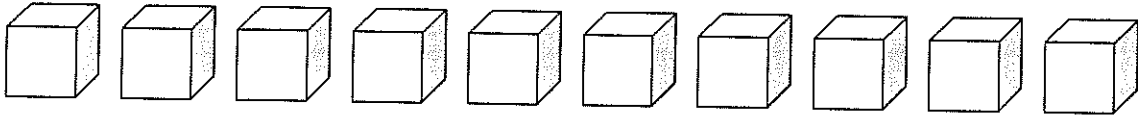


Grouping Tens



Routines

1. NUMBER SHAPES: INSTANT RECOGNITION

Purpose: To familiarize students with number shapes while working with number combinations to 10.

Materials: Teacher: Several of each of the number shapes (see attached blacklines)

- Show students a number shape card.
- Ask students, *What do you see?*
- Students tell the number of squares they see and how they see them.
- Teacher records each equation on the board.
- Students should continue with this activity until they instantly recognize each number shape without having to count or add parts.

2. A TEN-SHAPE AND MORE: READINESS ACTIVITIES

Purpose: To determine if students are ready for the activity, A TEN-SHAPE AND MORE: SUBTRACTION

Materials: Teacher: Several of each of the number shapes (see attached blacklines)

- Children are ready for activity #3 (below) when they instantly know the total of ten plus any single-digit number (i.e. $10 + 7$ and $10 + 4$) as well as the differences of ten (i.e. $17 - 7$; $14 - 4$).
- Check to see if children are ready by showing the ten-shape and one other number shape. For example:
 - Show a ten-shape and a six-shape
 - Say, *Tell me fast. How many altogether?*
 - "16"
- Repeat with other number shapes paired with the ten-shape.
- Next, show the ten-shape and one other number shape. For example, 10 and 5. This time, after students tell you how many altogether, say:
 - *Take away 5. How many now?*
 - "10"
- When students consistently know the answers to both types of problems, they are ready for the following subtraction activity

7. ADDITION: NINE PLUS A NUMBER – PATTERN

Purpose: To learn the pattern of 9 plus a number without counting

Materials: Teacher: Number cube, digit cards, or spinner

Students: Two blank ten frames; two different color counters

- Each child has two ten frames and counters of two different colors.
- Children fill one of their ten frames with nine counters of one color.
- Teacher rolls a number cube or selects a number from a stack of digit cards or spins a spinner.
- According to the number rolled/selected/spun, children add one counter of a second color to complete the first ten frame and place the remaining counters on the second ten frame.
- Children determine how many counters they have altogether.
- Record the problem on the chalkboard horizontally.
(i.e. $9 + 3 = 12$; or $3 + 9 = 12$; or $12 = 9 + 3$)
- Continue until children understand the nine-plus pattern and know the totals without counting.

8. SUBTRACTION: NUMBERS 10 TO 20 – PATTERN

Purpose: To learn the pattern of a number (10 to 20) minus the ones without counting

Materials: Students: Two blank ten frames; two different color counters

- Teacher writes a number between 10 and 20 on the chalkboard (i.e. 17).
- Children use counters to show that number on their two ten frames.
- Teachers says “minus 7.”
- Children put their thumbs up when they know the answer.
- Children explain how they figured it out.
- Record the problem on the board horizontally.
(i.e. $17 - 7 = 10$; or $10 = 17 - 7$)

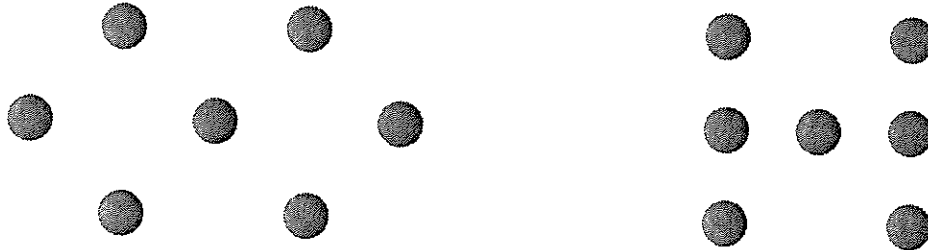
9. SUBTRACTION: MINUS NINE – PATTERN

Purpose: To learn the pattern of a number minus 9 without counting

Materials: Students: Two blank ten frames; two different color counters

- Teacher writes a number between 10 and 20 on the chalkboard.
- Children use counters to show that number on their two ten frames.
- Teachers says “minus nine.”
- Children put their thumbs up when they know the answer.
- Children explain how they figured it out.
- Record the problem on the board horizontally.
(i.e. $16 - 9 = 7$; $7 = 16 - 9$)

Number Arrangements



Routines

1. INSTANT RECOGNITION OF NUMBER ARRANGEMENTS

Purpose: To encourage instant recognition of small groups

Materials: **Teacher:** Number Arrangement cards (see attached blacklines)

- Teacher holds up one number arrangement at a time. Begin with arrangements of 5 or less.
- Teacher quickly calls on children to say how many objects they see.
For example: *“Julie, tell me fast. How many?”*
- When children can instantly recognize groups of 5 or less, include groups greater than 5.
- **Note:** In order to recognize groups of more than 5 quickly, students need to mentally combine the smaller groups that they see.
- When students tell you how many they see in groups greater than 5, always ask them how they saw it.
- For example, hold up an arrangement of 7.
Teacher: *“Tell me fast. How many?”*
Student: *“Seven.”*
Teacher: *“How did you know?”*
Student: *“I saw four and three, and that’s seven.”*

SCAFFOLDING NOTE:

- To help children verbalize their mental strategies, model your own thinking aloud. Say things such as, “I knew it was seven because I saw four on the top and three on the bottom.” Also, show children how to frame the small groups they see with their hands to help them organize what they want to say. It is very important to

4. SNAP IT EXTENSION

Purpose: Predicting a missing part

Materials: Students: Connecting cubes, sorted by color

- Teacher selects the number that the students will explore
- Each child makes a train with this number of cubes (all the same color)
- When the teacher says “snap,” children break their trains into two parts and put their hands behind their backs.
- Going around the circle of children, each child shows what is in one hand and keeps the other hand behind his back.
- The other children predict how many cubes are hidden.
- The child shows the hidden cubes so that the other children can check their predictions.
- Teacher records each equation on the board (i.e. $1 + 4 = 5$; or $4 + 1 = 5$; or $5 = 4 + 1$).

5. TUB GAME

Purpose: Describing a number by its parts

Materials: Students: Counters sorted by color; margarine tubs or something similar (1 per child)

- Teacher decides the number of counters
- Children take the counters and place some under an overturned tub and some on top of their tubs.
- Children take turns showing what is on and what is under their tubs.
- The other children say the combination shown.
- Teacher records each equation on the board.

