LETTER HOME

Area of Different Shapes

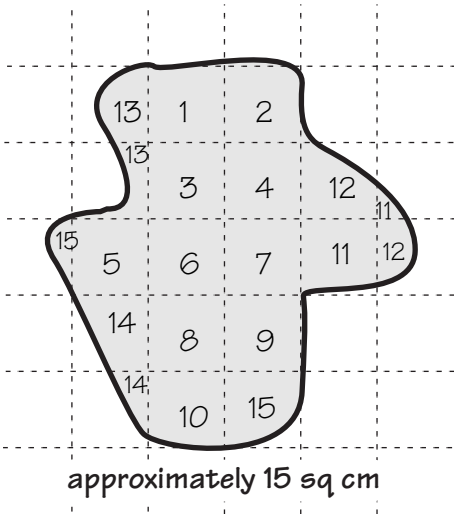
Dear Family Member:

Area. Area is the amount of surface needed to cover something—the amount of carpet to cover a floor, wallpaper to cover a wall, or skin to cover a body. In this unit, your child will explore the area of flat surfaces.

We will find the area of shapes that have straight, curved, or irregular sides, such as the shape shown here. To find the area of an irregular shape, students trace the shape on centimeter grid paper. They first count the number of full centimeter squares inside the shape. Then, they piece together the remaining parts (for example, halves) into full squares. This gives a good estimate of the shape's area. The class will apply its knowledge of area to an experiment that investigates which brand of paper towel absorbs the most water.

As we study area in this unit, you can help reinforce the concept of area at home with the following activities:

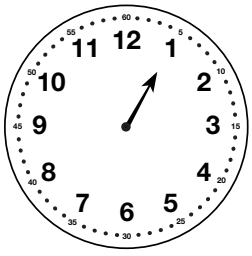
- **Trace Shapes and Measure Area.** Help your child look for different shapes around the house, such as a plate or leaf or the handprints of different family members. Trace the shapes on paper. Ask your child to compare the area of the different shapes by covering them with pennies or beans.



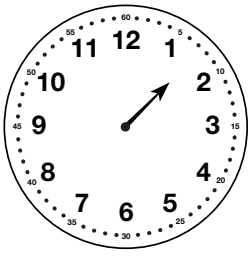
Counting the number of square centimeters in a shape to find area

Time. The analog clock is a complex instrument to learn to read. Not only are there two or more scales involved (hours, minutes, and seconds), but the hands that mark these scales move in a circular motion. A child's difficulty in reading time may stem from an approach that focuses on both hands simultaneously but does not distinguish between how the two hands are read. Using a one-handed clock is one strategy employed to help students focus on reading the different scales on a clock.

- **Using one hand.** Ask your child to focus only on the hour hand and ask if it is closer to the start of the hour or the end of the hour and to tell you how he or she knows. Ask your child to estimate the number of minutes past the hour using only that one hand.
- **Elapsed time.** Ask your child questions about time during your daily routine. For example, "It is now 1:00. If I read to you for 30 minutes, what time will it be when we finish? Where will the hour hand on the clock be pointing?"



1:00



1:30

Math Facts and Mental Math

This unit continues the review of the subtraction facts and development of the multiplication facts. Help your child using the activities below.

Subtraction Facts. Students review the following subtraction facts to maintain and increase proficiency and to learn to apply subtraction strategies to larger numbers:

Group 7: 14 – 7, 14 – 6, 14 – 8, 12 – 6, 12 – 7, 12 – 5, 10 – 5, 13 – 7, 13 – 6

Group 8: 15 – 7, 16 – 8, 17 – 8, 18 – 9, 18 – 10, 8 – 4, 7 – 4, 6 – 3, 15 – 8

You can help your child review these facts using the flash cards the teacher sends home or by making a set of flash cards from index cards or scrap paper. Study the facts in small groups each night. As your child goes through the flash cards, put the cards in three stacks: Facts I Know Quickly, Facts I Can Figure Out, and Facts I Need to Learn.

For Facts I Need to Learn, work on strategies for figuring them out. Good strategies for the facts in Groups 7 and 8:

Using Doubles. To solve 12 – 7, I know 6 + 6 =12 so 12 – 6 = 6 and 12 – 7 = 5.

Thinking Addition. To solve 14 – 7, I know 7 + 7 = 14 so 14 – 7 = 7.

For Facts I Can Figure Out, use the flash cards to practice the facts for fluency.

For Facts I Know Quickly, help your child use strategies to solve problems like these using mental math:

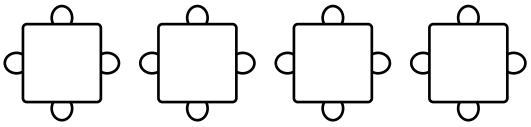
Subtracting 10s and 100s. 180 – 90 = 90, 700 – 400 = 300

Two-digit minus one-digit problems. 44 – 7 (practices 14 – 7), 36 – 3 (practices 6 – 3), 40 – 5 (practices 10 – 5)

Multiplication Facts. Students work on developing number sense for the multiplication facts for the square numbers in this unit. This will help them remember the facts as they develop proficiency. Ask your child to write a story, draw a picture, and complete number sentences for one or two facts each night. Follow these examples:

Example: $4 \times 4 = \square$

There are 4 seats at each of the 4 tables.
There are 16 chairs.



4 tables × 4 chairs = 16 chairs

Example: $6 \times \square = 36$

$\square \times 6 = 36$

Cans of soda come in packs of six.

If I have 6 packs of soda, I have 36 cans of soda.

6 12 18

24 30 36

Thank you for taking time to talk with your child about what he or she is doing in math.

Sincerely,

Name _____ Date _____

Unit 5: Home Practice

Part 1 Story Solving

1. A. Frank wrote a math story. Draw a picture of his story.

Our coach took the team to the batting cage. There were six of us on the team. Six balls were pitched to each of us. It was a fun time.

B. How many balls were pitched to Frank and his friends in all?

2. While he was at the batting range, Frank bought three baseball key chains, one for himself and one for each of his little brothers. One key chain costs 75¢. If all three key chains were the same how much money did Frank spend? Show or tell how you solved the problem.

Name _____ Date _____

Part 2 Same Difference

For each of the problems below, write another number sentence that has the same difference.

Example: 8 − 4 is the same as 10 − 6. We write 8 − 4 = 10 − 6.

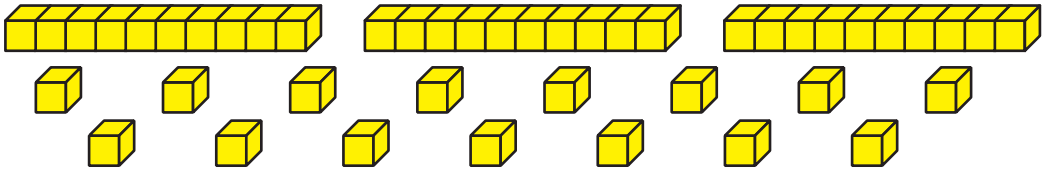
1. **A.** 14 − 7 = _____
   B. 17 − 8 = _____
   C. 12 − 5 = _____

2. **A.** 18 − 10 = _____
   B. 13 − 7 = _____
   C. 15 − 8 = _____

3. Pick one of the problems in Question 2 and find a third number sentence that has the same difference.

Part 3 Skinnies and Bits

Natasha placed three skinnies and fifteen bits on her desk.



1. Write a number sentence that matches Natasha's pieces.

   _____

2. What number is she representing? _____
3. Is she using the Fewest Pieces Rule? Explain your thinking.

4. Write a number sentence using the Fewest Pieces Rule.

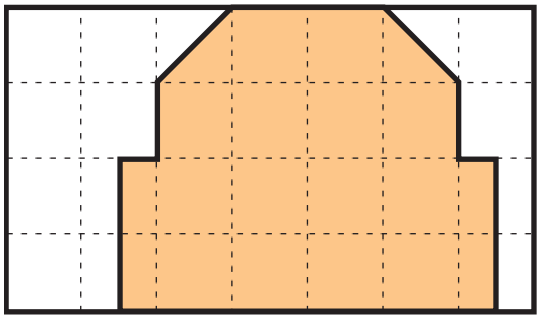
   _____

Name _____ Date _____

Part 4 Finding Area

1. Predict which shape has the greater area, Shape A or Shape B. Circle your choice and find the area of each shape.

Shape A



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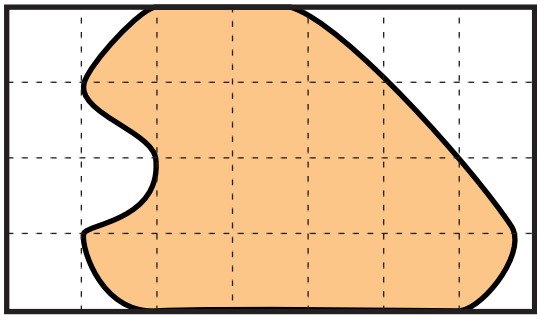
Shape B



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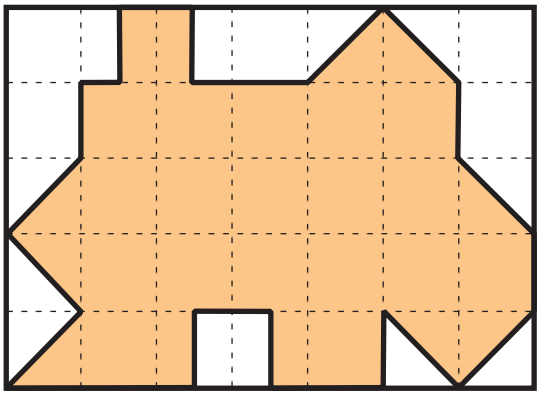
2. A. Find the area of Shape C.

