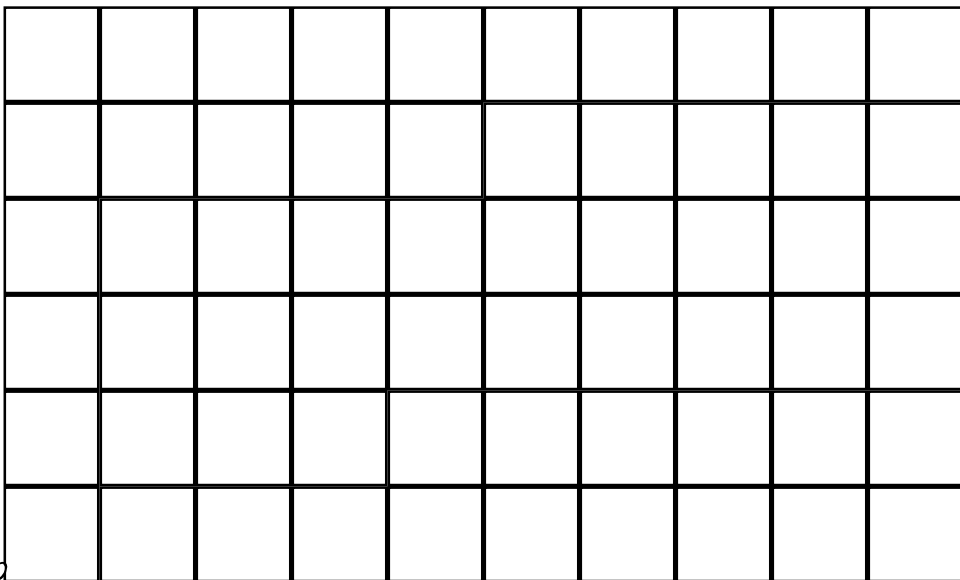
*Player 1*



**Materials:** Gameboard, one die, crayons.

**Number of players:** Two

**Directions:** Players take turns rolling a die and coloring that many squares on their gameboard. The winner is the player whose gameboard is completely colored first.



*Player 2*



(Counting activity to 30)

Drawing One More

(1.01d)

Name \_\_\_\_\_

4	7
5	3

# To the Teacher ..

Grade 1

WEEK  
2

## Look and See:

As an extension, include a rectangle, square, triangle, and circle. Continue to ask “show me” questions about the shapes. Remember the importance of having the children verbalize the names. Verbalization helps to increase mathematics vocabulary and concepts. Teachers and students alike need to get in the habit of using correct terminology.

Journals are an integral part of the mathematics classroom. They allow students to reflect upon and clarify their thinking through pictures, words, and/or numbers. Writing in journals allows students to communicate their understanding of concepts and provides excellent documentation for assessment.

Journals need to be on full-sized paper to allow ample space for recording. Many teachers use spiral-bound notebooks for this purpose.

🍏 **Fishing for Numbers** is a game played by matching numbers similar to “Go Fish” (cards are included in the Blackline Masters).

*Number of Players:* Two to three.

*Directions:* Shuffle cards. Deal each child five cards. The remaining cards are placed in a stack in the middle face down. The first player asks any other player for a number he has in his hand. If the person has the card, he must give it to the asker. As pairs are made, they are laid to the side. If he does not have it, he says “Fish for Numbers” and the asker must draw from the stack of cards. The winner is the person with the most matches at the end of the game.

## Mental Math

1. Listen carefully. (Teacher claps four times.)  
How many claps did you hear?
2. Show me six.
3. Which number is greater, five or one?
4. What number comes after four?
5. How many legs does a bird have?
6. How many sides does a triangle have?
7. What number comes next...2,3, \_\_\_?
8. Which number is less, four or two?

## Powerful Potpourri

*Directions:* Work with students to model numbers and then show one more.

On the worksheet children are to draw one more object than the number given. They can choose to draw the same pictures or different ones for each set.



### Nifty Numbers

Model representing numbers in a variety of ways.

Example: Ten can be represented as the numeral 10, number word, tally marks, objects, children, minutes, fingers, pictures, etc.