6. TUB GAME EXTENSION

Purpose: Predicting a missing part

Materials: Students: Counters sorted by color, margarine tubs or something similar (1 per child)

- Teacher decides the number of counters
- Children take the counters and place some under an overturned tub and some on top of their tubs.
- Children take turns showing what is on top of their tub
- The other children predict the number of cubes that are under the tub.
- The tub is then lifted to check the prediction.
- Teacher records each equation on the board.

9. THE CAVE GAME

Purpose: To explore number combinations

Materials: Students: Counters, Blank paper

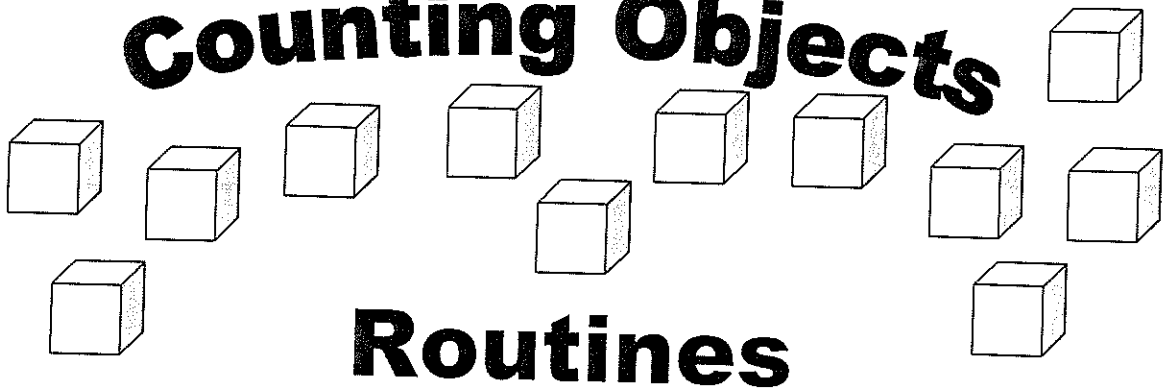
- Teacher selects the number students will explore.
- Ask children to arrange that number of counters across their page horizontally.
- Children cup their right hand on top of the paper to form a “cave.”
- Tell children the number of counters to move away from the others and “hide” in the cave. Say, *How many?*
- Without looking under their right hand, children tell the number of counters *outside* their caves and the number of counters *inside* their caves.
- Next, say, *Check.*
- Children lift their “hand caves” and again say the combination they formed.
- Continue to call out numbers of counters for children to hide, having them identify the combinations they formed.

VARIATION on THE CAVE GAME

- Ask one child to hide some of his counters under his “cave.”
- The rest of the class tells how many counters are left outside the cave and then determine the hidden part.

Adapted from Richardson, Kathy, *Developing Number Concepts, Book 1, Counting, Comparing, and Pattern*, Parsippany, N.J.: Dale Seymour Publications, 1999.

Counting Objects



Routines

Note: In planning routines, adapt the size of the numbers to meet the needs of the students. Needs are determined by the individual assessments, observations, and conferring.

1. COUNT AND DUMP

Purpose: One-to-one correspondence

Materials: Students: Margarine containers or something similar
Counters

- Teacher designates the number to which children will count.
- Children drop counters into margarine tubs (or similar container) as they count to the number.
- Teacher tells children to “dump” their containers.
- Children empty the container and count again.

2. MAKING TOWERS

Purpose: Practice counting

Materials: Students: Connecting cubes

- Teacher directs students to make several towers the same height.
- “Get one cube. How many do you have?”
- “Get one more. How many do you have?”
- “Get one more. How many do you have?”
- Continue until students have counted as far as the number they need to work on.
- Repeat again.

3. GROW AND SHRINK

Purpose: See relationships between numbers and to practice counting

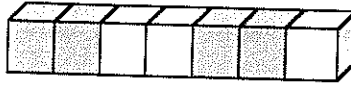
Materials: Students: Connecting cubes

- Teacher names a number
- Children make a train with the specified number of cubes
- Name another number. Ask, “Do you think we need to get some more or take some off to make that number?” Some children may be ready for this question, others not. Children show that number. Continue.

- Children take the number of counters they think are needed to cover the dots on the card.
 - One child then places his/her counters on the dots while the rest of the class counts and checks.
 - Repeat with other cards
7. **TELL ME FAST – PART 2**
Purpose: Instant recognition of quantities to ten without counting
Materials: Teacher: Large dot cards
Students: Counters
- Teacher briefly shows one large dot card and puts it down quickly
 - Children try to recognize the number of dots without counting
8. **ONE MORE/ONE LESS**
Purpose: Name one more or one less than a given number without counting
Materials: Students: Connecting cubes
- Have children make a cube train of any length up to ten.
 - “Add one more. How many are there now?”
 - “Add another one. How many now?”
 - Are the children counting all the cubes each time or are they counting on from the number of cubes in their last train?
 - Have children add cubes or take away cubes, one at a time.
 - Children tell the number and then count to check.
9. **GIVE AND TAKE**
Purpose: Develop visual images of numbers while counting
Materials: Teacher: Margarine container or something similar; Counters
- Start with a set of loose counters. Have the group count together as you point to each.
 - Cover the counters with a margarine tub.
 - As children watch, carefully slightly lift the tub and place another counter under it.
 - Children guess how many are now under the tub.
 - Continue adding counters, one at a time, and taking counters away.
 - Each time a counter is added or taken away, have the children guess the number and then count to check.
 - When you feel children are ready, have them write the number of the counters they think are under the margarine tub.

Adapted from Richardson, Kathy, *Developing Number Concepts, Book 1, Counting, Comparing, and Pattern*, Parsippany, N.J.: Dale Seymour Publications, 1999.

Number Combinations



Routines

1. SNAP IT

Purpose: Describing a number by its parts

Materials: **Students:** Connecting cubes, sorted by color

- Teacher selects the number that the students will explore
- Each child makes a train with this number of cubes (all the same color)
- When the teacher says “snap”, children break their trains into two parts.
- Going around the circle of children, each child shows what is in one hand and then what is in the other hand. The rest of the children say the number combination shown (i.e. 1 and 4)
- Teacher records each equation on the board (i.e. $1 + 4 = 5$; or $4 + 1 = 5$; or $5 = 4 + 1$).

