Let's Write

Write a story about apples for this number sentence.

$7 + 2 = 9$.

(1.04)

Seeing Math

Can you imagine what my pattern block shape looks like? Build what I describe:

1. Two green triangles side by side, but not touching.
2. The red trapezoid above the triangles.
3. The yellow hexagon below the triangles.

Is there more than one way to build what was described?

(3.01)

What Do You Think?

Mr. Jones dumped a load of clean socks on the table and sorted them into piles. He had six brown socks, five green socks, five black socks, and three blue socks. How many pairs of socks can be put in the dresser? Which socks were lost? Show how you solved the problem.

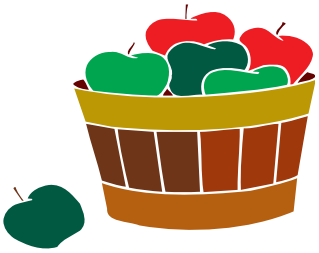
(1.05, 1.06)

Investigations

Taste different types of apples.

Decide which one is your favorite.

Graph the class results.



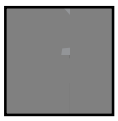
Can this be changed into a Venn diagram problem?

¢$¢$¢$¢

Sue has seven coins in her pocket. She has 70¢. What kind of coin does she have?

Miguel had 45¢ in his pocket. He has nine coins. What kind of coin does he have?

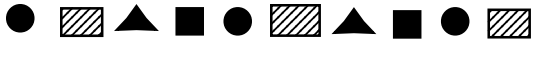
(1.01a)



(5.01)

Patterns, Patterns, Patterns

What will be the 20th shape? How do you know?



Easy As Pie!

(1.04)
Materials: an Easy Pie gameboard, and ten tokens (beans, bingo chips, etc.) for each player.
Number of Players: Two - four
Directions:

1. The player whose last name is closest to the end of the alphabet, goes first.

2. The first player takes one of his tokens and places it on any number on the gameboard and says the number aloud.

3. The next player places one of his tokens on any number he chooses and mentally adds it to the previous number and says the sum aloud.

4. Each player follows in turn by placing one of his/her tokens on another number and mentally adding it to the previous total and saying the sum aloud.

5. The winner is the first player to reach the target sum of 25.

Variations:

1. Different target sums could be decided on ahead of time, with the winner being the first player to reach that sum.

2. Players could begin with a target number and then subtract the numbers on which they place their tokens. The winner would be the first player to reach zero.

3. A regular die could be used as well as different-colored tokens for each player. As each player rolls the die, he/she covers the matching number with one of his/her their tokens. If a number is rolled and all corresponding numbers are covered, the player loses that turn. The winner is the player with the most tokens on the pie.

4. Each player would need a different color of tokens. Math problems whose answer equals the numbers on the pie could be printed on cards. A player draws a card, gives the answer and places one of his tokens on that number if the answer is correct. If all the corresponding numbers are covered, the player loses that turn. The winner is the player with the most tokens on the pie.

5. The pie without numbers could be used for other skills that need practicing, such as reading, language arts, science, social studies, etc.

Objective: 1.04
Memorize addition and subtraction facts to 18.

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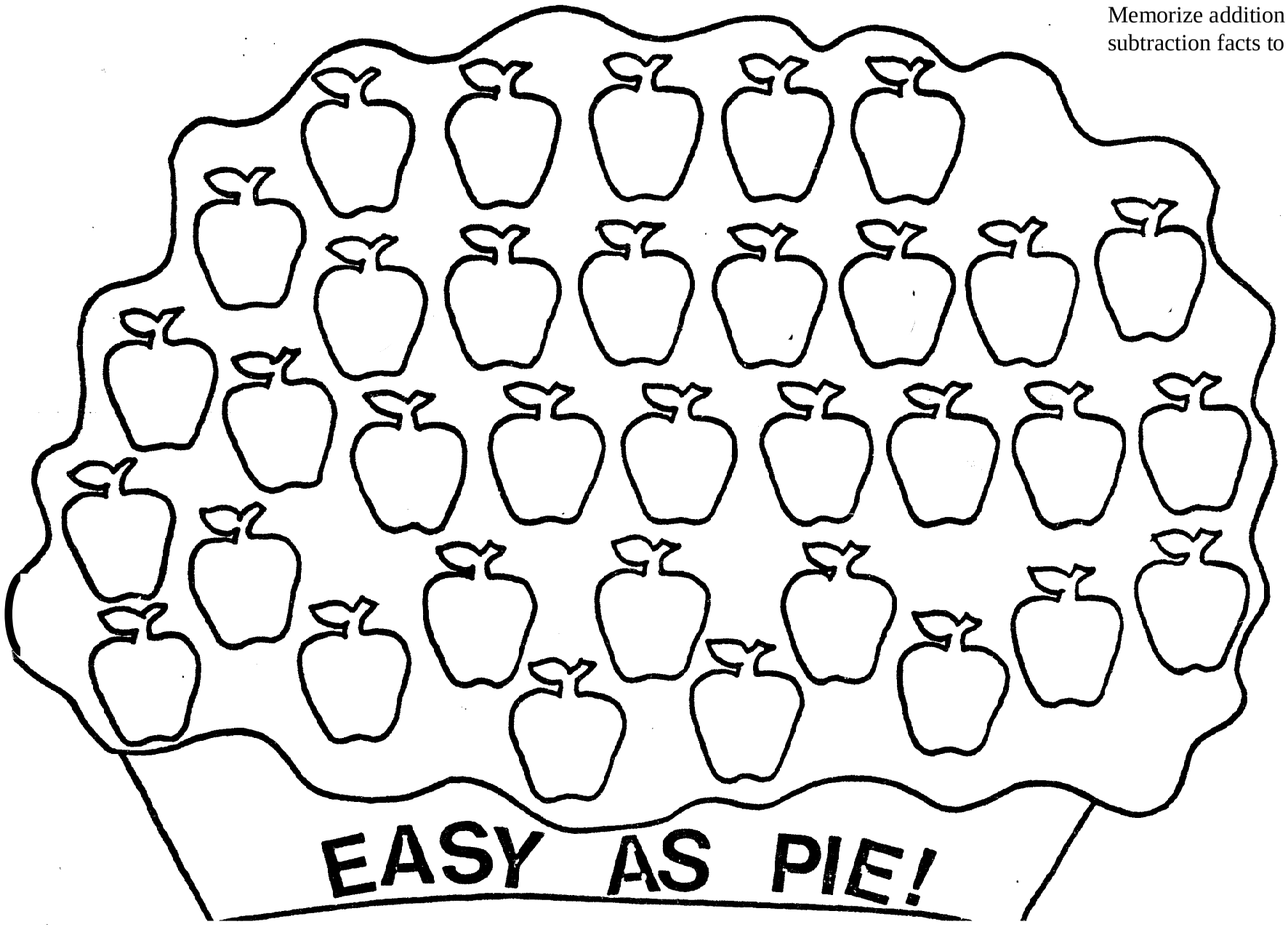