Shape C



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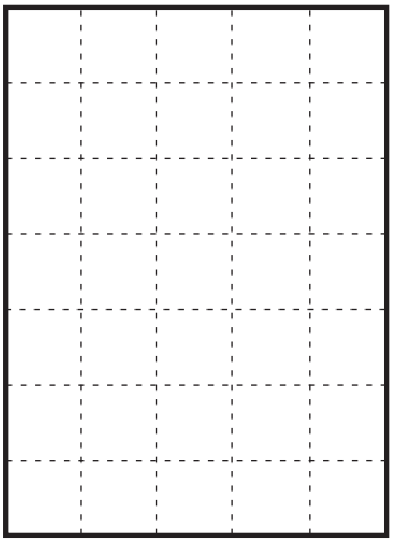
B. Draw a different shape with the same area as Shape C.



Name _____ Date _____

Part 5 Fact Families: Groups 7 and 8

1. A. $14 - 7 = \square$ **B.** $7 + \square = 14$

2. A. $13 - 7 = \square$ **B.** $7 + \square = 13$

C. $13 - \square = 7$ **D.** $6 + \square = 13$

3. A. $16 - \square = 8$ **B.** $\square + 8 = 16$

4. A. $\square - 7 = 5$ **B.** $\square + 5 = 12$

C. $12 - \square = 7$ **D.** $5 + 7 = \square$

5. A. $15 - \square = 7$ **B.** $\square + 7 = 15$

C. $\square - 7 = 8$ **D.** $7 + \square = 15$

6. A. $\square - 9 = 9$ **B.** $\square + 9 = 18$

7. A. $\square - 8 = 6$ **B.** $6 + \square = 14$

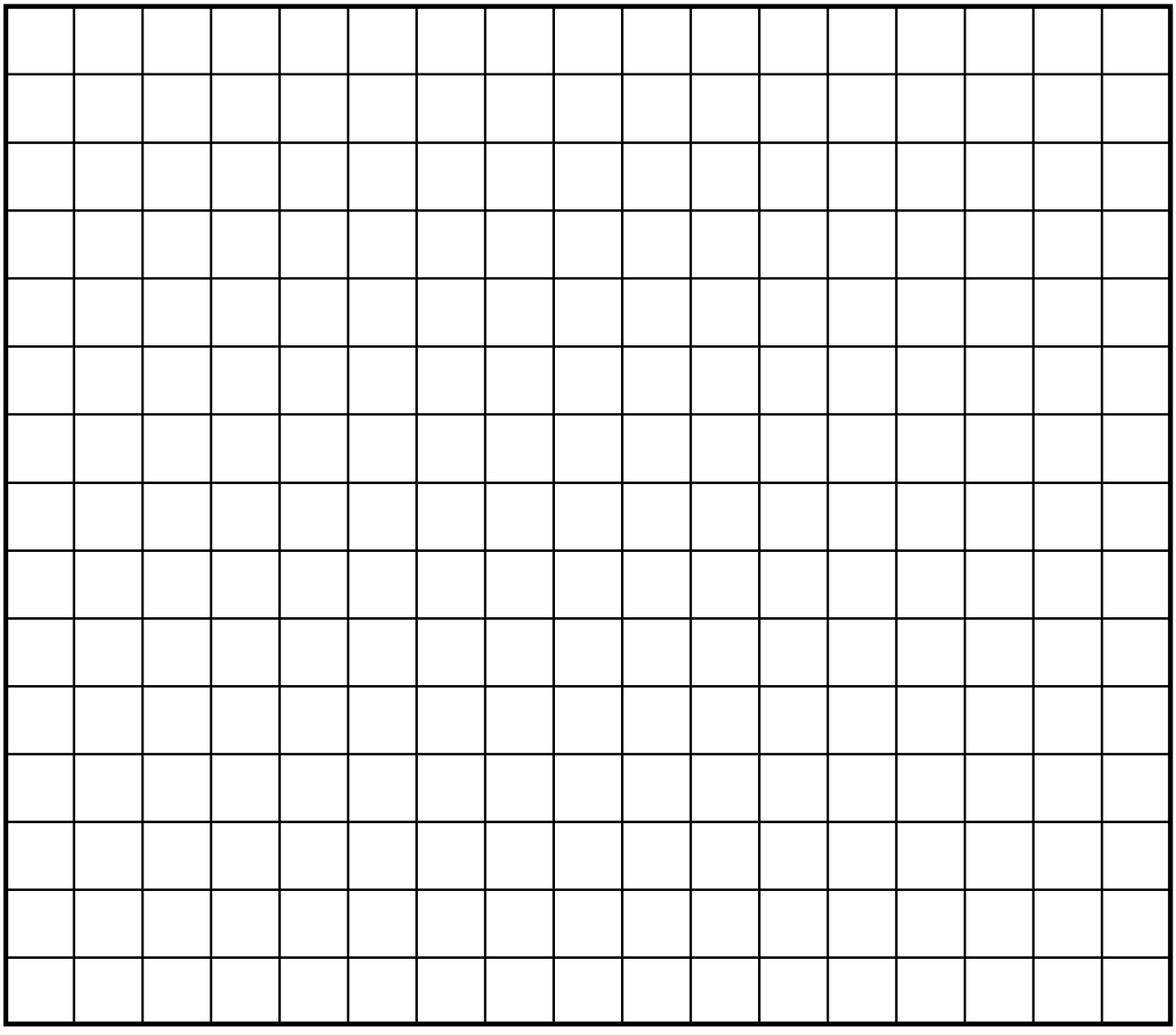
C. $14 - \square = 8$ **D.** $8 + 6 = \square$

8. Explain why Questions 1, 3, and 6 have only two number sentences in the fact families.

Name _____ Date _____

Part 6 Finding the Area of Your Hand

1. Trace your hand on the Centimeter Grid.
2. Find the area of the tracing of your hand.



3. What shortcuts could you use to find the area?

$\begin{array}{r} 14 \\ -\ 7 \\ \hline \end{array}$ Group 7	$\begin{array}{r} 12 \\ -\ 6 \\ \hline \end{array}$ Group 7	$\begin{array}{r} 10 \\ -\ 5 \\ \hline \end{array}$ Group 7
$\begin{array}{r} 13 \\ -\ 7 \\ \hline \end{array}$ Group 7	$\begin{array}{r} 14 \\ -\ 8 \\ \hline \end{array}$ Group 7	$\begin{array}{r} 13 \\ -\ 6 \\ \hline \end{array}$ Group 7
$\begin{array}{r} 12 \\ -\ 5 \\ \hline \end{array}$ Group 7	$\begin{array}{r} 14 \\ -\ 6 \\ \hline \end{array}$ Group 7	$\begin{array}{r} 12 \\ -\ 7 \\ \hline \end{array}$ Group 7

5 Group 7	6 Group 7	7 Group 7
7 Group 7	6 Group 7	6 Group 7
5 Group 7	8 Group 7	7 Group 7

16 − 8 Group 8	18 − 9 Group 8	8 − 4 Group 8
15 − 7 Group 8	15 − 8 Group 8	18 −10 Group 8
7 − 4 Group 8	17 − 8 Group 8	6 − 3 Group 8

