3rd Math Distance Learning Activities

Directions: Choose **one** activity from the Practice Choice Board and **one** activity from the Fluency Games Choice Board to complete each day. Color in the box for each activity as you complete it. Of course, you can play the fluency games as much as you like, just be sure to try them all. The Technology Choice Board is **optional**. You should spend about 30 minutes a day on Math content. If you would have any questions, please contact your child's teacher.

Practice Choice Board

Choose one activity to complete each day. Choose either the **Reteach** page OR the **Enrich/Challenge** page. You **do not** have to do both pages. Color in the box for the activity you complete each day. You have throughout the month of April to complete them all. If you have any questions, please contact your child's teacher.

Number Patterns Reteach 1.1 or Enrich 1.1	Round to the Nearest Ten or Hundred Reteach 1.2 or Enrich 1.2	Estimate Sums Reteach 1.3 or Enrich 1.3
Mental Math Strategies for Addition Reteach 1.4 or Enrich 1.4	Algebra * Properties to Add Reteach 1.5 or Enrich 1.5	Use the Break Apart Strategy to Add Reteach 1.6 or Enrich 1.6
Use Place Value to Add Reteach 1.7 or Enrich 1.7	Estimate Difference Reteach 1.8 or Enrich	Mental Math Strategies for Subtraction Reteach 1.9 or Enrich 1.9
Use Place Value to Subtract Reteach 1.10 or Enrich	Combine Pace Values to Subtract Reteach 1.11 or Enrich 1.11	Problem Solving * Model Addition and Subtraction Reteach 1.12 or Enrich 1.12
Use Picture Graphs Reteach 2.2 or Enrich 2.2	Algebra * Find Unknown Numbers Reteach 5.2 or Enrich 5.2	Size of Equal Groups Reteach 6.2 or Enrich 6.2
Problem Solving * Two Step Problems Reteach 7.10 or Enrich 7.10	Fractions on a Number Line Reteach 8.5 or Enrich 8.5	Free Space

Fluency Games Choice Board

Choose one fluency game to play each day. The directions for each game are attached. Color in the box for the game you complete each day. You have throughout the month of April to complete them all. Feel free to play the games as often as you like, but be sure to try all of the games at least once. If you have any questions, please contact your child's teacher.

Owl Pairs – Add to 11 and 15 *See attachments*	Race to the Moon *See attachments*	Guess Who? *See attachments*
How Close Can You Get to 100? *See attachments*	Fraction Concentration *See attachments*	Making Ten Memory *See attachments*
Multiplication Headbands *See attachments*	Rounding Dice Game *See attachments*	Division Go Fish! *See attachments*

Optional: Technology Choice Board

Choose one technology resources to play each day. Put a check mark in the box for the resource you play each day. You have throughout the month of April to use them all. Feel free to play the games as often as you like, but be sure to try all of the games at least once. If you have any questions, please contact your child's teacher.

***BrainPop Jr. **(Classlink)**  **Search: Pictographs and Bar Graphs**	***Zearn **(Classlink)** ZEARN **Continue on your learning path assigned by your teacher.**	***Reflex **(Classlink)** Reflex **Work until you get a green light!**
RoomRecess.com Games: • Tic, Math, Toc • Snowball Fight • Boom Blocks • Pizzeria Parlor • Sir Roundalot • Number Ninja https://www.roomrecess.com/	FREE Space Choose your favorite math game to play on this day.	 prodigy https://www.prodigygame.com/
 https://toytheater.com/category/math-games/ Games: • Bingo - for addition, subtraction, multiplication, and division. • Flash Cards • Subtraction Sumo • Jewel Diver • Fruit Fall • Missing Multiplier	Ascend Math https://ascendmath.com/fcm/html5/ **Practice addition, subtraction, multiplication and division facts 0 - 12.**	MATH NOOK [Math Games and More] https://www.mathnook.com/ Games: - Alien Math Rounding to 10 and 100 - 3 Rabbits - Bike Racing Math Addition - Digit Drop - Match Around

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Name _____

Algebra • Number Patterns

A **pattern** is an ordered set of numbers or objects. The order helps you predict what will come next.