Keeping Skills Sharp

1. 5¢ + 10¢ = _____

2. 3¢ + 5¢ = _____

3. 4
   + 8

4. 6
   + 6

5. 32, 30, 28, 26, _____

6. Five dimes = _____

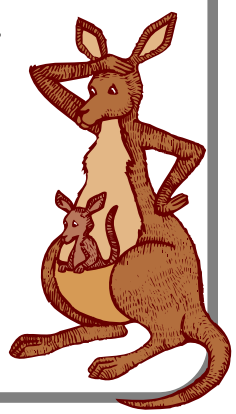
7. What number is 10 more than 81?

8. Mary has 12 apples. She gives half to Sam.
   How many apples does Sam get?

Solve this!

To solve this problem, you may want to use red, yellow and green unifix cubes to help.

There are three apples. One is green, one is red and one is yellow.
The yellow apple is not first. The green apple is last.
Write the apple color on the correct blank.



_____ _____ _____

first second third

To the Teacher

Grade 2 WEEK 5

Investigations:

Bring several types of apples to class. Three types will work well (red, yellow, green). Slice the apples. You can get 6-8 slices per apple. Have the children taste the different types and decide on their favorite. Use tally marks (𝍸) to record the class results. Have the children record the results on a graph. Graph paper is in the Blackline Masters. Discuss the results. Have the students write three observations about the class results. Examples: Eight children prefer red apples. Three more children prefer yellow than green. Twenty-six people voted.

Patterns/Extensions:

Slice several apples horizontally. Have a child dip them into different colors of paint and stamp a pattern. Example: YYGYYG. They can label their pattern with letters.

Seeing Mathematics:

There are several ways students can imagine this configuration

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 number that is 2 more than:

1. 6
2. 19
3. 8
4. 40

Write the number that is 2 less than:

5. 5
6. 7
7. 13
8. 34

Write the number that is 10 more than:

9. 11
10. 2

Keeping Skills Sharp

15¢	24
8¢	50¢
12	91
12	6

(2.01)

Let's Write

Write a story about a special birthday present.

Tell the size of the box it comes in as part of your story.

Seeing Math

Four children were going to the movies. They were dressed in red, yellow, blue, and green. They decided to go in the door in a certain order. Here are clues about their order.

- The red is not first.
- The yellow is between the green and red
- The blue is last.

(1.05)

What Do You Think?

Solve these math puzzles, then write puzzles for your friends:

Scott has four pets. He has a fish, a hamster, a rabbit and a bird. Scott's favorite pet has four legs. It is furry. It is very small. Which pet is Scott's favorite?

Lynn is trying to guess how big her birthday box is. Her mother gives her these clues: It is more than ten inches long. It is less than 13 inches long. It is not 6 + 5 inches long. How long is it?

(1.01c)

Investigations

Investigate the length of things in your classroom. Use connecting cubes.

Three things less than five cubes long

Three things eight cubes long

Three things greater than ten cubes long

Record your results on paper.

(2.01)

$¢$¢$¢$¢

Tom had five nickels. His dad gave him six more nickels. How much money does he have now?

Sol has 38¢. His dad gives him two dimes.

How much money does he have now?

(1.01a)

(5.01)