4 Group 8	9 Group 8	8 Group 8
8 Group 8	7 Group 8	8 Group 8
3 Group 8	9 Group 8	3 Group 8

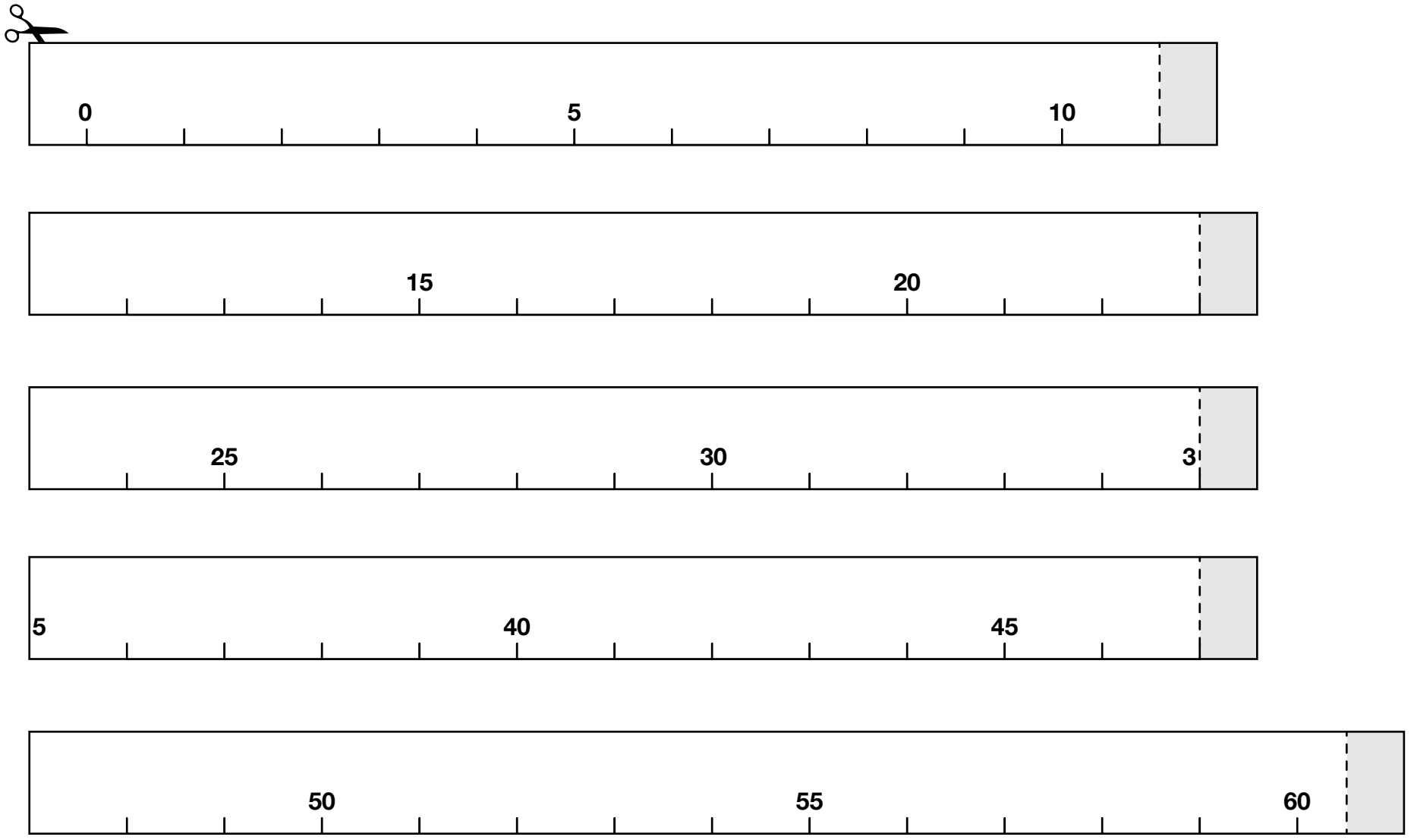
Name _____ Date _____

Subtraction Facts I Know

Circle the subtraction facts you know and can answer quickly. Underline the facts you can figure out using a strategy. Do nothing to the facts you still need to learn.

	A	B	C	D	E	F	G	H
2	4 − 2 = 2	5 − 2 = 3	6 − 2 = 4	7 − 2 = 5	8 − 2 = 6	9 − 2 = 7	10 − 2 = 8	11 − 2 = 9
3	5 − 3 = 2	6 − 3 = 3	7 − 3 = 4	8 − 3 = 5	9 − 3 = 6	10 − 3 = 7	11 − 3 = 8	12 − 3 = 9
4	6 − 4 = 2	7 − 4 = 3	8 − 4 = 4	9 − 4 = 5	10 − 4 = 6	11 − 4 = 7	12 − 4 = 8	13 − 4 = 9
5	7 − 5 = 2	8 − 5 = 3	9 − 5 = 4	10 − 5 = 5	11 − 5 = 6	12 − 5 = 7	13 − 5 = 8	14 − 5 = 9
6	8 − 6 = 2	9 − 6 = 3	10 − 6 = 4	11 − 6 = 5	12 − 6 = 6	13 − 6 = 7	14 − 6 = 8	15 − 6 = 9
7	9 − 7 = 2	10 − 7 = 3	11 − 7 = 4	12 − 7 = 5	13 − 7 = 6	14 − 7 = 7	15 − 7 = 8	16 − 7 = 9
8	10 − 8 = 2	11 − 8 = 3	12 − 8 = 4	13 − 8 = 5	14 − 8 = 6	15 − 8 = 7	16 − 8 = 8	17 − 8 = 9
9	11 − 9 = 2	12 − 9 = 3	13 − 9 = 4	14 − 9 = 5	15 − 9 = 6	16 − 9 = 7	17 − 9 = 8	18 − 9 = 9
10	12 − 10 = 2	13 − 10 = 3	14 − 10 = 4	15 − 10 = 5	16 − 10 = 6	17 − 10 = 7	18 − 10 = 8	19 − 10 = 9

Clock Number Line

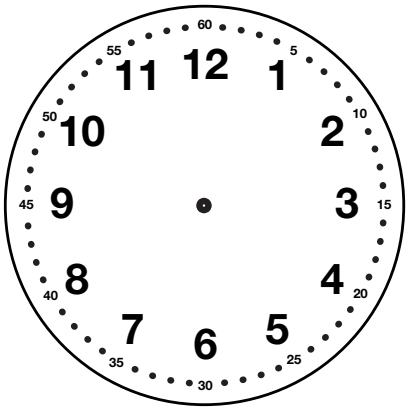


Name _____ Date _____

Hours and Hours

Draw the hour and minute hands on each clock to show the correct time. Use your clock.

1.



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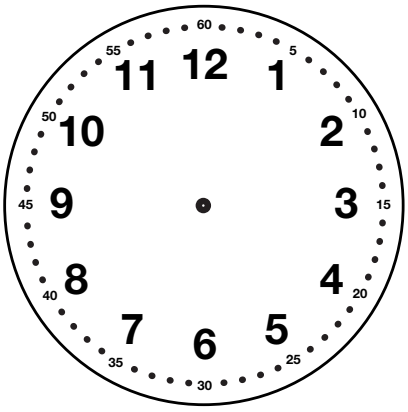
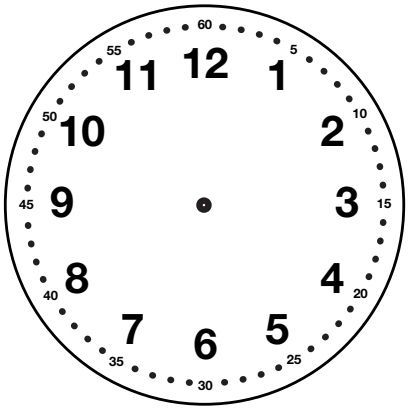
2.



9:30

3.



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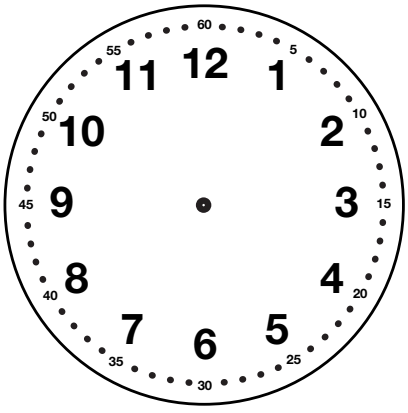
4.



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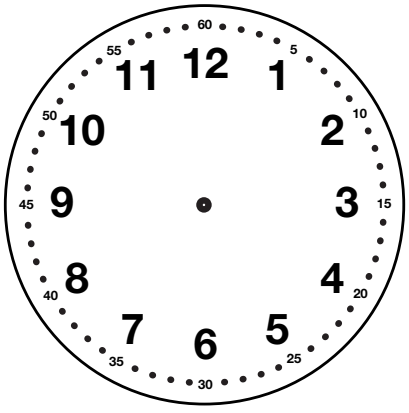
5.



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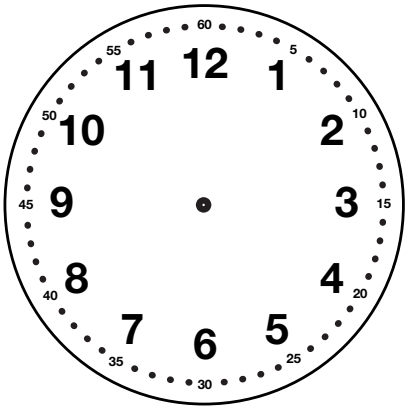
6.



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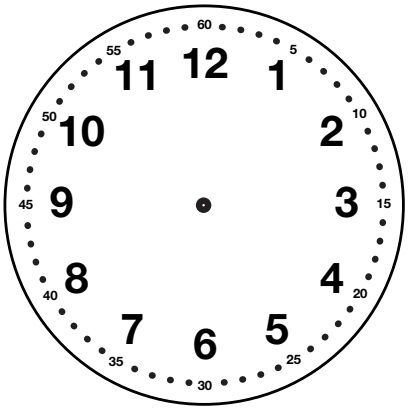
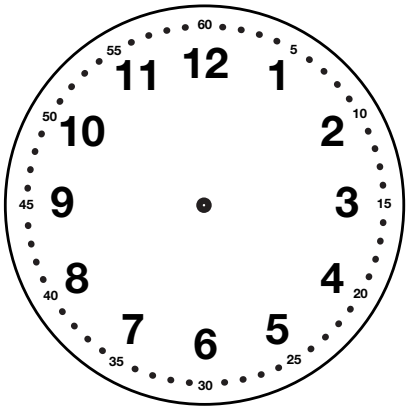
Name _____ Date _____

7.



1:30

8.



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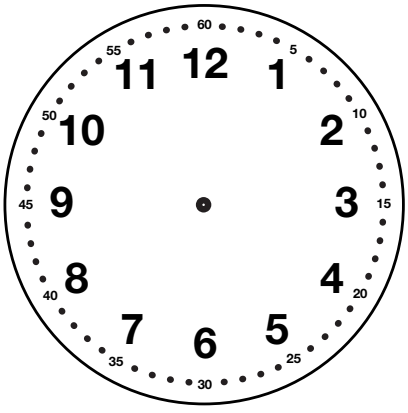
9.



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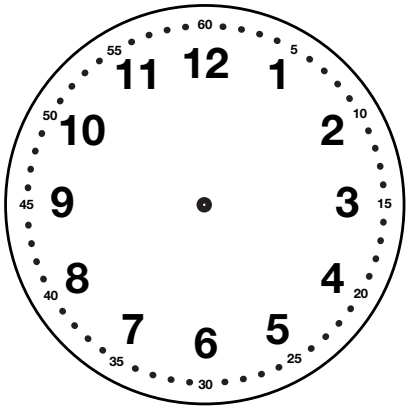
10.