2. SNAP IT EXTENSION

Purpose: Predicting a missing part

Materials: **Students:** Connecting cubes, sorted by color

- Teacher selects the number that the students will explore
- Each child makes a train with this number of cubes (all the same color)
- When the teacher says “snap,” children break their trains into two parts and put their hands behind their backs.
- Going around the circle of children, each child shows what is in one hand and keeps the other hand behind his back.
- The other children predict how many cubes are hidden.
- The child shows the hidden cubes so that the other children can check their predictions.
- Teacher records each equation on the board (i.e. $1 + 4 = 5$; or $4 + 1 = 5$; or $5 = 4 + 1$).

6. NUMBER SHAPES – INSTANT RECOGNITION

Purpose: Internalize number combinations to 10

Materials: **Teacher:** Number shape cards

Students: Number shape cards; color tiles or connecting cubes, two colors

- Children create “number shape arrangements” by placing connecting cubes or color tiles in two colors in the number shape patterns.
- Children record their arrangements by coloring them in on their number shape card.
- Teacher collects the colored-in color shape cards.
- Teacher holds up a colored-in number shape arrangement.
- Children describe as fast as they can the number combinations they see (i.e. $2 + 4 = 6$).
- Teacher records each equation on the board.

7. NUMBER TRAINS – INSTANT RECOGNITION

Purpose: Internalize number combinations to 10

Materials: **Teacher:** Connecting cubes of two colors joined together in trains of lengths up to 10

- Teacher holds up a two-color cube train of any length and has the children determine the number of cubes there are of each color and the total number of cubes.
- Ask, “How many blue?”
- “How did you figure it out?”
- “Did anyone see it a different way?”
- “How many altogether?”
- “How did you know?”
- “Who thought of it a different way?”
- Teacher records each equation on the board.

8. BLANK NUMBER SHAPES – HOW DO YOU SEE IT?

Purpose: Give the children opportunities to describe combinations in their own way.

Materials: **Teacher:** Number shape cards

- Show students a number shape card.
- Ask students, “What do you see?”
- Students tell the number of squares they see and how they see them.
- Teacher records each equation on the board.
- Students should continue with this activity until they can identify the number of squares without counting

Hiding Assessment Routines

1. THE WALL GAME

Purpose: To explore number combinations

Materials: Students: Counters (each child should use only one color), Blank paper

- Teacher selects the number students will explore.
- Ask children to arrange that number of counters on their papers from top to bottom, so that the cubes line up pointing to their stomachs.
- Call out a number less than your original number.
- Children use their hand to make a “wall” that breaks their line just after the number you called.
- For example: Students have a vertical line of six counters on their papers. You say,
Wall off four.
Children place their hand, like a wall, between the fourth and fifth counters so that four counters are closer to them.
- You say, *Peek over the wall.*
- Children look over their hands and first say the number of counters *behind* their hands and then say the number of counters that are closer to them. In this example, they would say, “Two and four.”
- Continue to call out various numbers to be walled off, each time asking children to say the combinations formed.

2. BULLDOZER

Purpose: To explore number combinations through the process of taking one part away

Materials: Students: Counters (each student should use just one color), Working-space papers (1 per child) – See attached blackline.

- Teacher selects the number students will explore.
- Ask children to put that number of counters on their working-space paper.
- Ask children to push off a number of counters and then tell you how many are left, for example:
Put on 6.
Push off 4.
How many are left?

- The child shows the class how many she took out, and the rest of the group tells how many they think are left in the bag.
- After a number of guesses, dump the counters from the bag and count what is left as a group.
- Ask students to describe what happened.
- Lead them to a simple take away number sentence. For example, “Eight take away five is three.”
- You may choose to write the number sentence (ex) $8 - 5 = 3$ on the board.
- Continue calling on students to grab a handful from the bag.

5. NUMBER SHAPES: NUMBER CUBES

Purpose: To explore number combinations and addition and subtraction concepts.

Materials: Students: Counters (sorted by color), Number shapes for the day’s number (1 per child) – See attached blacklines

- Teacher selects the number students will explore.
- Give each child that number shape.
- Direct the children to perform a series of actions with the shape. It is important to use the shapes for both addition and subtraction from the beginning so that children learn to use the shapes flexibly.
- The following examples use a “six” shape.
- ADDITION EXPLORATION
 - Say: *Put three red and three blue counters on your shape.*
 - Wait for class to place counters. Any combination of 3 and 3 is acceptable.
 - Say: *This shows that three plus three equals six.*
 - Next, say:
 - Clear off your shape. Now put four red counters and two blue counters.*
 - Who can tell me what that shows?*
 - Accept any expression that accurately reflects the situation such as, “four and two is six” or “four and two more is six altogether.”
- SUBTRACTION EXPLORATION
 - Say: *Fill up your shape with blue counters. Take one off. Who can tell what we did?*
- NUMBER RELATIONSHIP EXPLORATION
 - Say: *Put two red counters on your shape. Fill the rest of the shape with blue counters. What do you have?*
 - Can you find another way to arrange those counters on your shape? How did you arrange them?*
 - Can you find another way? How did you arrange them this time?*

The following routines are repeated from “**Number Combinations Routines.**” These routines also help the critical learning phases involved in the “Hiding Assessment.”

7. SNAP IT

Purpose: Describing a number by its parts
Materials: **Students:** Connecting cubes, sorted by color

- Teacher selects the number that the students will explore
- Each child makes a train with this number of cubes (all the same color)
- When the teacher says “snap”, children break their trains into two parts.
- Going around the circle of children, each child shows what is in one hand and then what is in the other hand. The rest of the children say the number combination shown (i.e. 1 and 4)
- Teacher records each equation on the board (i.e. $1 + 4 = 5$; or $4 + 1 = 5$; or $5 = 4 + 1$).

8. SNAP IT EXTENSION

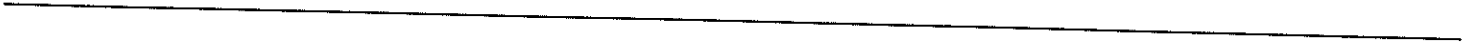
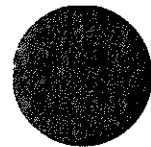
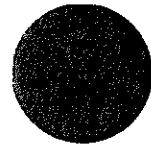
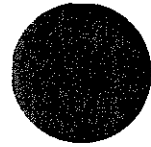
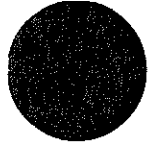
Purpose: Predicting a missing part
Materials: **Students:** Connecting cubes, sorted by color

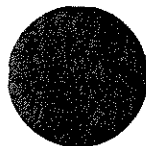
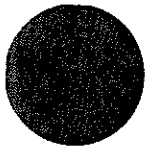
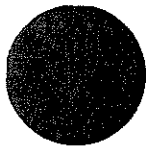
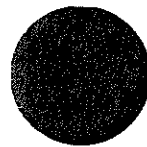
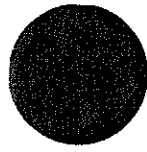
- Teacher selects the number that the students will explore
- Each child makes a train with this number of cubes (all the same color)
- When the teacher says “snap,” children break their trains into two parts and put their hands behind their backs.
- Going around the circle of children, each child shows what is in one hand and keeps the other hand behind his back.
- The other children predict how many cubes are hidden.
- The child shows the hidden cubes so that the other children can check their predictions.
- Teacher records each equation on the board (i.e. $1 + 4 = 5$; or $4 + 1 = 5$; or $5 = 4 + 1$).