+	0	1	2	3	4
0	0	1	2	3	4
1	1	2	3	4	5
2	2	3	4	5	6
3	3	4	5	6	7
4	4	5	6	7	8

Use the addition table to find patterns.

- Color the row that starts with 1. What pattern do you see?

  The numbers increase by 1.

- Color the column that starts with 1. What pattern do you see?

  The numbers increase by 1. The numbers are the same as in the row starting with 1.

- Circle the sum of 4 in the column you colored. Circle the addends for that sum. What two addition sentences can you write for that sum of 4?

  3 + 1 = 4 and 1 + 3 = 4

  The addends are the same. The sum is the same.

The **Commutative Property of Addition** states that you can add two or more numbers in any order and get the same sum.

Use the addition table to find the sum.

1. 2 + 3 = ___ 3 + 2 = ___

2. 2 + 0 = ___ 0 + 2 = ___

Find the sum. Then use the Commutative Property of Addition to write the related addition sentence.

3. 3 + 0 = ___

___ + ___ = ___

4. 4 + 1 = ___

___ + ___ = ___

5. 2 + 3 = ___

___ + ___ = ___

Name _____

Pattern Pairs and Quads

+	0	1	2	3	4	5	6	7	8	9
0	0	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9	10
2	2	3	4	5	6	7	8	9	10	11
3	3	4	5	6	7	8	9	10	11	12
4	4	5	6	7	8	9	10	11	12	13
5	5	6	7	8	9	10	11	12	13	14
6	6	7	8	9	10	11	12	13	14	15
7	7	8	9	10	11	12	13	14	15	16
8	8	9	10	11	12	13	14	15	16	17
9	9	10	11	12	13	14	15	16	17	18

1. Look at a pair of numbers next to each other in any *row* of the addition table. Is their sum even or odd? **Explain.**

_____

_____

2. Look at a pair of numbers next to each other in any *column* of the addition table. Is their sum even or odd? **Explain.**

_____

_____

3. **Stretch Your Thinking** Look at any square of four numbers in the addition table. One square is outlined as an example. Is the sum of the four numbers even or odd? **Explain.**

_____

_____

_____

Name _____

Round to the Nearest Ten or Hundred

When you **round** a number, you find a number that tells you *about* how much or *about* how many.

Use place value to round 76 to the nearest ten.

Step 1 Look at the digit to the right of the tens place.

- If the ones digit is 5 or more, the tens digit increases by one.
- If the ones digit is less than 5, the tens digit stays the same.

Step 2 Write zero for the ones digit.

76
|
ones place

The digit in the ones place is 6.

$6 > 5$

So, the digit 7 in the tens place increases to 8.

So, 76 rounded to the nearest ten is **80**.

Think: To round to the nearest hundred, look at the tens digit. So, 128 rounded to the nearest hundred is **100**.

128
|
tens place

Round to the nearest ten.

1. 24 _____ **2.** 15 _____ **3.** 47 _____

4. 42 _____ **5.** 81 _____ **6.** 65 _____

Round to the nearest hundred.

7. 176 _____ **8.** 395 _____ **9.** 431 _____

10. 421 _____ **11.** 692 _____ **12.** 470 _____

Name _____

Round and About

Round the distances to the nearest hundred and ten.

		Nearest Hundred	Nearest Ten
1.	628 miles	_____ miles	_____ miles
2.	704 miles	_____ miles	_____ miles
3.	58 miles	_____ miles	_____ miles

4. Write Math **Explain** why 58 can be rounded to the nearest hundred even though there is not a digit in the hundreds place.

_____

_____

_____

_____

5. **Stretch Your Thinking** Write a number that is the same when rounded to the nearest hundred and ten. **Explain.**

_____

_____

_____

_____

_____

Name _____

Estimate Sums

An **estimate** is a number close to an exact amount.

You can use **compatible numbers** to estimate. Compatible numbers are easy to compute mentally and are close to the real numbers.

Estimate. Use compatible numbers.