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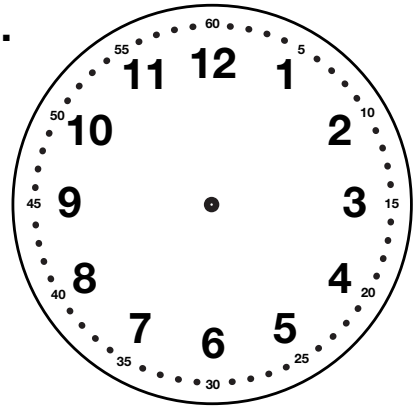
11.



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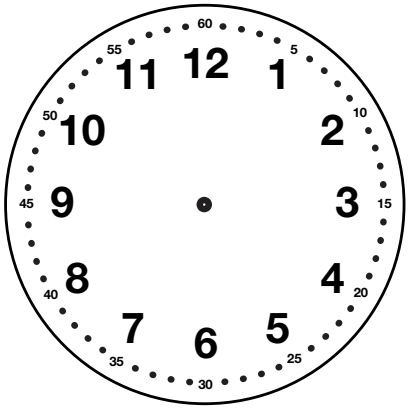
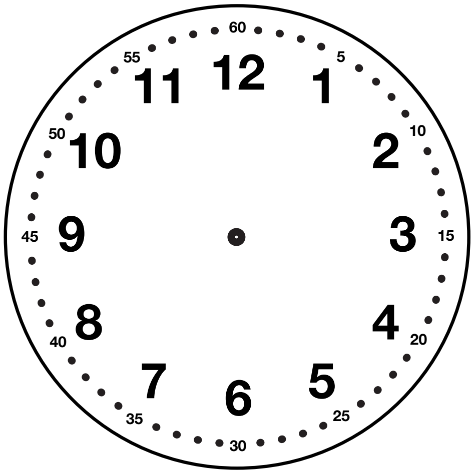
12.

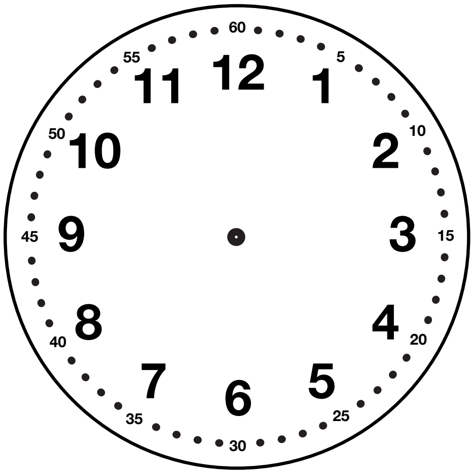


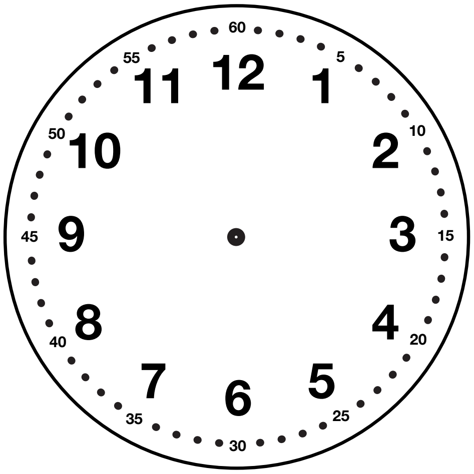
7:50

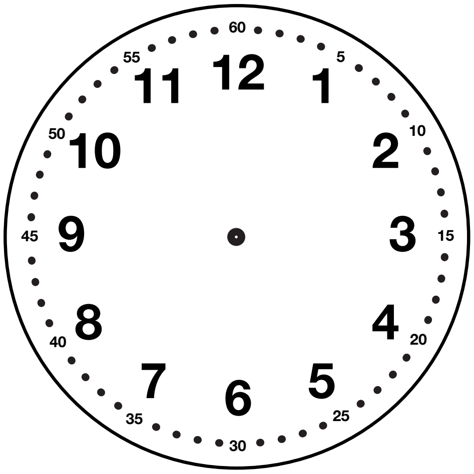
Name ______________________ Date ______________

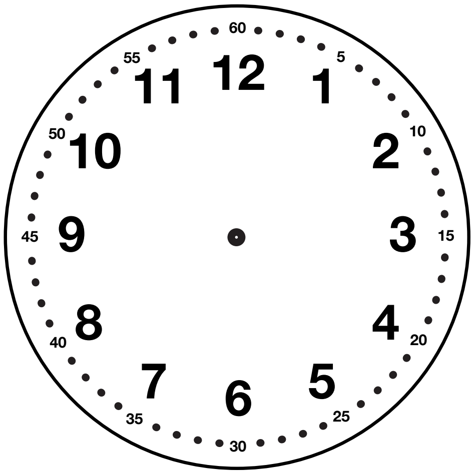
Practice with Clocks

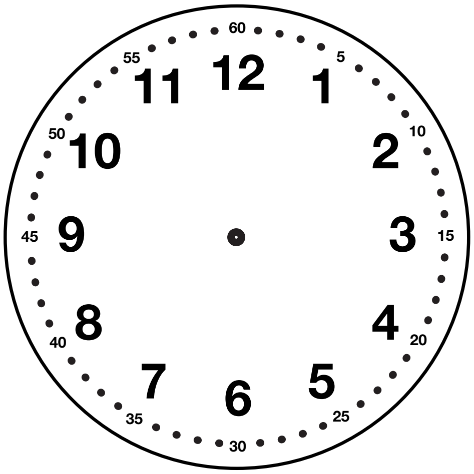










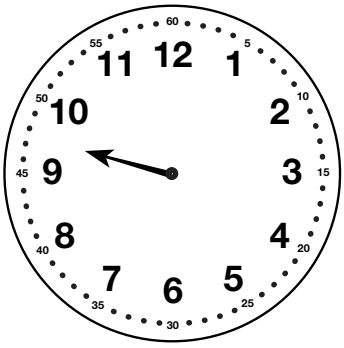


Name _____ Date _____

Time and Time Again

The minute hand is missing from these clocks. About what time is it? Use your clock.

1.



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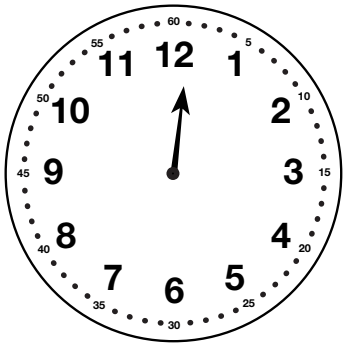
2.



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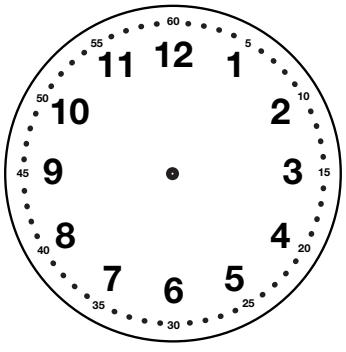
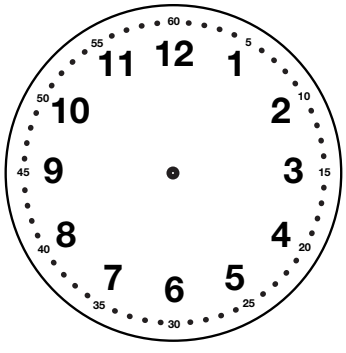
Show the time on your own clock. Then draw the hands on the clocks below.

3. 2:25

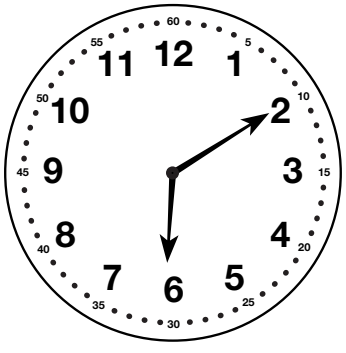


4. 9:10



Write the times that are shown on the clock faces below.

5.



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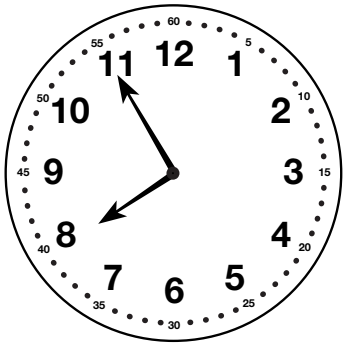

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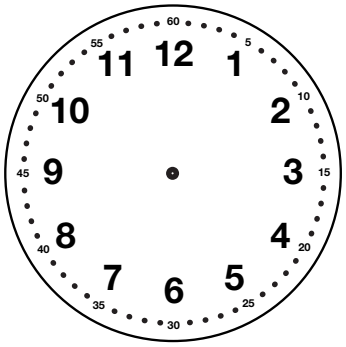
Name _____ Date _____

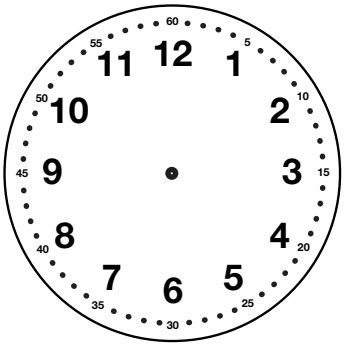
Show the start time, stop time, and the elapsed time for each of the following problems. Use your clock.