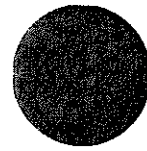
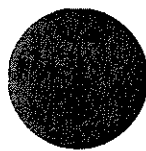
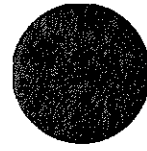
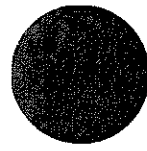
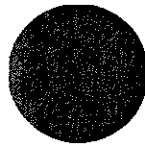
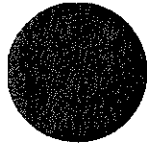
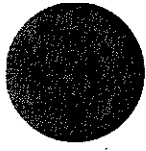
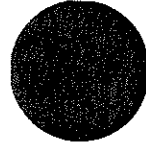
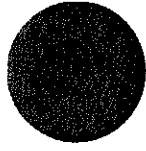
9. TUB GAME

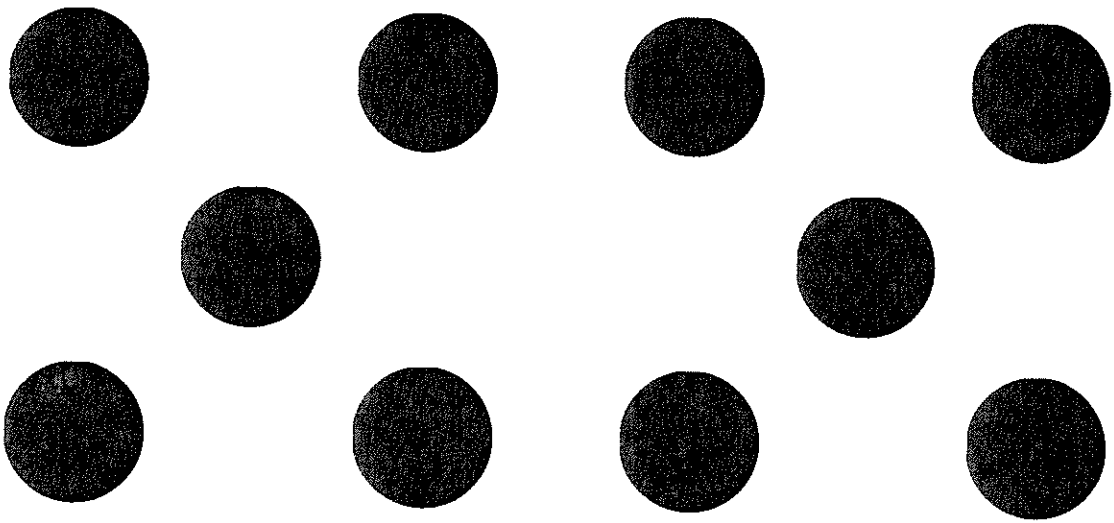
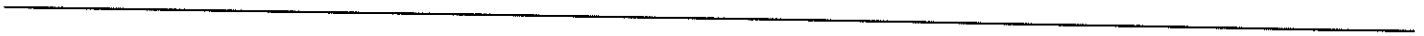
Purpose: Describing a number by its parts
Materials: **Students:** Counters sorted by color; margarine tubs or something similar (1 per child)

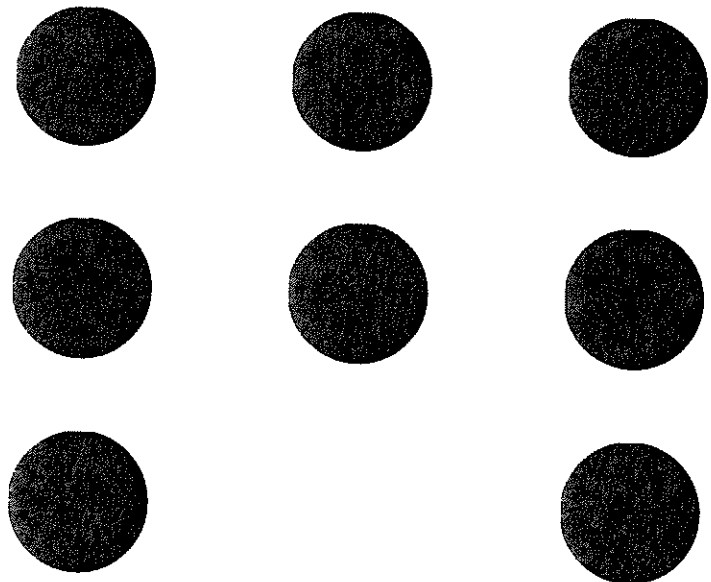
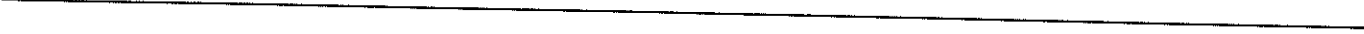
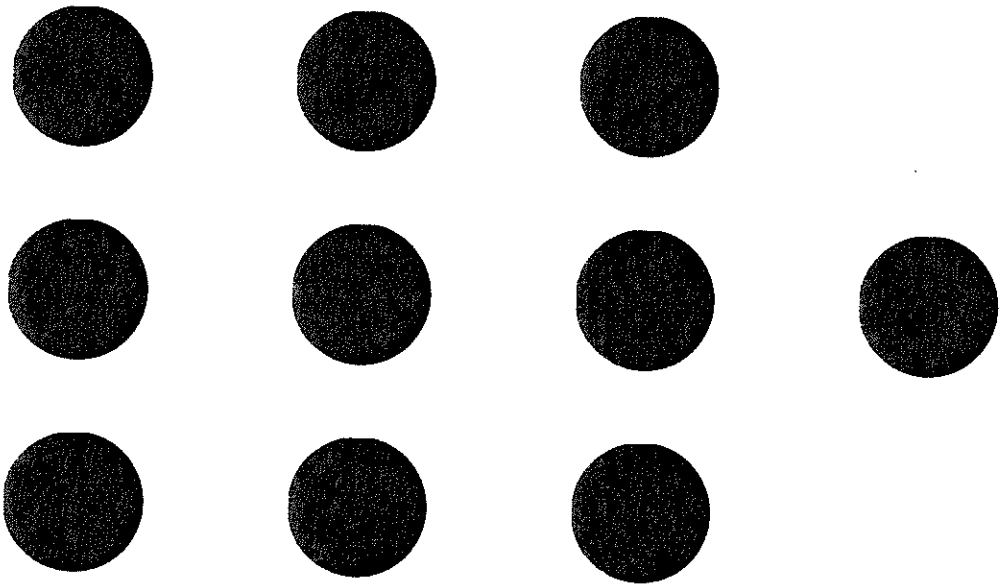
- Teacher decides the number of counters
- Children take the counters and place some under an overturned tub and some on top of their tubs.
- Children take turns showing what is on and what is under their tubs.
- The other children say the combination shown.
- Teacher records each equation on the board.