$73 + 21 =$ ▒

So, 73 + 21 is about **100**.

$$\begin{array}{rcl} 73 & \text{———} & 75 \\ +21 & \text{———} & +25 \\ \hline & & 100 \end{array}$$

Another way to estimate is to round numbers to the same place value.

Estimate. Round each number to the nearest hundred. $214 + 678 =$ ▒

Step 1 Look at the digit to the right of the hundreds place.

- $1 < 5$, so the digit 2 stays the same.
- $7 > 5$, so the digit 6 increases by 1 to become 7.

$$\begin{array}{rcl} 214 & \text{———} & 200 \\ +678 & \text{———} & +700 \\ \hline & & 900 \end{array}$$

Step 2 Write zeros for the tens and ones places.

So, 214 + 678 is about **900**.

Use rounding or compatible numbers to estimate the sum.

1. $\begin{array}{r} 42 \\ +\ 36 \\ \hline \end{array}$ ____ + ____

2. $\begin{array}{r} 523 \\ +\ 117 \\ \hline \end{array}$ ____ + ____

3. $\begin{array}{r} 235 \\ +\ 374 \\ \hline \end{array}$ ____ + ____

4. $\begin{array}{r} 23 \\ +\ 99 \\ \hline \end{array}$ ____ + ____

5. $\begin{array}{r} 254 \\ +\ 167 \\ \hline \end{array}$ ____ + ____

6. $\begin{array}{r} 299 \\ +\ 199 \\ \hline \end{array}$ ____ + ____

Name _____

Estimating the Crowd

It is Kids' Month at the city baseball park. The table shows how many people went to the baseball games during Kids' Month. Estimate to answer each question.

Attendance		
Game	Adults	Children
Game 1	235	324
Game 2	257	399
Game 3	189	404
Game 4	477	398
Game 5	317	197

1. Which game did the fewest people attend? _____

2. Which game did about 650 people attend? _____

3. Which game did the most people attend? _____

4. **Stretch Your Thinking** Suppose the total attendance at Game 6 was about 800 and there were more children than adults at the game. About how many children and how many adults could have attended? **Explain** how you know your answer is correct.

_____

_____

_____

_____

_____

Name _____

Mental Math Strategies for Addition

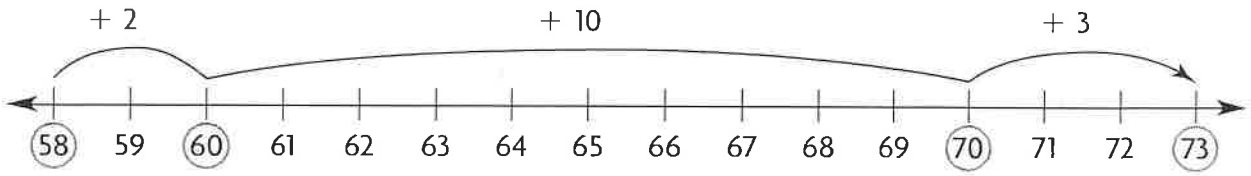
You can count by tens and ones to find a sum.

Find 58 + 15.

Step 1 Count on to the nearest ten. Start at 58. Count to 60.

Step 2 Count by tens. Start at 60. Count to 70.

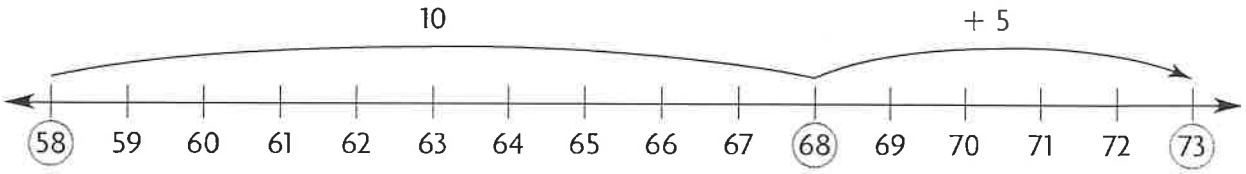
Step 3 Then count by ones. Start at 70. Count to 73.



Think: 58 + 2 + 10 + 3 = 73

So, 58 + 15 = **73**.