(1.01a)



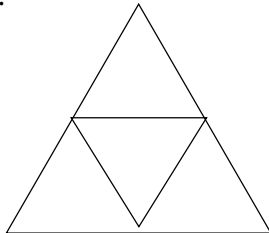
### Brain Teaser

There are three lily pads in the pond. There are two frogs on each lily pad. How many frogs are there in all? Show how you solved the problem. (1.04)



### Look And See

How many different triangles are there in the diagram below?



(3.01)

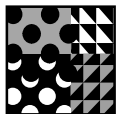


### Let's Explore

**Question:** There are nine houses on my street. Four are painted blue. Two are red brick. How many are not red brick? How many are not painted blue?

**Activity:** Give students Unifix cubes, paper and crayon for mapping out the houses on the street. Have students work together to find the answer. Allow them to solve the problem without your guidance.

**Discussion:** Is there more than one way to solve this problem? Ask different groups to tell what they did. (1.04)



### Patterns Galore

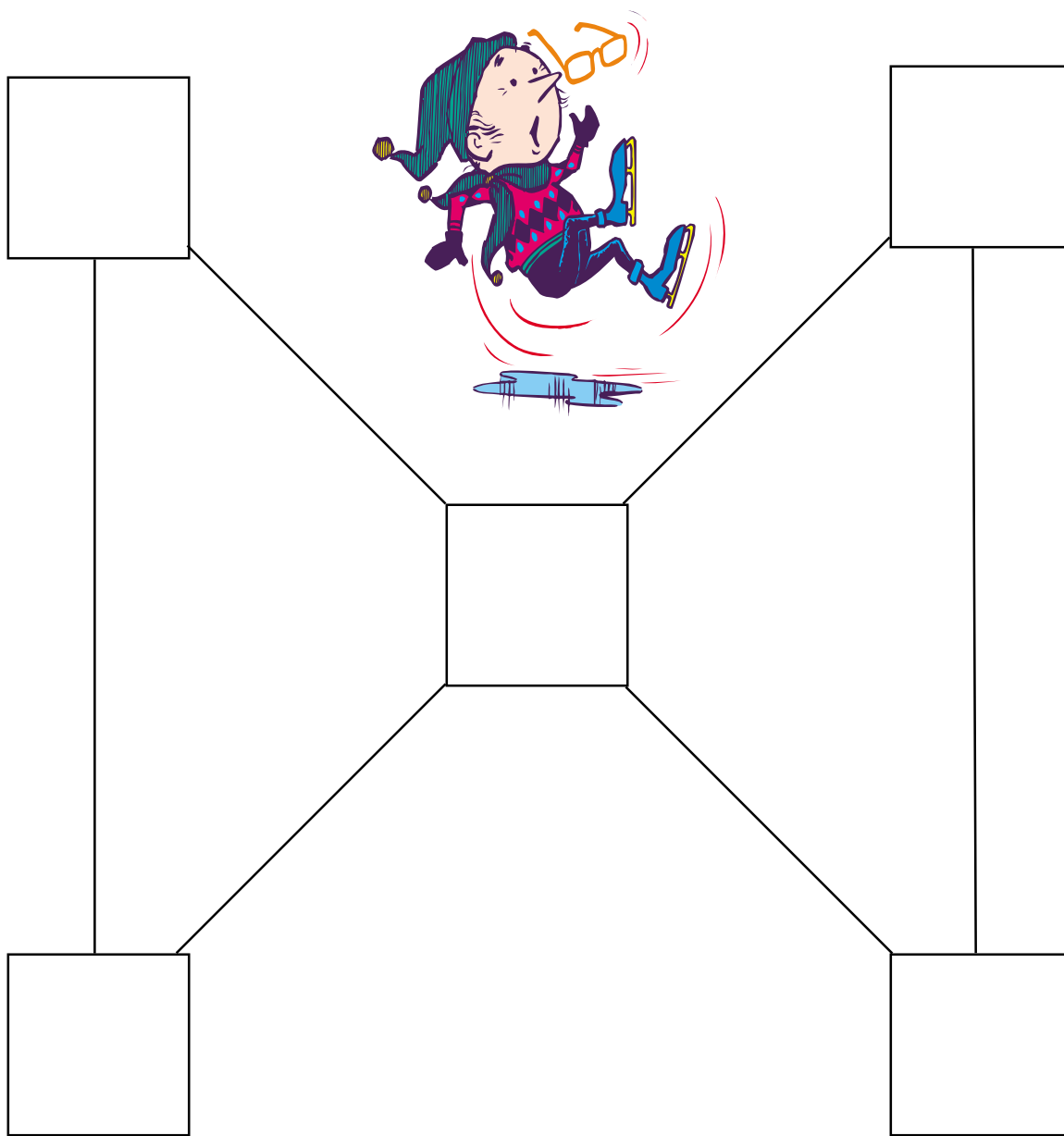
Show class a pattern of red, red, yellow, blue, red, red, yellow, blue shapes. Suggest an action for each pattern part (clap, clap, snap, stomp, etc.) Have children demonstrate movements for the pattern. Allow them to provide other actions for the same pattern. (5.03)