Estimation Jars

To gain experience and build understanding with:

- Estimation
- Counting strategies
- Grouping
- Place value
- Number Sense

As children develop a sense of number, they begin to reasonably estimate amounts and quantities found in various situations. With estimation jars, children are asked to estimate the number of objects in a jar. Throughout the year, the number of objects in the jar increases or decreases, the size of the objects increases or decreases, and the size of the jar increases or decreases. The child is asked to use reasoning skills and number relationships to estimate the number of objects in the jar (Has the amount doubled from last week? Are the objects twice as large? How would that affect the number of objects in the jar?). In addition, estimation jars give children the opportunity to learn to efficiently count (Is it most efficient to count by ones? To group by twos and count? To group by fives and count? To group by tens and ones and count?)

Time:

15 minutes maximum

This routine is intended to take no longer than 15 minutes. If you find that you need more time, complete the routine in two days:

Day 1 of Estimation Jars, complete Part A, Estimating
Day 2 of Estimation Jars, complete Part B, Counting

Materials:

- Glass jars of different sizes
- Snap Cubes/Unifix Cubes
- Other items to place in jar such as walnuts, bear counters, buttons, marbles, etc.
- There can be one estimation jar for the whole class, or there can be several estimation jars (same size jar) with the same number of items in each jar.

B. Counting:

1. Pour out the contents of the jar in the center of the circle.
2. Ask students to share with their partner the strategy they would like to use for counting the objects (ones, twos, fives, tens?). Have students justify why they would choose their particular counting strategy.
3. Select a child to come to the center of the circle and group the objects according to his/her counting strategy (groups of one, two, five, or ten).
4. Class as a group counts together (2, 4, 6, etc.; 5, 10, 15, etc.; 10, 20, 30, etc.). After the class has counted about one-quarter of the objects, stop counting and ask if anybody would like to change their estimate. Be sure to ask about the reasoning for this change. Then, resume counting.
5. If the counting is not even, have a group discussion about how to count the "leftovers" (2, 4, 6, 8, 9, etc.; 5, 10, 15, 20, 21, 22, etc.; 10, 20, 30, 31, 32, 33, etc.).
6. After the students have counted using a particular counting strategy (i.e. ones), ask the children:
 - If we were to count these by fives, how many would there be? Class counts.
 - If we were to count these by twos, how many would there be? Class counts.
 - If we were to count these by tens, how many would there be? Class counts.

Do not be surprised if children respond with a number other than the quantity just counted. Children will learn with multiple experiences that counting by groups does not change the total quantity.

7. After students have counted the items using different grouping strategies, guide the conversation toward the idea of efficiency in counting. An efficient strategy is one that the student can carry out easily. What is efficient for one child may not be efficient for another.

Number Lines – Whole Numbers

Understanding the Relative Magnitude of Numbers

Students use reasoning skills and their understanding of numbers to place numbers on a number line. Students use what they know about one number to determine where a second number should be placed. As the numbers change and as the scale changes, students draw upon their understanding of the system of tens. Number lines allow students to better understand relationships between numbers and to better understand the relative magnitude of numbers.

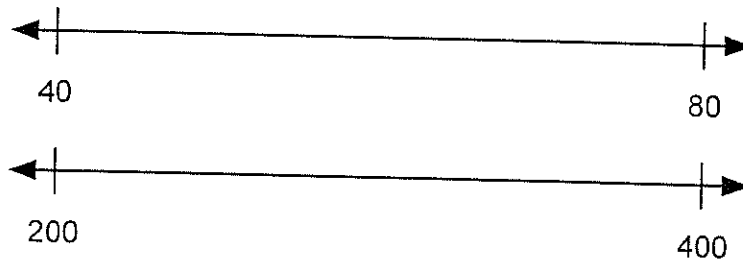
Materials:

- A large, blank number line easily visible to all students
- Attached black line master (number lines)

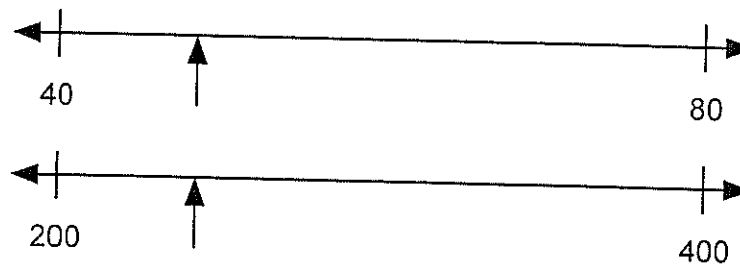
CAUTION: Always include arrows on both ends of your number line representations so students learn that we are only looking at a section of the number line. The number line is infinite.

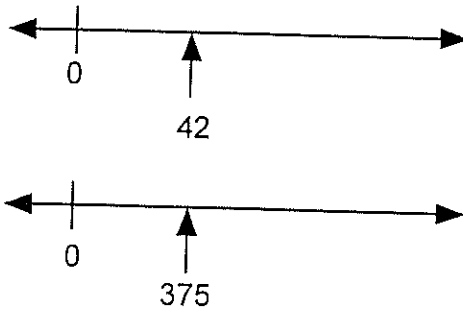
VARIATION 1

1. Label two marks on the number line (e.g., 40 and 80).



2. Place an arrow somewhere between the two marks.





3. Ask where other numbers would be. This helps students look at the relative positions of values. For example:
- "About where would 83 be? Explain your thinking."*
 - "About where would 21 be? Explain your thinking."*
 - "About where would 31 be? Explain your thinking."*
 - "About where would 750 be? Explain your thinking."*
 - "About where would 190 be? Explain your thinking."*
 - "About where would 300 be? Explain your thinking."*

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Dot Cards – Ten Frames

Dot Cards and Ten Frames provide opportunities for children to work with computation in meaningful ways. During routine time, the teacher presents various problems to children and asks them to share the processes they used to figure out “how many.” This routine should be short, including just one or two examples. Routines should also be an ongoing, frequent part of the math program, providing children the opportunity to develop increasing competence over time.