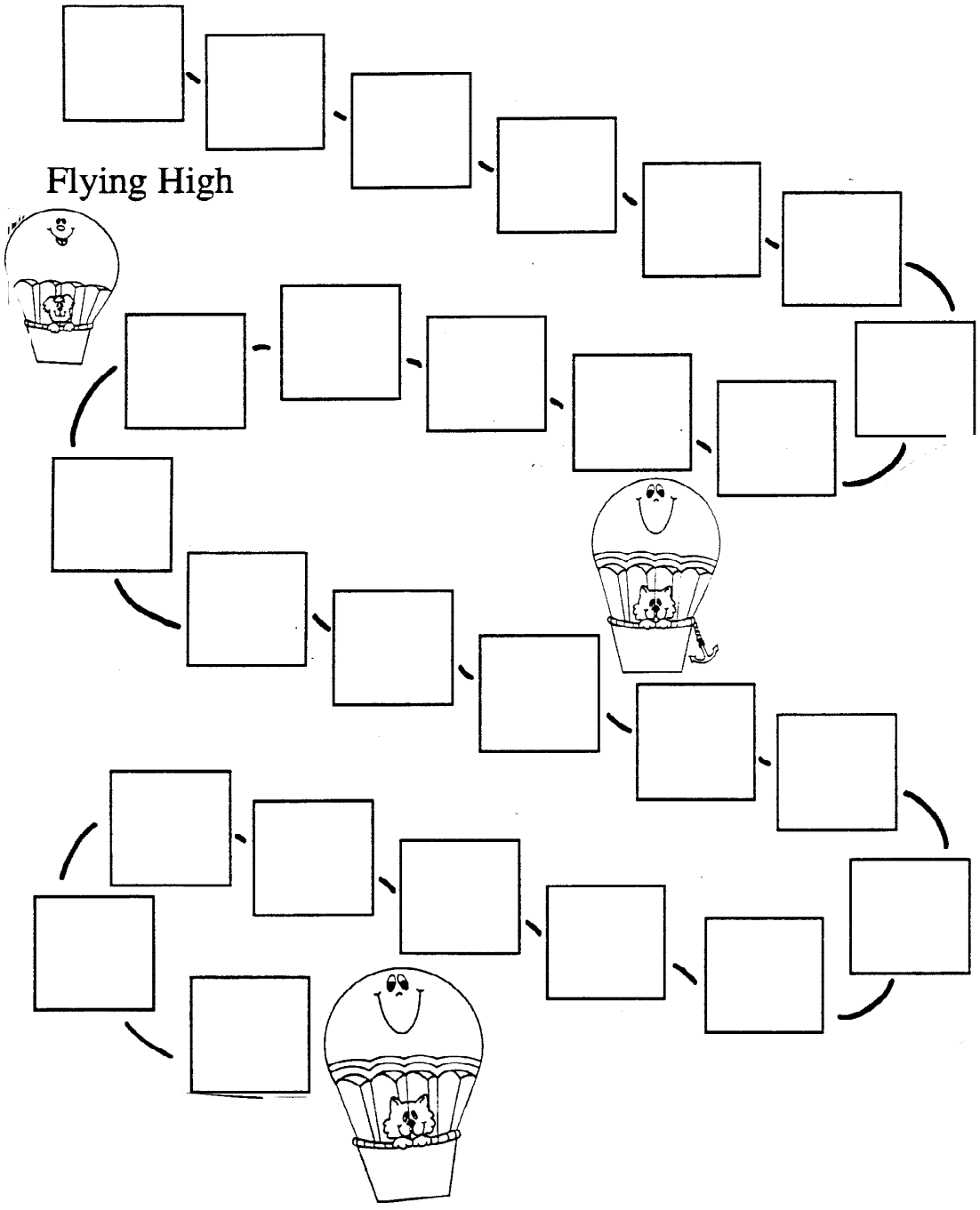
Patterns, Patterns, Patterns

Draw the next three figures in the pattern.

Up, Up and Away

Materials: Game board, set of cards (hundred board cut apart); hundred board

Directions: Place all cards face down on the table. Players take turns drawing a card. Place the card on the cloud (square). The next player places a card before or after that card according to sequence. Play continues until all the cards are at the correct place. The cards may be moved as the game progresses. Check the path going up by using



Ground Zero

Keeping Skills Sharp

1. 10 - 2

2. 10 - 8

3. 10 - 6 = _____

4. 10 - 3 = _____

5. 71, 73, 75, 77, _____

6. How many inches long is this line?

_____

7. ❒❒❒❒❒❒❒❒❒❒
❒❒❒❒❒❒❒❒❒❒ ❒ ❒
❒❒❒❒❒❒❒❒❒❒ ❒ ❒
❒❒❒❒❒❒❒❒❒❒ ❒ ❒
tens ones

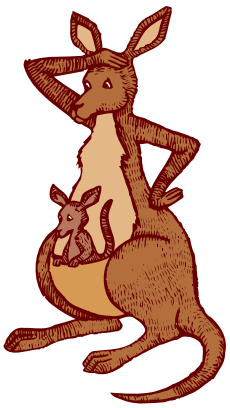
Write the numeral.

8. On Monday I earn 5¢. On Tuesday I earn 15¢. On Wednesday I earn 25¢. If this pattern continues, how much money will I have on Saturday?

Solve this!

(1.05)

Dwight wants each of the six bears to have three pieces of celery. He plans to cut each stalk into two pieces. How many stalks of celery will he need? Show how you solved the problem.



To the Teacher

Grade 2
WEEK 6

Investigations:
Children measure things in the classroom. They will need Unifix cubes. Working in pairs may work well with this activity.

Seeing Mathematics
Children will need pattern blocks. After the teacher models these problems, the children could work in pairs to do similar problems. Place a divider between two students (ex: file folders). One child builds a design using two or three pattern blocks. He describes the design to his partner as the partner builds the design.

Patterns, Patterns, Patterns:
Children could use round two-color counters to make this pattern. Drawing it may be difficult for second graders. They could write the numbers (10, 15, 21) in the blanks after making the pattern with the counters.

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 comes between

1. 21 and 23
2. 39 and 41
3. 87 and 89
4. 43 and 45

Write the number that is two more than

5. 20
6. 78
7. 52

Write the number that is two less than

8. 16
9. 40
10. 65

Keeping Skills Sharp

8	79
2	3
4	46
7	180¢

Let's Write

.

Write everything you know about a square. If you cut it in two, what are the parts? Is there more than one answer?

(3.02)

Seeing Math

How many Triangles???

Using pattern blocks: four triangles, one blue parallelogram, one trapezoid, and one hexagon, how many ways can you show a triangle?

(3.01)

(1.05)

What Do You Think?

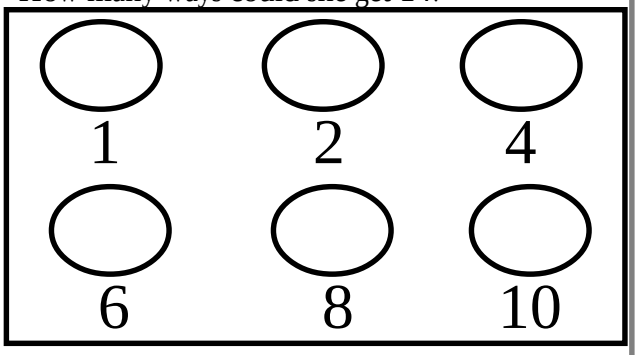
Kanga was playing a bean bag toss game.

She threw three bean bags.

Her score was 14.

Which three numbers did she get?

How many ways could she get 14?



Investigations

Make a human pictograph by having the children organize themselves by the month of their birthday. After they have grouped themselves, the teacher records the information on the board. A class graph is then created and discussed. What month has the most birthdays? the least birthdays? etc.

(4.01)

$¢$¢$¢$

Jason had 18¢ to spend at the store. He wanted to get three or more pieces of candy.

A lollipop costs 5¢.