### Writing About Math

Have each child record three different ways to show ten through words, pictures, numbers or object representation. (1.01a)

# Slide It



**Materials:** Gameboard, markers.

**Number of players:** Two

**Directions:**

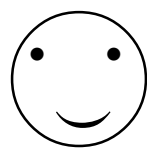
1. Each player has two markers which look the same but are different from his/her partner's two markers.
2. Players take turns placing markers on opposite (diagonal) corners until all four markers are placed.
3. Take turns sliding one marker of your own along a line into an empty square. State the direction in which you moved.
4. There is no jumping and each square may contain only one marker at a time.
5. You win by blocking your partner so that he/she can't move.

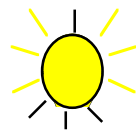
(Spatial task or puzzle)


### Numbers and Sets


(1.01a)


Name \_\_\_\_\_


Draw 6 blue 

Draw 8 yellow 

Draw 5 green 

Draw 9 purple 

Draw 10 red 

Draw 7 orange 

# To the Teacher

Grade 1

WEEK  
3

## Daily Calendar Math

Setting up a daily calendar routine will allow children an opportunity to review many concepts throughout the year. The daily discussion will help children to internalize important concepts in a fun and purposeful way.

- The calendar is displayed and the days are put up daily with a different pattern each month. The vocabulary of *yesterday*, *today*, and *tomorrow* are reviewed. These are also written out for the children to read each day.
- The days of the school year are tallied and groups of ten are then circled.
- Children tell the teacher everything they can think of that represents the number of days they have been in school.
- Straws are added one by one for each day and then bundled and moved to the tens place.
- A weather graph is recorded each day
- The birthdays for the month are displayed.
- A “tooth” is provided for those children who lose a tooth to record or tally.
- The temperature is checked each day and colored in on a chart.
- Other activities may be added or deleted as the school year progresses. Activities may include ten more and ten less, telling time, reviewing geometric shapes or solids, etc.
- You may prefer to start with only two or three activities and build on your calendar throughout the year.
- The 100th day of school provides for a special celebration by having children bring in collections of 100 and planning a day of activities with 100 in mind.

Refer to *Blackline Masters* section for sample calendar boards.

### Mental Math

1. Listen carefully. (Teacher snaps fingers six times.)  
How many snaps?
2. What number comes before three?
3. Which number is less, eight or three?
4. How many eyes do two cats have?
5. How many toes do you have?
6. How many sides are on a trapezoid?
7. If we eat two cookies for snack and one cookie at lunch, how many cookies did we eat in all?
8. One dog + two cats equal how many pets?

### Powerful Potpourri

Work with students to make sets.

On the worksheet, children are to draw the sets of the numbers given.



### Nifty Numbers

Using the following chant, students will model addition facts to ten:

Ten little fingers quiet as a mouse,  
some in the house some in the town  
six are up and four are down.