7. Richard started to read at 7:30. He read until his dad told him to go to sleep at 9:00.

Start Time



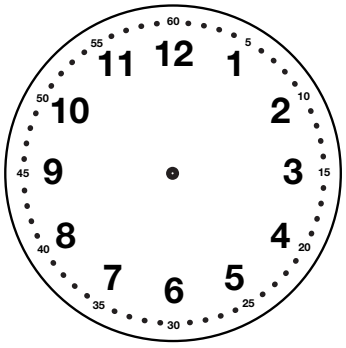
Stop Time



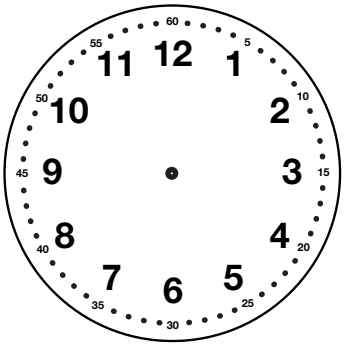
Elapsed time _____

8. Emily started cleaning the yard at 2:15. She finished her work at 3:30.

Start Time



Stop Time



Elapsed time _____

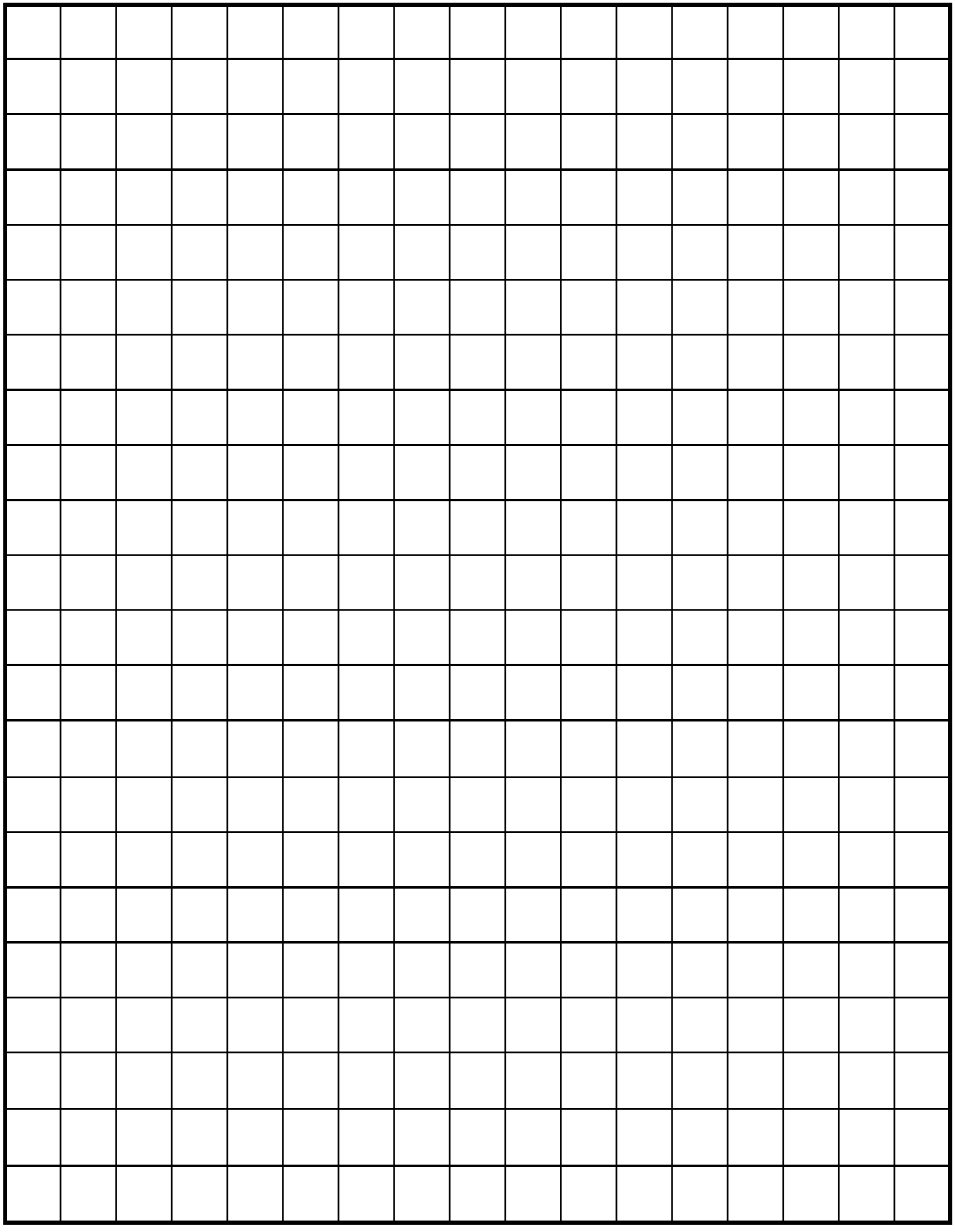
Name _____ Date _____

9. Mark said it took him 1 hour and 15 minutes to put the newspapers in bags for recycling. He started at 10:30. What time did he finish his work?

10. Liz and her mother went shopping. They were gone for 2 hours and 10 minutes. If they got home at 4:30, what time did they leave?

	Expectation	Check In	Comments
Solve problems involving time measurement to the nearest five minutes. [Q# 7–10]	**E2**		
Write and tell time to the nearest five minutes. [Q# 1–8]	**E4**		

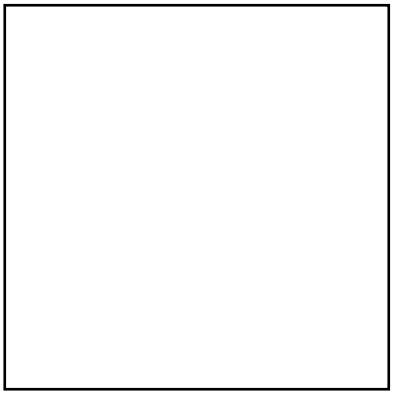
Name _____ Date _____



Name _____ Date _____

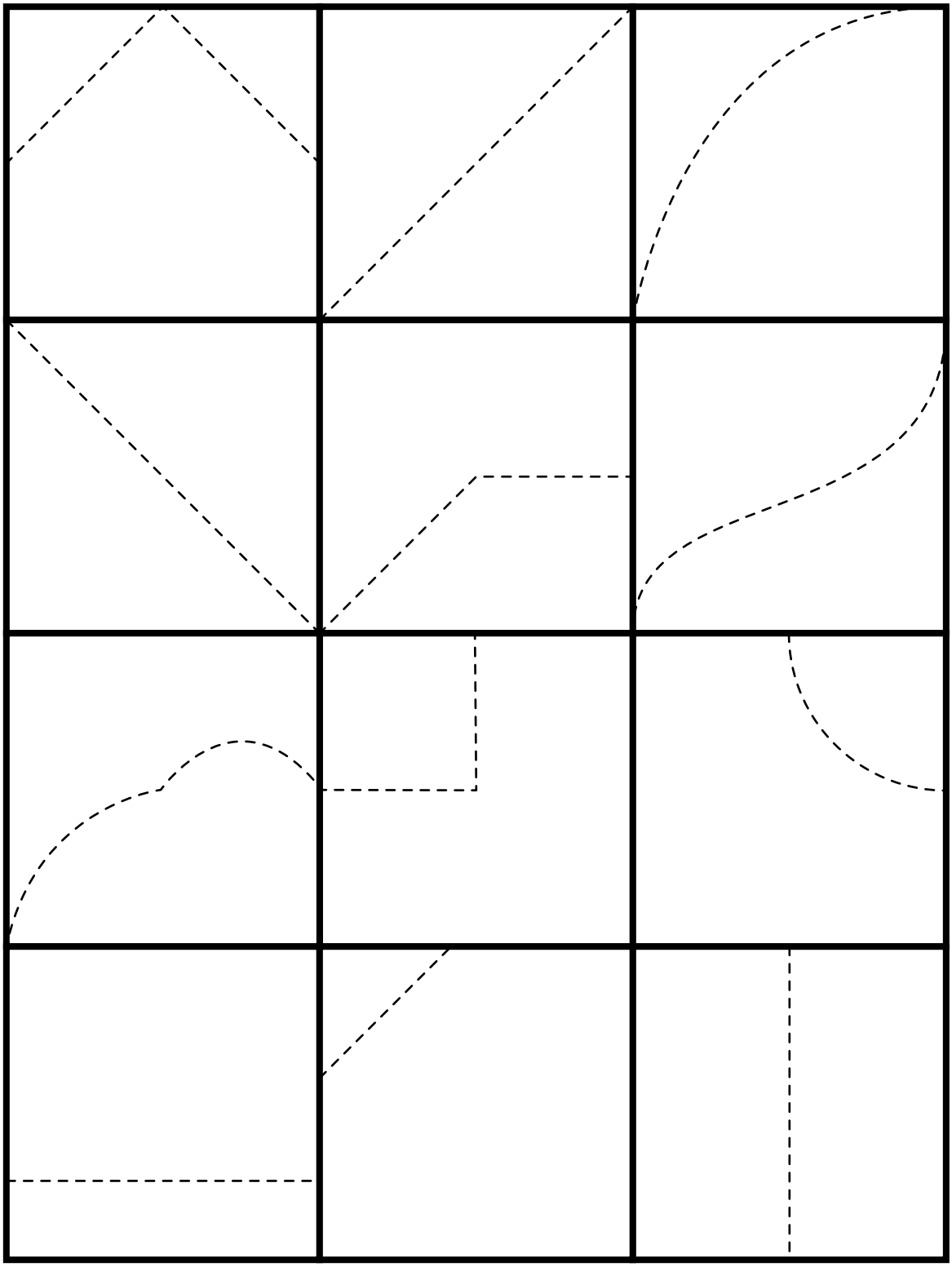
Putting Pieces Together

The square below is one square unit.