A caramel costs 3¢.

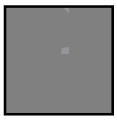
A chocolate costs 10¢.

A peppermint costs 2¢.

A gummy dinosaur costs 6¢.

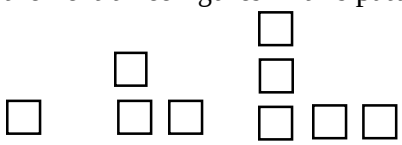
What could he buy? With a partner, find a way to display your answers.

(1.01a)



Patterns, Patterns, Patterns

Draw the next three figures in this pattern.



(5.01)

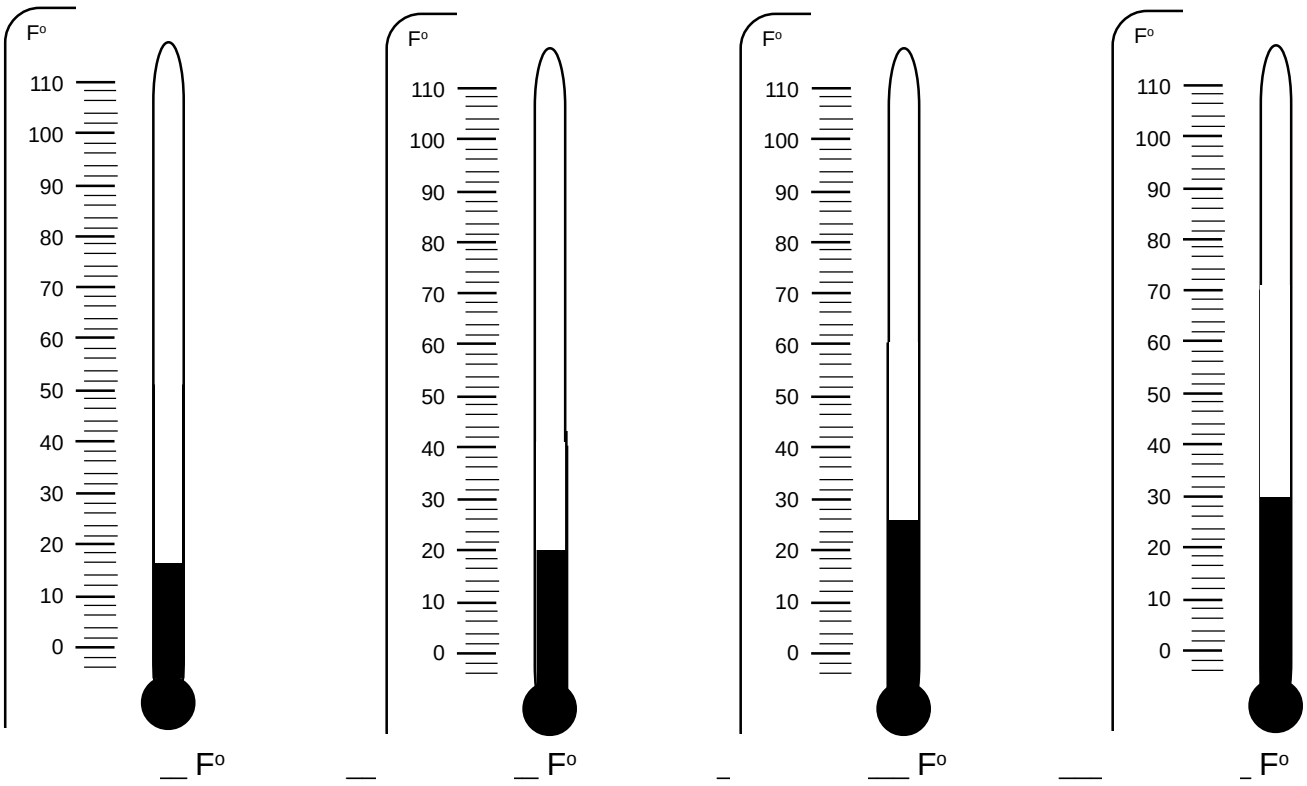
The Heat Is On

60º	16º	92º	20º
56º	40º	88º	26º
80º	30º	64º	40º
48º	52º	70º	34º

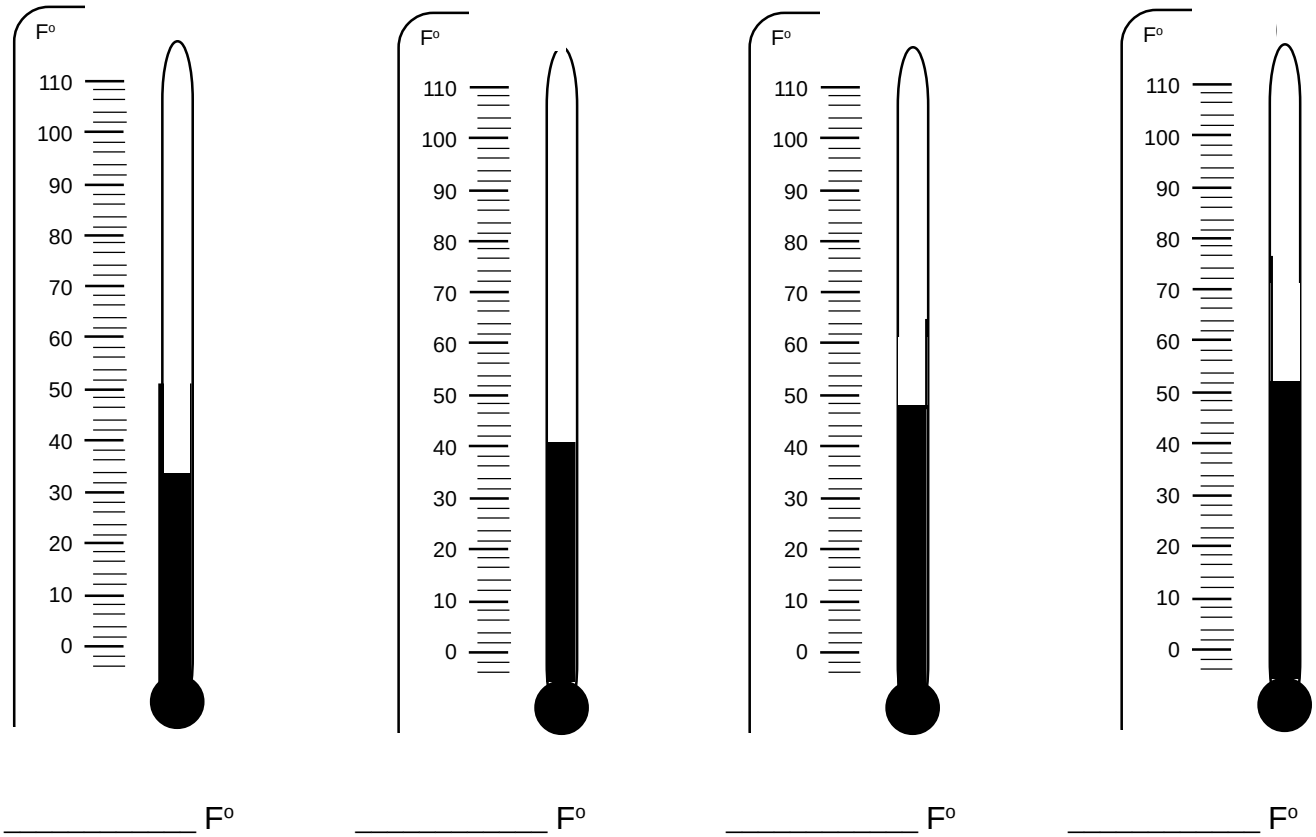
Materials: Game board, temperature cards, markers (five per player).