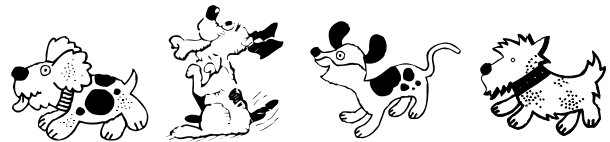
Repeat using different combinations of ten.

(1.03)



### Brain Teaser

Curly, Flipsy, Buzzy and Topsy are sitting in a row. Topsy is first. Buzzy is last. Curly is between Topsy and Flipsy. Who is third?



(3.04)



### Look And See

You and three of your friends are going to share a pizza. Each of you will get the same size piece. Draw a picture to show how you will share the pizza.

(3.04)



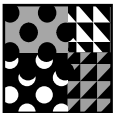
### Let's Explore

Have a "Cookie Day" by asking parents to send in a bag of cookies or even some homemade cookies. Give each table one of each type of cookie. Have the children share each cookie so they can taste each type. Finally, have the children draw their favorite-tasting cookie on an index card. Use these to make a class graph "Best Tasting Cookies."



The Doorbell Rang by Pat Hutchins.

(4.01)



### Patterns Galore

Illustrate A A B B C pattern to the children by using objects found in the classroom. Give several examples of correct pattern repetition. Have children record and continue the pattern in their math journal.

(5.03)