- Shuffle the pieces.
- Match pieces that make approximately one whole.
- Ask someone to check your matches.

- Cut apart each of the squares.
- Then cut on the dotted line in each square.



Make Your Own Shape

1. Draw a polygon or shape with curved sides on a piece of Make Your Own Shape Grid.
2. Find the area of your shape.
3. Trade papers with a partners.
4. Check the area of your partner's shapes.

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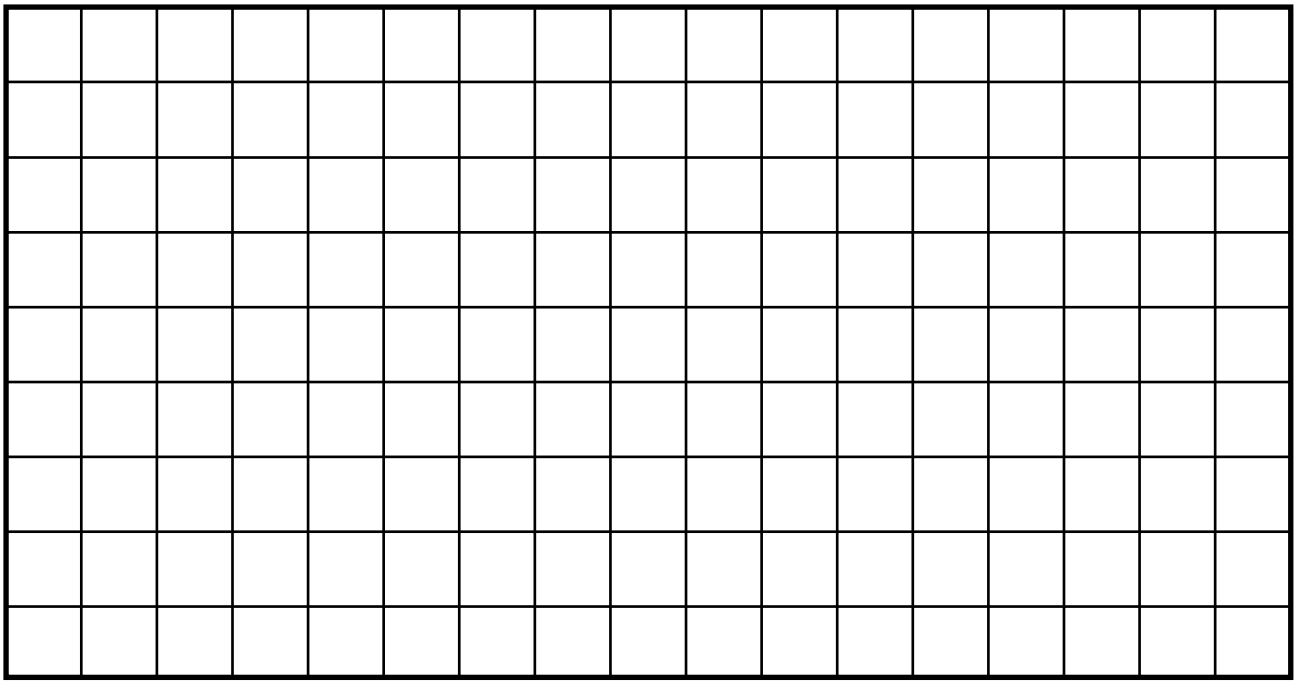
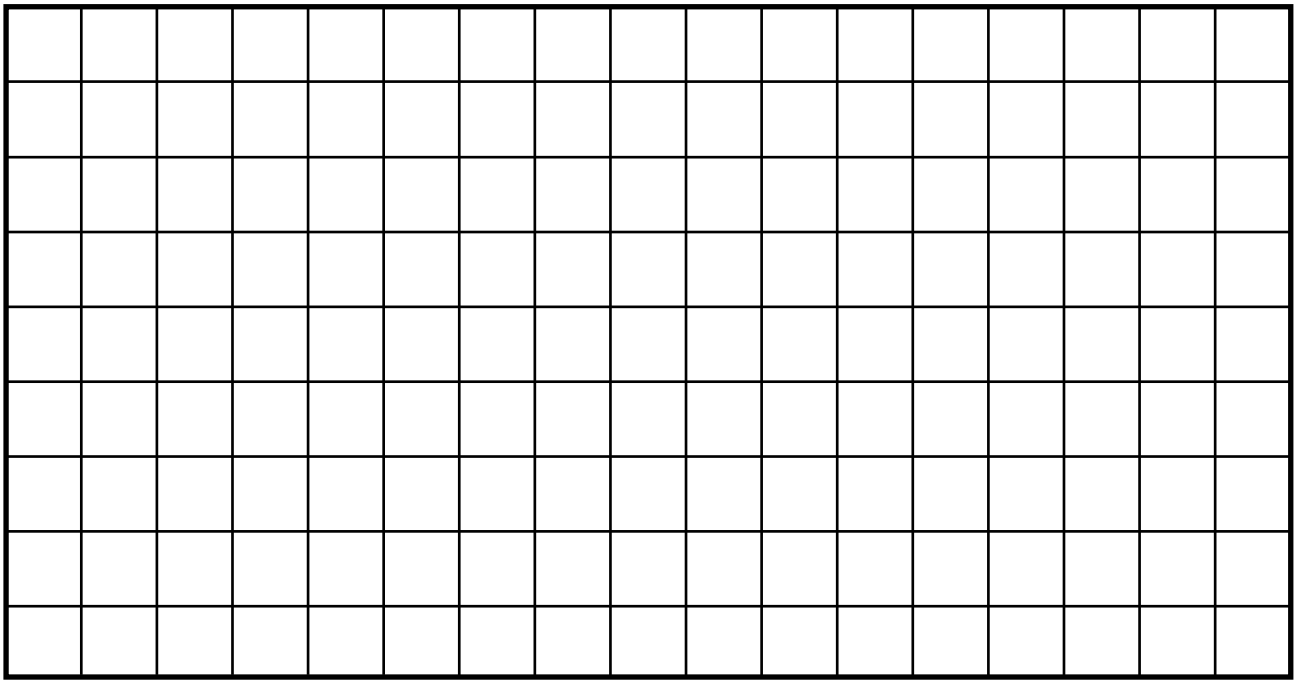
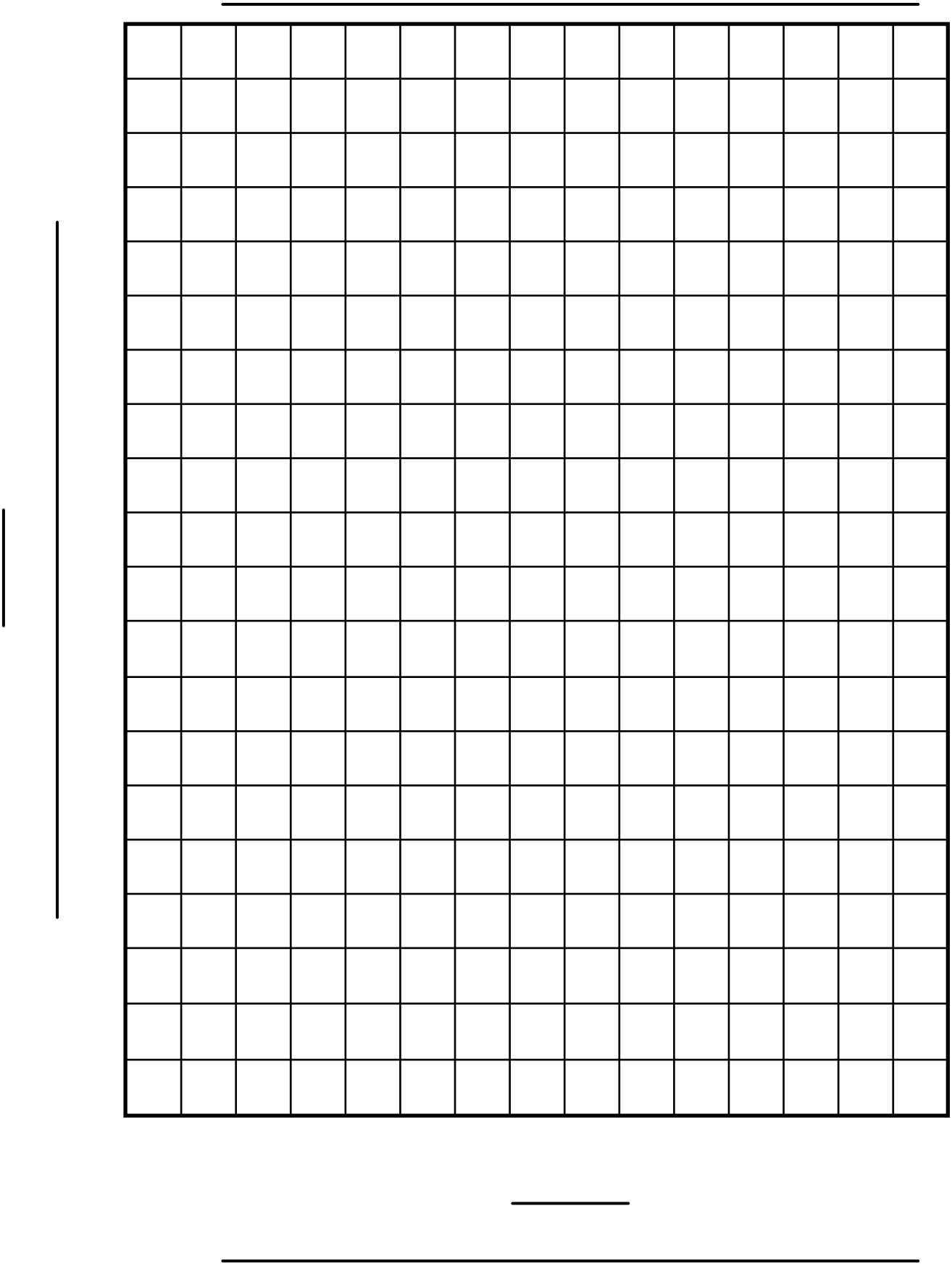
Make Your Own Shape Grid