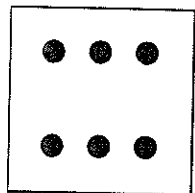
Materials:

- Interlocking cubes or Unifix cubes
- White boards or scratch paper
- Dot Cards
- Number Shapes

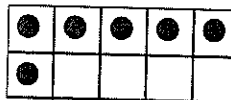
Time: 15 minutes maximum

Directions:

1. Students sit in a circle.
2. Teacher shows dot cards or ten frames to students.
3. Teacher shows the first card and asks: “How many do you see?”



or



"I thought 7 and 7 is 14 and one less is 13."

The teacher then write on the chart paper $7 + 7 - 1 = 13$

Ten Frames:

"I saw five and five more make ten. I saw one and two and that makes 3. Ten and three make 13."

The teacher writes on the chart paper:

$$\begin{aligned}5 + 5 &= 10. \\1 + 2 &= 3 \\10 + 3 &= 13.\end{aligned}$$

or

"I took three from the six and put it with the 7 and that made 10. I now had ten and 13 and that makes 13."

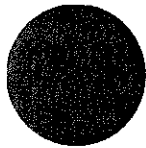
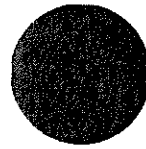
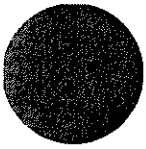
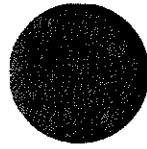
The teacher writes on the chart paper

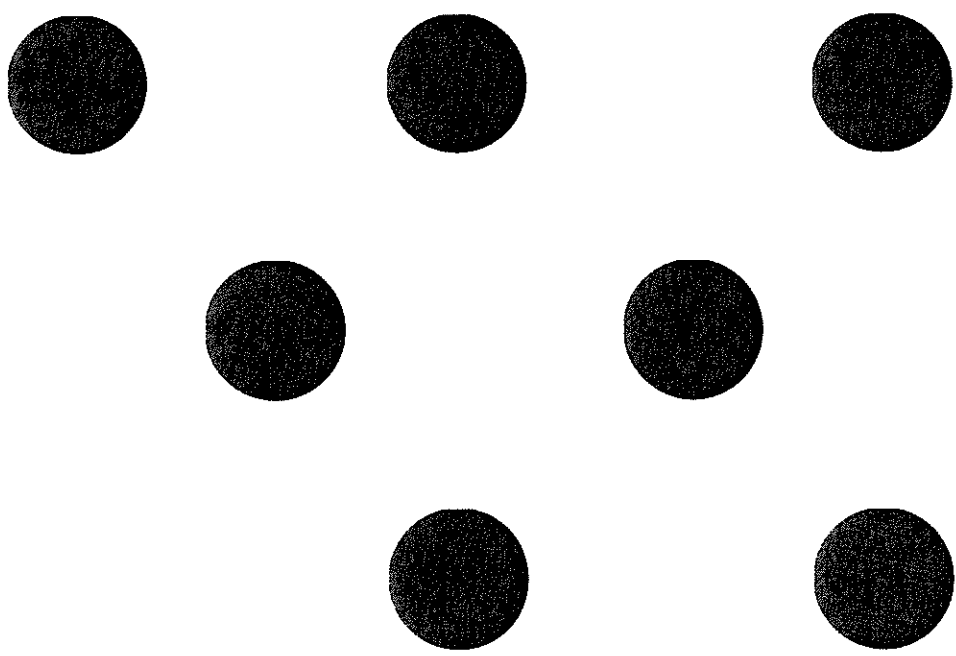
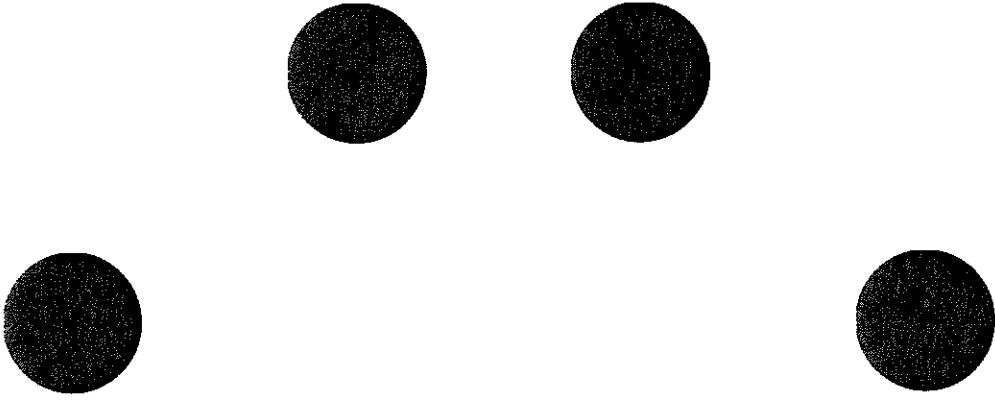
$$\begin{aligned}6 - 3 &= 3 \\7 + 3 &= 10 \\10 + 3 &= 13.\end{aligned}$$

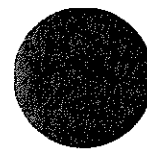
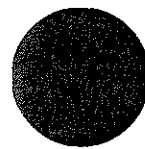
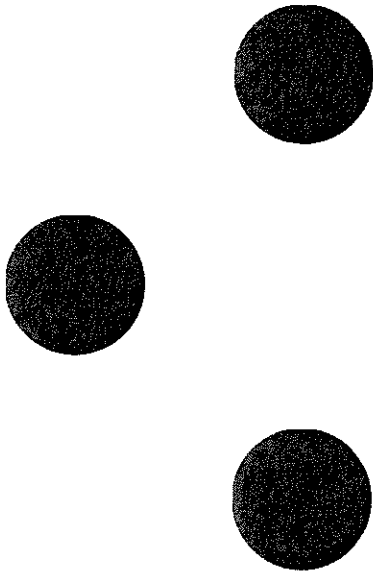
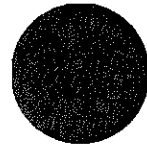
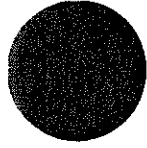
or