Directions: Draw a card. Read the thermometer. If that temperature is on the gameboard, cover it with your marker. If the temperature has been covered, you lose a turn. Shuffle and reuse cards as needed. The winner is the first person to play all five markers.

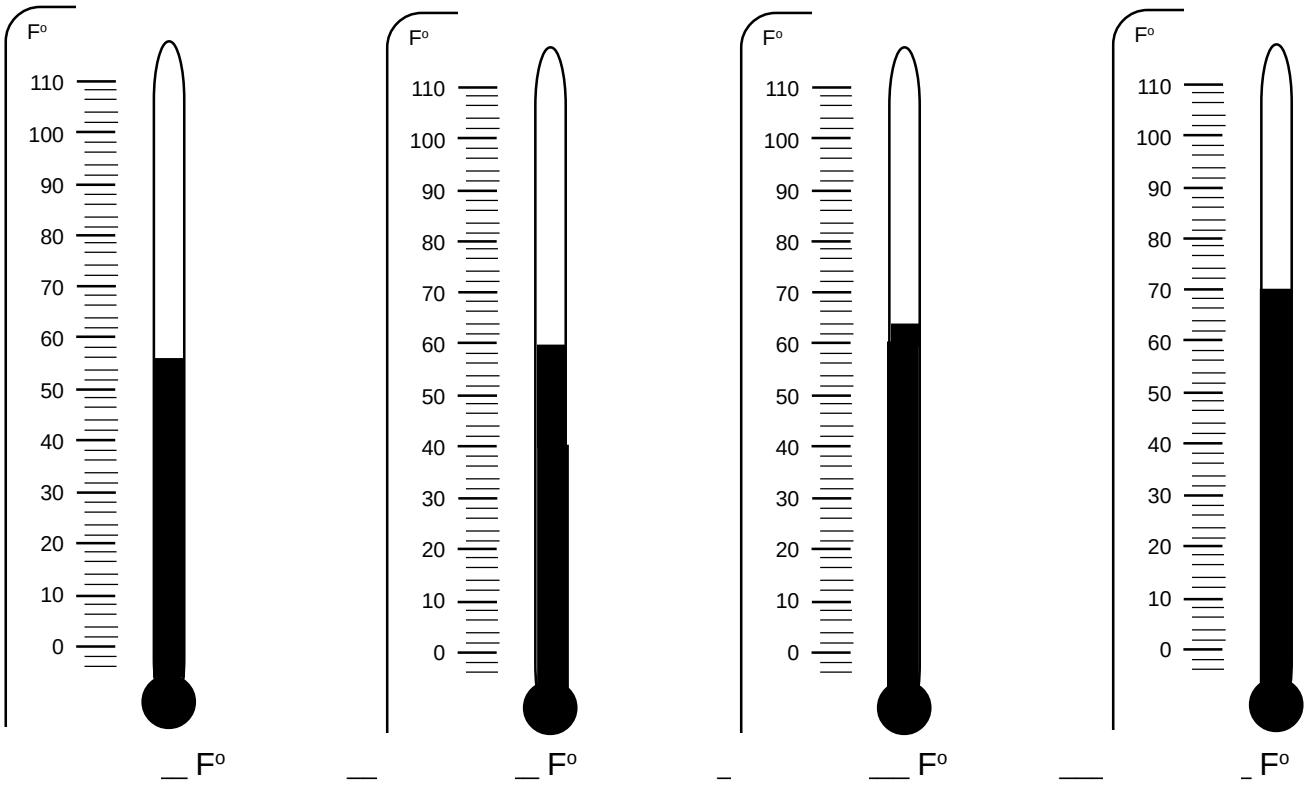
(2.01b)