Make Your Own Shape Grid



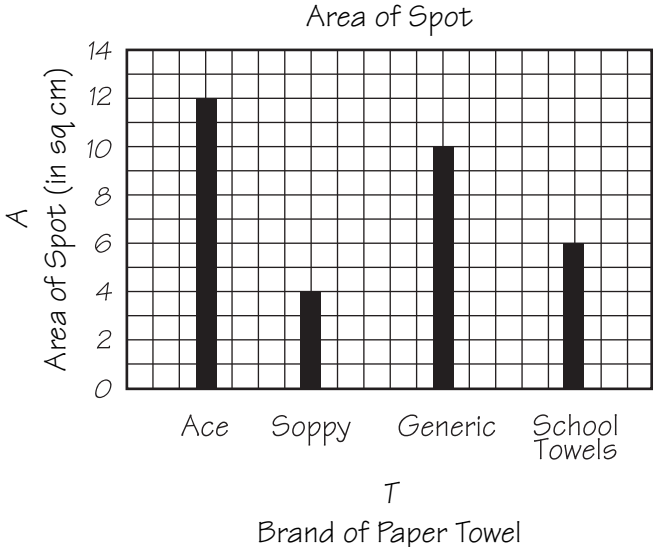
Name _____ Date _____



Name _____ Date _____

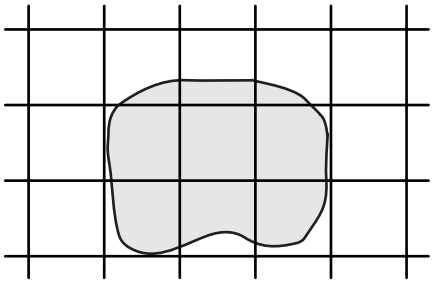
Lori's Questions

Lori did *The Better "Picker Upper" Lab* using four different brands of paper towels. She dropped two drops of water on each of the paper towels. Her graph is shown below.



1. Which paper towel had a spot with an area of 10 sq cm? _____

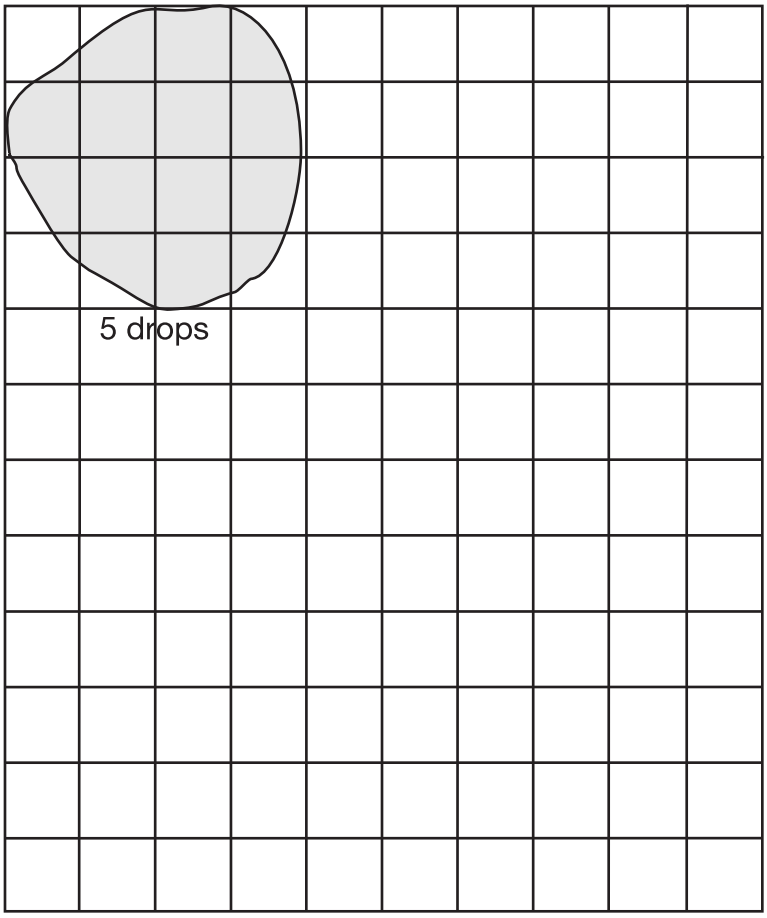
2. This is one of Lori's spots. She forgot to label it. Which paper towel is this spot from? Show or tell how you decided.



Name _____ Date _____

3. Lori did the experiment again, but this time she dropped five drops of water on a small paper towel. The picture on the right shows Lori's spot on her paper towel. How many drops of water do you think it would take to cover this towel completely? Show or tell how you decided.

Lori Paper Towel
(actual size)



Name _____ Date _____

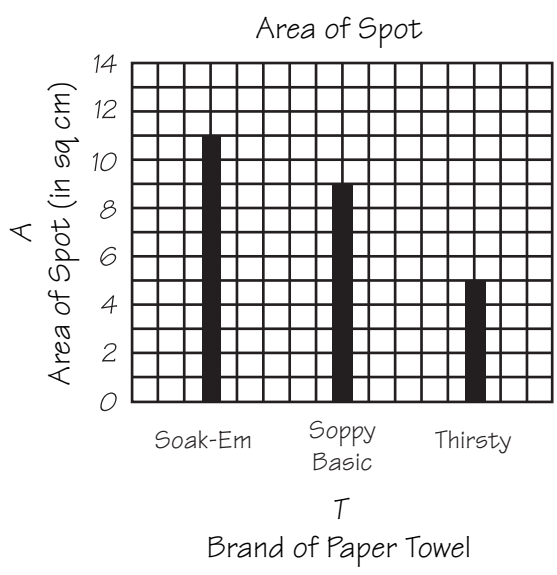
4. Lori's mother wanted to know which of three brands of paper towels picked up the most water. Lori did The Better "Picker Upper" Lab experiment at home on the three paper towels. She used the same size paper models to find the number of drops. Her data is below.

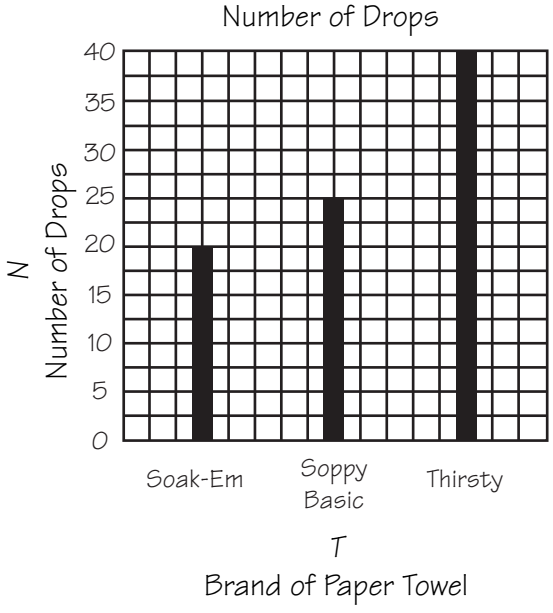
Area of Spot

T **Brand of Towel**	***A*** **Area of Spot (in sq cm)**			
	Trial 1	**Trial 2**	**Trial 3**	**Median**
Soak-Em	10	11	11	11
Soppy Basic	8	10	9	9
Thirsty	5	4	5	5

Number of Drops

T **Type of Towel**	***N*** **Number of Drops**
Soak-Em	20
Soppy Basic	25
Thirsty	40





Which paper towel should Lori recommend that her mother buy? Explain.

Name _____ Date _____

Lori's Questions Feedback Box	Expect-ation	Check In	Comments
Find the area of shapes with curved sides by counting square centimeters. [Q# 2–3]	E3		
Read a table and graph to find information about a data set. [Q# 1–2, 4]	E6		
Make predictions and generalizations about a data set using data tables, graphs, and diagrams. [Q# 3–4]	E8		

	Yes . . .	Yes, but . . .	No, but . . .	No. . .
MPE1. Know the problem. I read the problem carefully. I know the questions to answer and what information is important. [Q# 4]				
MPE2. Find a strategy. I choose good tools and an efficient strategy for solving the problem. [Q# 4]				
MPE5. Show my work. I show or tell how I arrived at my answer so someone else can understand my thinking. [Q# 4]				
MPE6. Use labels. I use labels to show what numbers mean. [Q# 4]				

Name _____ Date _____

Math Practices Notes

Solving a problem:

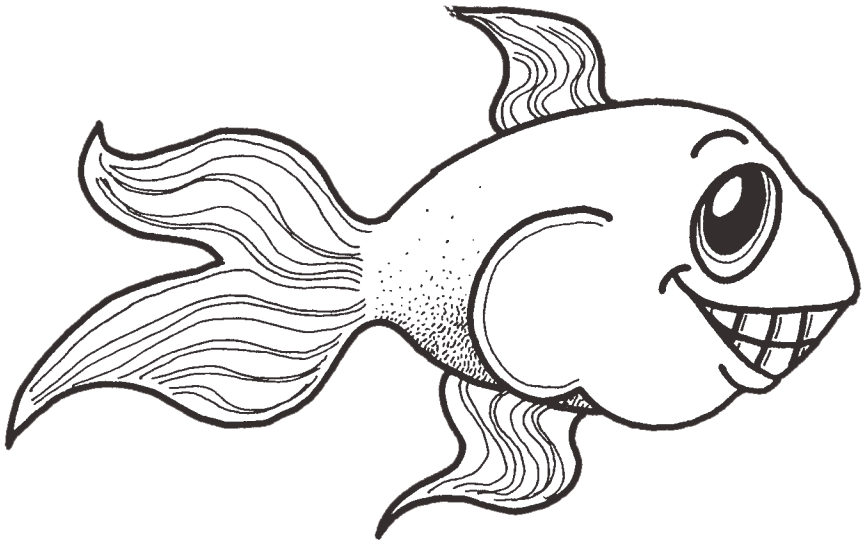
1. **Know the problem.** I read the problem carefully. I know the questions to answer and what information is important.	2. **Find a strategy.** I choose good tools and an efficient strategy for solving the problem.
3. **Check for reasonableness.** I look back at my solution to see if my answer makes sense. If it does not, I try again.	4. **Check my calculations.** If I make mistakes, I correct them.