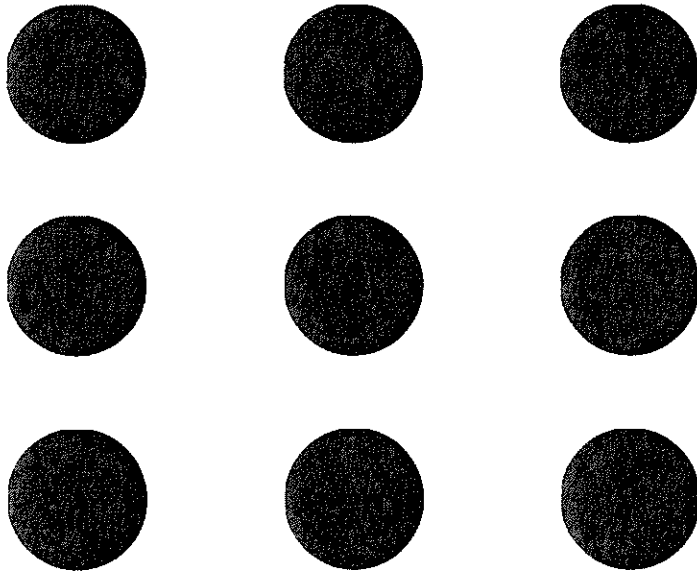
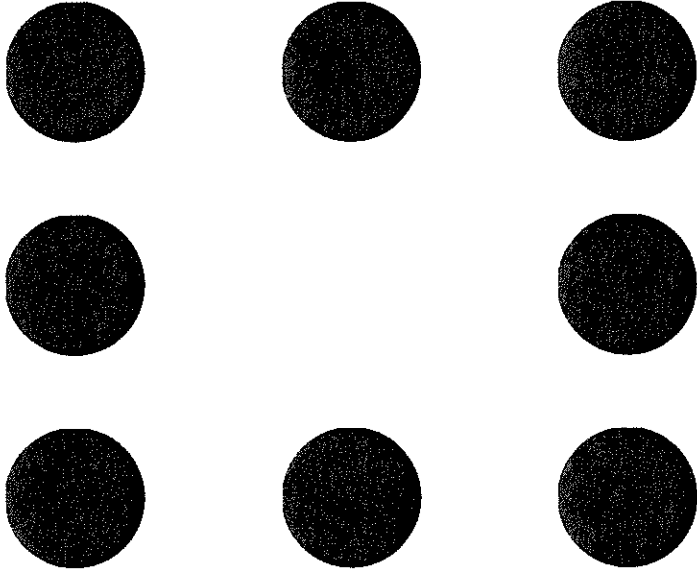
"I just knew that 6 and 7 are 13."

The teacher writes on the chart paper $6 + 7 = 13$.







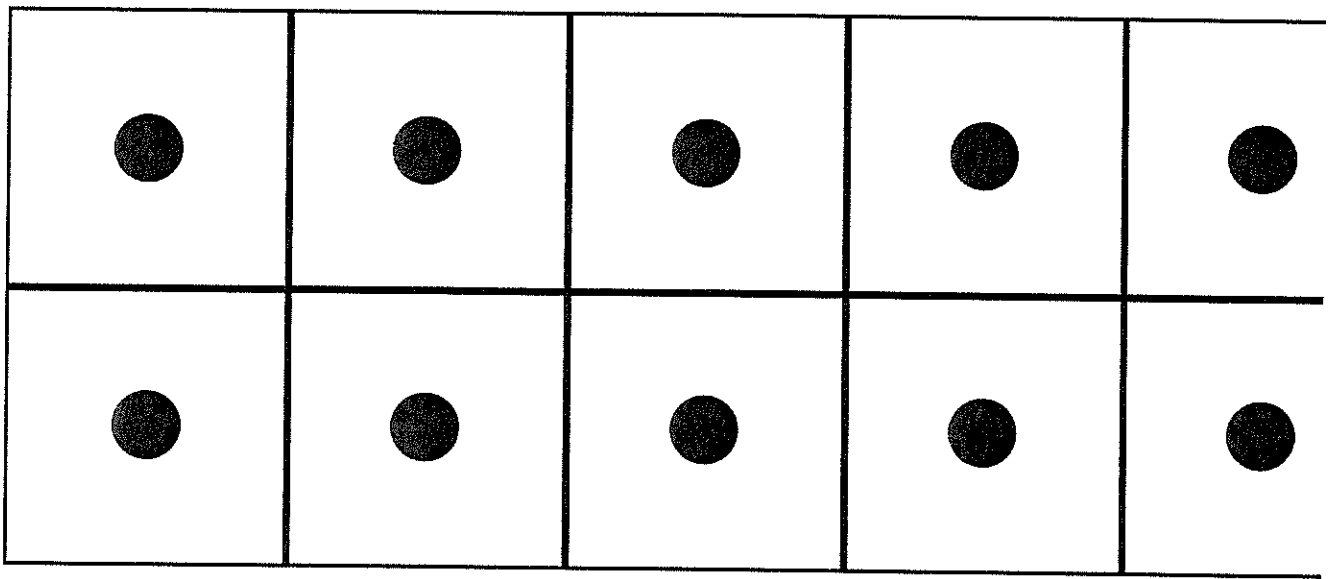
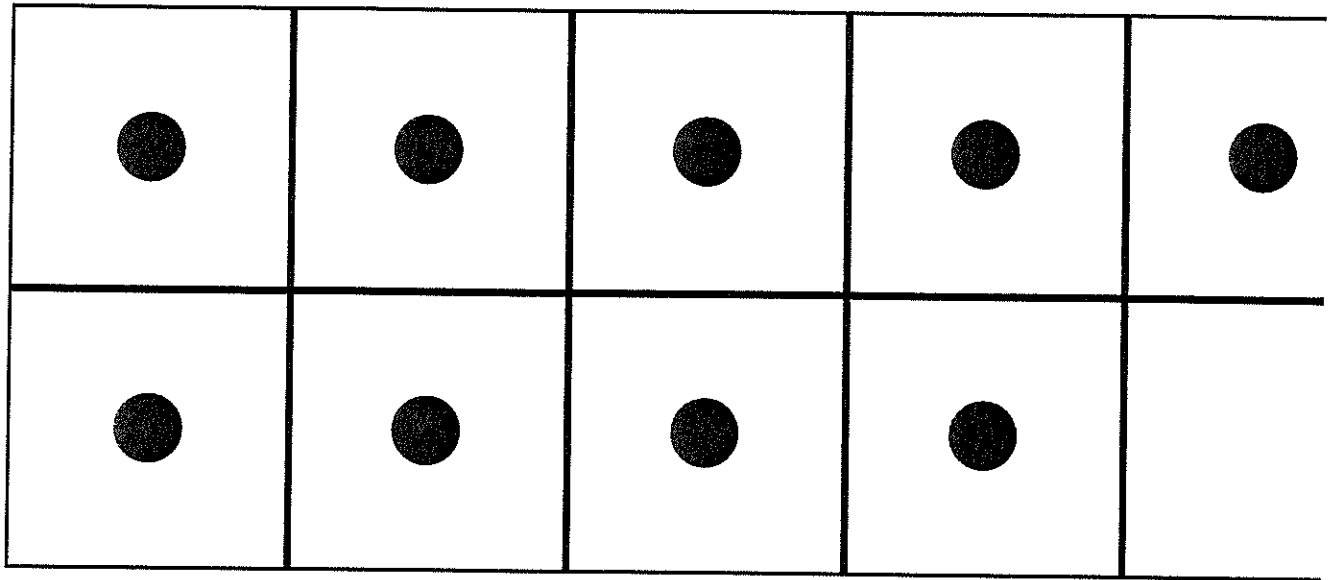


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What is the Value?