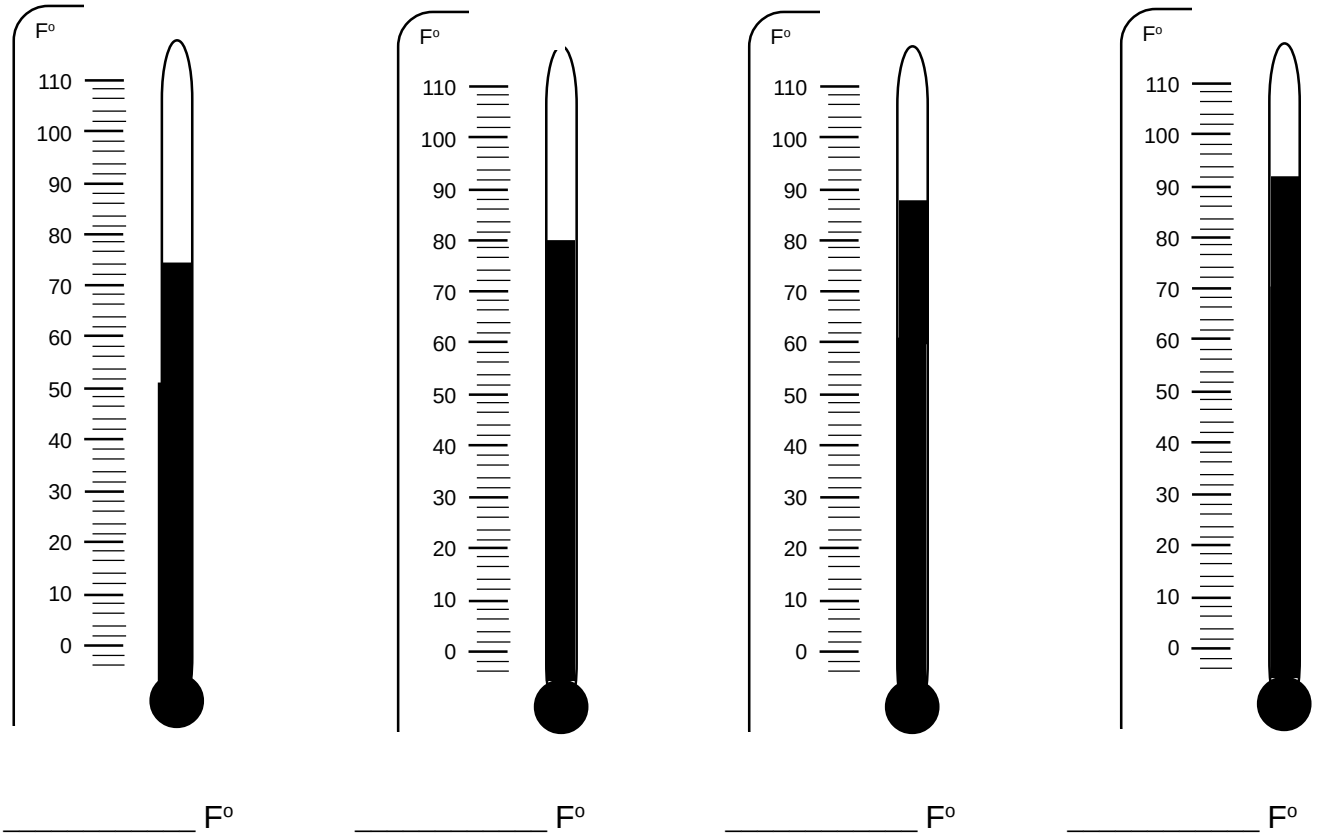
__ Fº __ Fº _ ___ Fº ___ _ Fº



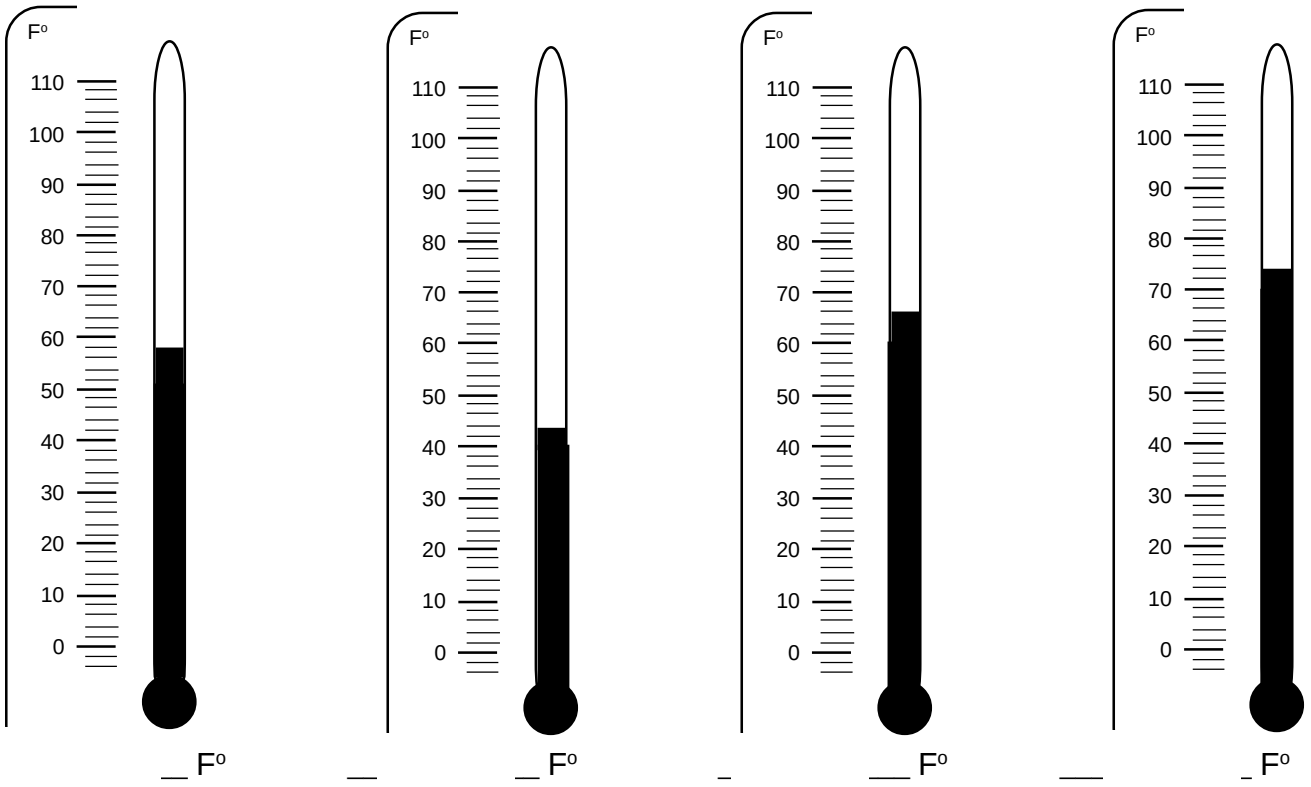
_____ Fº _____ Fº _____ Fº _____ Fº



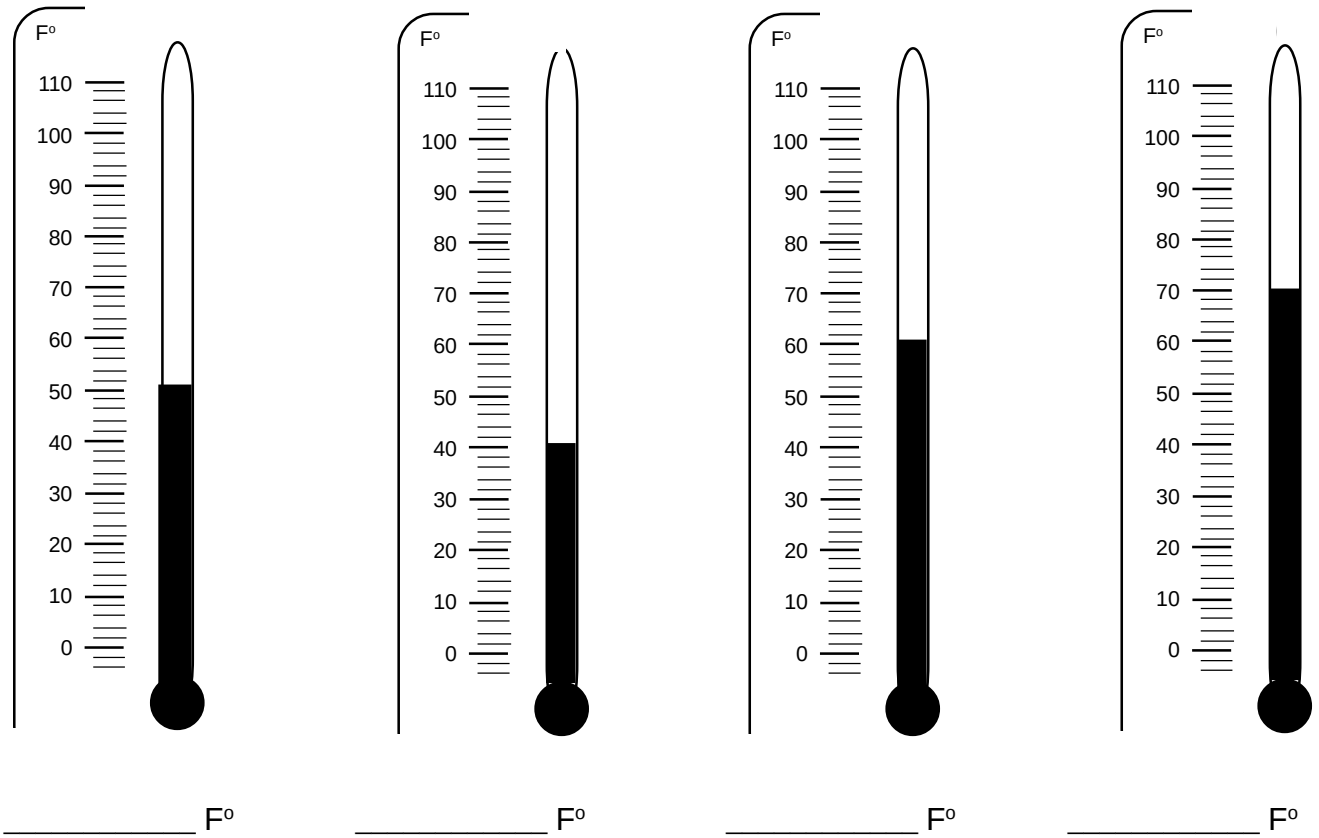
_ Fº __ Fº _ Fº _ Fº



_____ Fº _____ Fº _____ Fº _____ Fº



_ Fº _ Fº _ Fº _ Fº



_____ Fº _____ Fº _____ Fº _____ Fº

Keeping Skills Sharp

1. 30 + 10

2. 42 + 10

3. 51 + 10 = _____

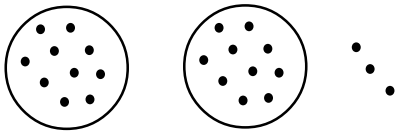
4. 63 + 10 = _____

5. 3, 6, 9, 12, _____

6. Measure this line with a centimeter ruler.

_____

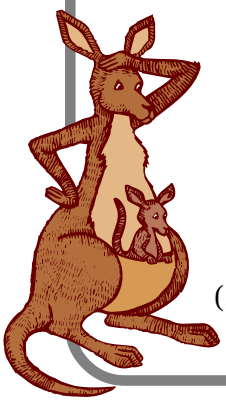
7. How many rocks?



8. It was 45 degrees this morning. Now it is 12 degrees warmer. What is the temperature now?

Solve this!

To solve these puzzles you will need brown, orange, green, and blue Unifix cubes. No tower can be more than eight cubes tall or shorter than four cubes. Use these clues to make four different towers. Is there more than one answer?



(1.01c)

Tower 1

There is at least one of each color. There are more blue than orange. There are more green than orange.

Tower 2

There are two of every color but the same colors are not touching. Brown is on each end.

Tower 3

Half of the tower is orange. There are no green cubes.

Tower 4

Two blues at each end.

To the Teacher

Grade 2
WEEK 7

Seeing Mathematics:
Seeing different triangles in many contexts is important in the development of a universal understanding of triangles. When students have completed their shapes they might take the opportunity to walk around the classroom to see the different triangles their classmates have created.

Investigations:
The human pictograph can be duplicated by students using different symbols for multiple groups. Students can decide, based on the results, which groupings are appropriate.