Showing or telling how I solve a problem:

5. **Show my work.** I show or tell how I arrived at my answer so someone else can understand my thinking.	6. **Use labels.** I use labels to show what numbers mean.

Name _____ Date _____

A Raincoat for Joe the Goldfish



Joe the Goldfish

Pretend you need to design and make a raincoat for Joe the Goldfish. Design a raincoat for Joe on *Centimeter Grid Paper*. Find the area of the raincoat in square centimeters. Use the space below to explain your answer.

Name _____ Date _____

A Raincoat for Joe the Goldfish Feedback Box

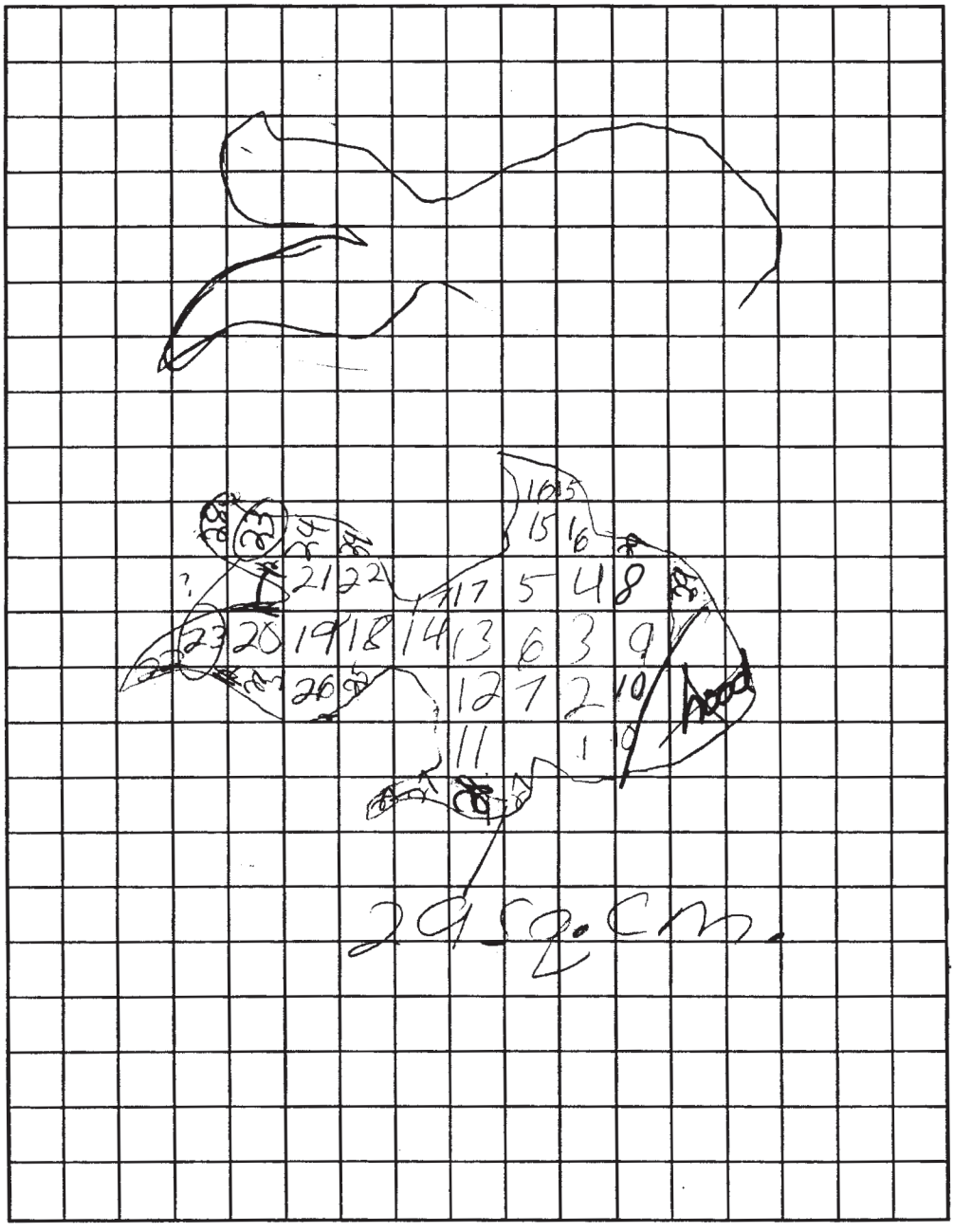
Student to Student	Yes . . .	Yes, but . . .	No, but . . .	No. . .
MPE1. Know the problem. I read the problem carefully. I know the questions to answer and what information is important.				
MPE2. Find a strategy. I choose good tools and an efficient strategy for solving the problem.				
MPE3. Check for reasonableness. I look back at my solution to see if my answer makes sense. If it does not, I try again.				
MPE4. Check my calculations. If I make mistakes, I correct them.				
MPE5. Show my work. I show or tell how I arrived at my answer so someone else can understand my thinking.				
MPE6. Use labels. I use labels to show what numbers mean.				

Name _____ Date _____

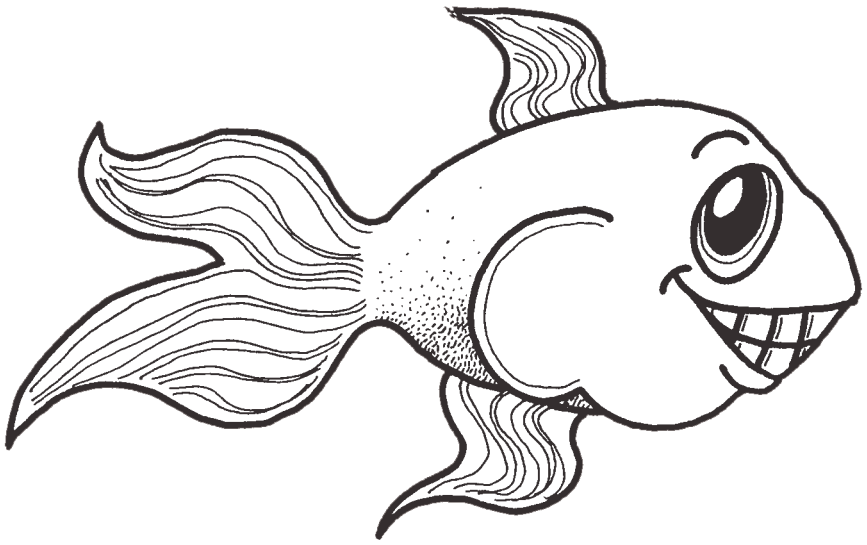
A Raincoat for Joe the Goldfish Feedback Box

Teacher to Student	Yes . . .	Yes, but . . .	No, but . . .	No. . .
MPE1. Know the problem. I read the problem carefully. I know the questions to answer and what information is important.				
MPE2. Find a strategy. I choose good tools and an efficient strategy for solving the problem.				
MPE3. Check for reasonableness. I look back at my solution to see if my answer makes sense. If it does not, I try again.				
MPE4. Check my calculations. If I make mistakes, I correct them.				
MPE5. Show my work. I show or tell how I arrived at my answer so someone else can understand my thinking.				
MPE6. Use labels. I use labels to show what numbers mean.				

Kelly's Work Page 1



Kelly's Work Page 2



29 sq.cm. first we cutout Joe
2. Then we traced him on grid paper
3. after that we counted his area.
4. The area was 29 sq.cm,
5. were not covering his face so we did not COUNT it, we made a hood

EXTRA.!!!!

1. 29 sqCM on each side altogether is 585qCM,

Ernie's Work

First I masure it and then I made a raincoat. And Now I am going to masure the raincoat with choklate pieces.

Name _____ Date _____

Using Number Sense at the Book Sale
Check-In: Question 11
Feedback Box

Student to Student	Yes . . .	Yes, but . . .	No, but . . .	No. . .
MPE2. Find a strategy. I choose good tools and an efficient strategy for solving the problem.				
MPE5. Show my work. I show or tell how I arrived at my answer so someone else can understand my thinking.				
MPE6. Use labels. I use labels to show what numbers mean.				

Teacher to Student	Yes . . .	Yes, but . . .	No, but . . .	No. . .
MPE2. Find a strategy. I choose good tools and an efficient strategy for solving the problem.				
MPE5. Show my work. I show or tell how I arrived at my answer so someone else can understand my thinking.				
MPE6. Use labels. I use labels to show what numbers mean.				