A 1 to 100 chart is a reconfigured number line. The chart lends itself to a number of activities that reinforce place-value concepts, addition concepts, and concepts related to difference. By exploring number patterns in rows and columns, children discover that for any number on the chart, the number that is:

- The number that is 1 more is 1 square to the right.
- The number that is 1 less is 1 square to its left.
- The number that is 10 more is 1 square down.
- The number that is 10 less is 1 square up.

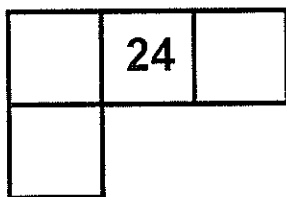
Materials:

- Attached masters for overhead
- Attached 1-100 chart

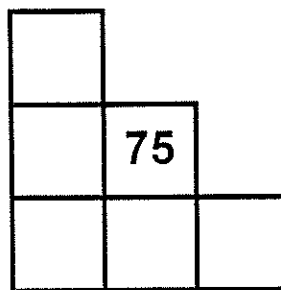
Time: 15 minutes maximum

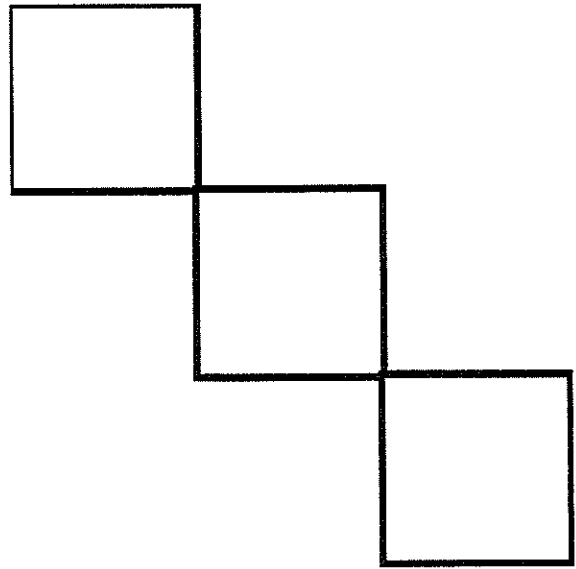
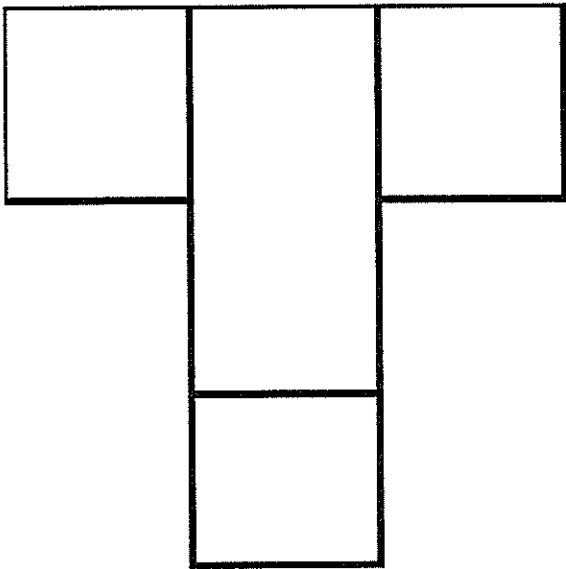
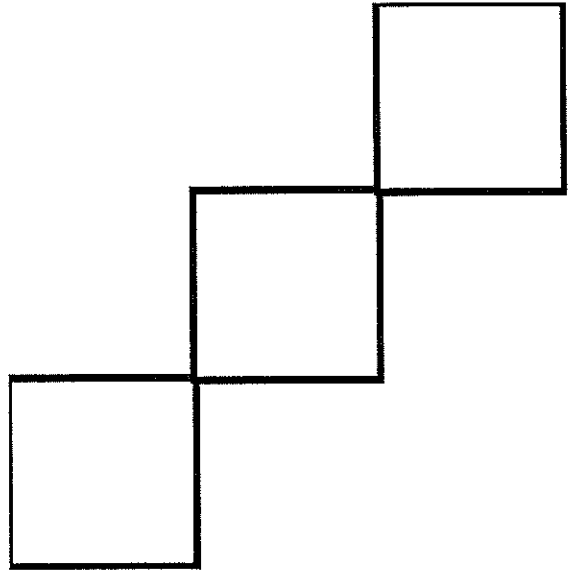
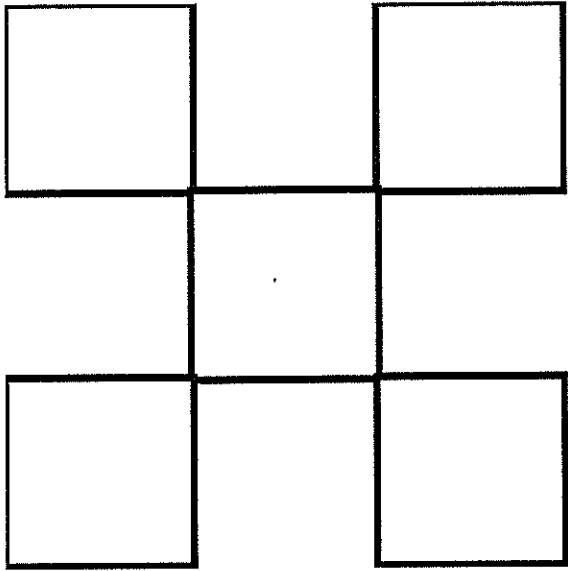
Directions:

1. Show students a partial 1-100 number grid. Write in one value on the grid (as determined by the needs of your students).
2. Students think about the value of each of the other squares.
3. Students turn to a partner and describe the strategy they used for determining the remaining numbers. Students justify their answers to their partners
4. When you come back to the whole group, have students publicly share their thinking.



or





1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100