Calendar Math:
A sample calendar is provided in the blacklines to help teachers develop and reinforce concepts in the second grade curriculum. The calendar activities included here show a pattern on the monthly calendar, and a daily count of the days in school by recording each day. This calendar displays 31 days in school. The children find three ways to make 31¢ and record with coins. These can be displayed by using a velcro strip and putting velcro on money, magnetic strips on money will stick to a cookie sheet, or Ziploc bags will hold amounts of money. The temperature is read and recorded each day. Children can guess the temperature after one child reads it and the child can give clues as to whether the temperature is higher or lower than the number guessed. A weather graph can be colored in and tabulated each month to collect data over time. Today's number provides an opportunity for children to think about numbers in a variety of ways. These are recorded each day and can be used as a quick assessment. The calendar should change in some way each month to build on previously taught lessons.

Solve This:
There are many different answers for each tower. Some of the towers have a certain number and color of blocks but the order can vary. Allow children to justify their answers to the class.

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 comes

1. before 60
2. after 60
3. before 73
4. after 73
5. before 89
6. after 89

What number is 10

7. more than 47
8. less than 47
9. more than 28
10. less than 28

Keeping Skills Sharp

40	15
52	10 cm
61	23
73	57^0

Let's Write

Look at a dime and a penny. Make a chart telling how they are alike and different.

(Review attributes from Grade 1)

Seeing Math

Look at the ten frames as your teacher shows them. Write the number of dots that you see. Think about how you figure out each answer.

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

(1.01f)

What Do You Think?

<u>What number am I?</u>

I am greater than nine.

I am more than 6 + 7.

I am less than 9 + 9.

I am an odd number.

12 20 17 16 8

I am less than five tens.

I am greater than three dimes.

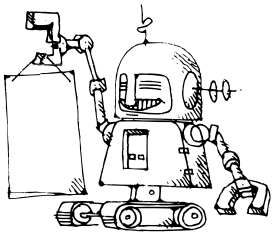
I am an even number.

67 45 42 18

(1.01c)

Investigations

Joan used pattern blocks to make a robot.



She used three trapezoids and two triangles for each robot.

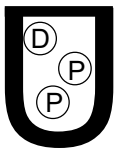
If she wants to make four robots, how many trapezoids and triangles will she need?

How do you know?

(1.05)

$¢$¢$¢$¢

Which pockets are equal to 10¢?

A 

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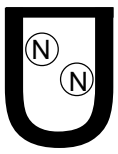
C 

(1.01a)

Patterns, Patterns, Patterns

A, B, A, B, B, A, B, B, B, A, B, ___, ___, ___

(5.01)

Scoop-De-Doo

Materials: Container of beans for each group, game board for each player, ten small cups and a small spoon.

Directions: The object is to be the first to make 100 by scooping ones, trading for tens, and finally trading tens for a 100. Players take turns scooping a spoonful of beans or corn, placing the ones on the mat in appropriate places. Trade for a ten when possible. Then trade 10 tens for a 100.

1	1	1	1	1	1	1	1	1	1

(1.01f)

Keeping Skills Sharp

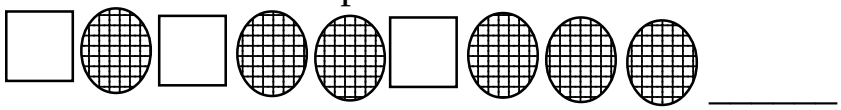
1. five nickels

2. three dimes

3. 10 + 5 = _____

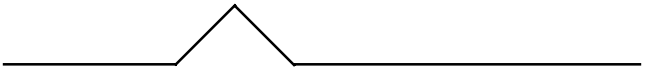
4. 8 + 10 = _____

5. What is the next shape?



_____

6. Measure this line in centimeters.



7. 3 ones, 7 tens, 3 hundreds = _____

8. Sue is baking cakes. Each cake needs three eggs.
How many cakes can Sue bake if she has one dozen eggs?

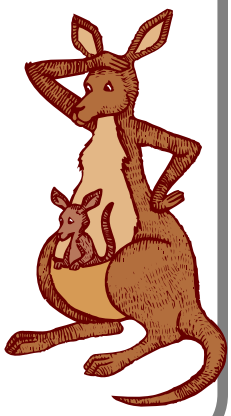
(1.05)

Solve this!

The kittens spilled a box of shapes on the floor. When the students picked them up, they found that they had a total of 24 corners on the shapes.

With a partner, decide what shapes might have been in the box.

Why are there several possible answers?

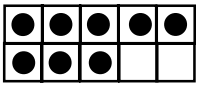


To the Teacher

Grade 2 WEEK 8

Seeing Mathematics:

Make an overhead transparency of the 10-frame page found in the Blackline Masters. This page illustrates the addition facts equal to ten. Cut the frames apart. Place one frame on the overhead. Flash the image for two-three seconds. Have the children write the number of dots they saw. Ask the students to describe what they saw.



For example this 10 frame might generate responses such as "I counted each dot." "I saw 5 + 3 and knew it was eight." "I saw 10 - 2 and knew it was eight." " I counted by two's." Discussions allow children to hear other strategies.

What Do You Think?

Model this type of riddle. The children could look at a hundred board as the teacher reads the riddle. After hearing and solving many riddles some second graders may want to write "Number Riddles."

Solve This:

Children working in pairs would need pattern blocks or other shapes. They could find several possible answers. They could record their answers in words, pictures or numbers.

Example: □ + □ + □ + □ + ◇ + ◇ = 24 angles (corners)

3 + 3 + 3 + 3 + 4 + 4 + 4 = 24 angles

4 hexagons = 24 angles

Let's Write:

The teacher can model this activity comparing a penny to a nickel.

PENNIES and NICKELS

Same	*Different*
both are money	different values
both have people	different colors
both say United States of America	different faces

Hand-held magnifying glasses would help with this activity.

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.

	When counting by 5's, what number comes after		*What number is 10*
1.	15	6.	more than 5
2.	25	7.	less than 15
3.	50	8.	more than 80
4.	70	9.	less than 80
5.	30	10.	more than 17

Keeping Skills Sharp

25¢	□ or square
30¢	9 cm
15	373
18	4