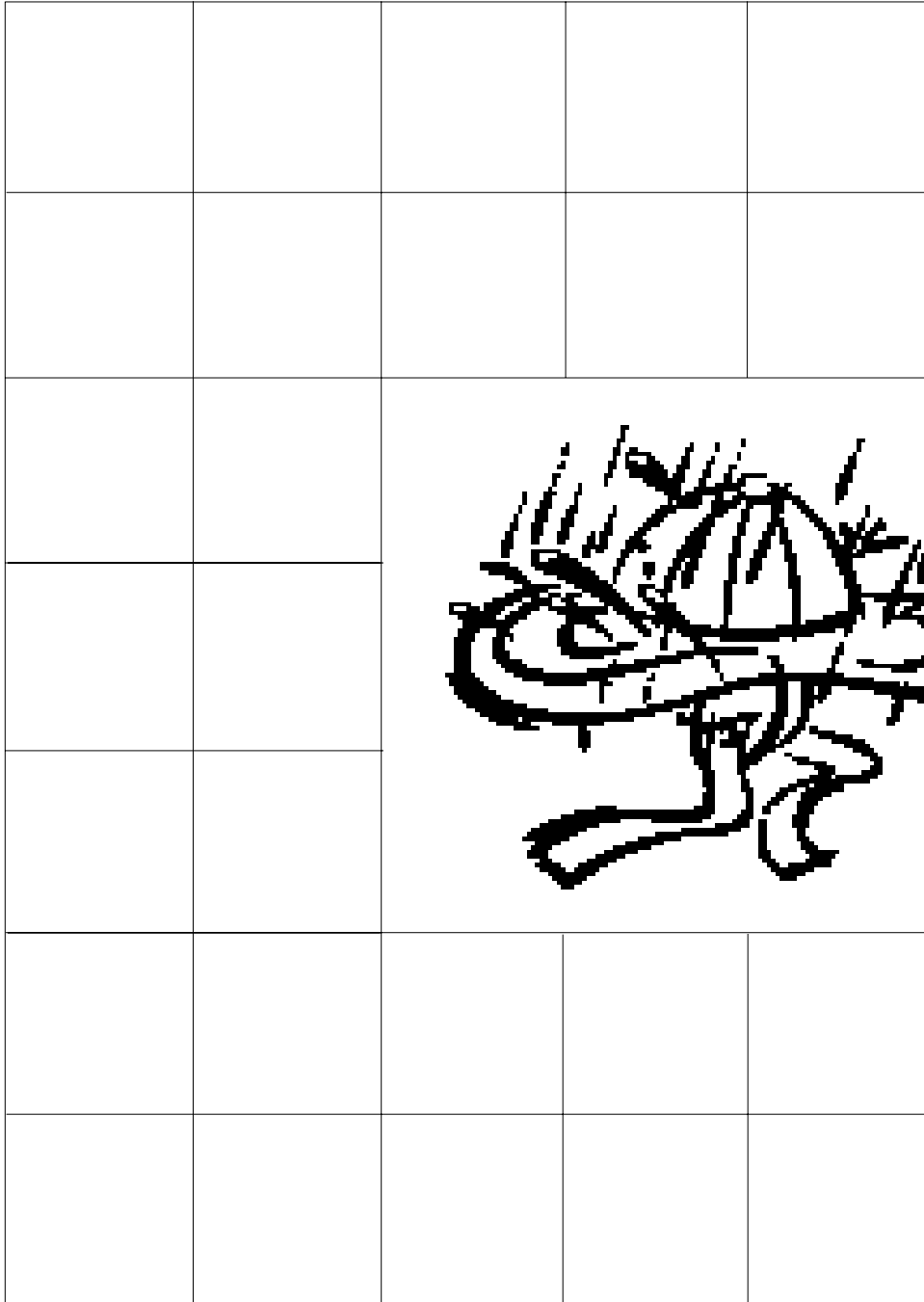


### Writing About Math

My favorite cookie was \_\_\_\_\_  
because \_\_\_\_\_.

(2.01c)

# Cover Up



**Materials:** A gameboard for each player, Unifix cubes and a die.

**Number of players:** Two or three.

**Directions:** Children take turns rolling a die and collecting that many Unifix cubes for their own gameboards. The cubes are placed on the big C. At each turn students tell how many they have on their gameboards and tell how many more they need to cover the board completely. The first player to exactly cover the board is the winner.

(1.03)

Directions: On your hundred board, find the number that I am telling about and color that space. Listen carefully to your directions. You may use any color crayon.

1. Color the number that is directly **over** the number 36.
2. Color the number **to the left of** 13.
3. Color the number that is directly **under** the number 49.
4. Color the number that is **between** 22 and 24.
5. Color the number that is **to the right of** 2.
6. Color the number directly **over** 47.
7. Color the number **to the right of** 86.
8. Color the number that is **one more than** 16.
9. Color the number that is **2 less than** 78.
10. Color the number that is **5 more than** 62.



(1.01d)

# To the Teacher ..

Grade 1

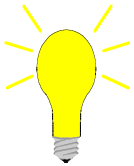
WEEK  
4

## Writing About Math:

Write a story about a time when you had a dozen cookies to share equally with four of your friends. Draw pictures to show how you made fair shares. The Doorbell Rang by Pat Cummins is a great way to introduce this activity.

## Let's Explore:

Each time the class discusses results of a bar graph, be sure to include questions focusing on subtraction by comparison. Example: How many more people like chocolate chip cookies than Oreo's?



Asking the right question is an art to be cultivated. As children work with patterns and relationships, think about using questions such as these: What is the relationship of this to that? What is the same? What is different? Is there a pattern? What would happen if you moved this part? Have we tried to solve other problems like this one? Can you find other patterns in the room like this one? How do you know it is a pattern?

🍏 Pattern blocks may be sorted and packaged in ziplock bags for easy distribution to groups or for individual children to keep at their desks. By providing a great deal of free exploration with the materials, children will be ready to complete the structured lessons you plan. Students can sort and package while waiting for late buses or before school.

## 🍏 To Think About:

When you are interviewing a child to assess mathematical understanding, the object is to try to get a picture of the student's thinking rather than to see whether the student can provide a predetermined "correct." answer. You are looking for the depth of the student's understanding. Is she/he parroting back memorized responses or has she/he personally interacted with ideas so that she/he understands their meaning.

## Mental Math

1. I have two red apples and three yellow apples. How many apples all together?
2. What number comes before eight?
3. Which number is greater, three or nine?
4. What is one more than nine?
5. How many legs on two dogs?
6. Two dogs and a robin have how many legs?
7. One dog + two cats equal how many pets?
8. Write the difference, five minus one.

## Powerful Potpourri

Make a copy of the hundred board in the Blackline Masters section for each child. Read aloud the directions at the top of the page. Have students color in the squares following your directions.