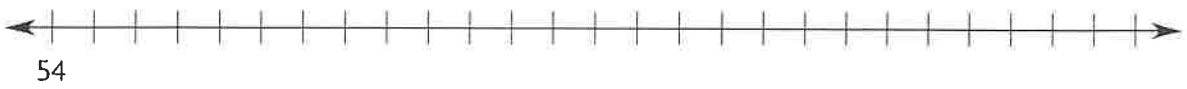
You can also count on by tens first and then by ones.



Think: 58 + 10 + 5 = 73

So, 58 + 15 = **73**.

1. Count by tens and ones to find 54 + 26. Draw jumps and label the number line to show your thinking.



54 + 26 = _____

Name _____

Musical Math

Use mental math strategies to solve the problem.

Use this information for 1–3.

There are 35 more musicians in the String section of a city Symphony Orchestra than in its Brass section. There are 29 musicians in the Brass section.

1. How many musicians are in the String and Brass sections of the Symphony Orchestra?

_____

2. Suppose 2 more musicians joined the String section of the Symphony Orchestra, and 4 musicians left the Brass section. How many musicians would there be in the String and Brass sections?

_____

3. How many musicians would the city Symphony Orchestra need to add now to have at least 100 musicians in its String and Brass sections?

_____

Use this information for 4–6.

The String section of a city Symphony Orchestra has 10 more musicians playing First and Second Violins than Violas and Cellos. It has 23 Violas and Cellos.

4. How many First and Second Violins, Violas, and Cellos are in the Symphony Orchestra?

_____

5. Suppose the Symphony Orchestra added 2 Violas and 2 Cellos. How many musicians would be in the String section of the Symphony Orchestra then?

_____

6. How many String musicians would the Symphony Orchestra need to add now to have exactly 75 musicians in its String section?

_____

7. Write Math How do mental math strategies help you solve problems such as the ones above?

_____

_____

Name _____

Algebra • Use Properties to Add

You can use addition properties and strategies to help you add.

Find 3 + 14 + 21.	**Find 7 + (3 + 22).**
The **Commutative Property of Addition** states that you can add numbers in any order and still get the same sum.	The **Associative Property of Addition** states that you can group addends in different ways and still get the same sum.
Step 1 Look for numbers that are easy to add. **Think:** Make doubles. 3 + 1 = 4 and 4 + 4 = 8.	**Step 1** Look for numbers that are easy to add. **Think:** Make a ten. 7 + 3 = 10
Step 2 Use the Commutative Property to change the order. 3 + 14 + 21 = 3 + 21 + 14	**Step 2** Use the Associative Property to change the grouping. 7 + (3 + 22) = (7 + 3) + 22
Step 3 Add. 3 + 21 + 14 = **24** + 14 24 + 14 = **30** + 8	**Step 3** Add. (7 + 3) + 22 = **10** + 22 **10** + 22 = **32**
So, 3 + 14 + 21 = **38**.	So, 7 + (3 + 22) = **32**.

Use addition properties and strategies to find the sum.

1. 2 + 15 + 8 = _____

2. 19 + 36 + 1 = _____

3. 25 + 44 + 5 = _____

4. 12 + 36 + 18 + 14 = _____

5. 23 + 14 + 23 = _____

6. 11 + 15 + 19 + 14 = _____

Name _____

Properties on Parade

Use addition properties to find the unknown numbers. Write the property that you used.

1. (▢ + 7) + 30 = 47

_____

_____

2. (44 + 8) + 52 = ▢ + (▢ + 52)

_____

_____

3. (96 + 7) + 73 = ▢ + (▢ + 73)

_____

_____

4. (9 + 17) + ▢ = 59

_____

_____

5. (▢ + 3) + 75 = 98

_____

_____

6. 5 + ▢ + 65 = 89

_____

_____

7. Write Math **Explain** how using addition properties can make adding easier.

_____

_____

_____

Use the Break Apart Strategy to Add

You can use the break apart strategy to add.

Add. 263 + 215

Think and Record

Step 1 Estimate. Round to the nearest hundred.

300 + 200 = **500**

Step 2 Start with the hundreds. Break apart the addends. Then add each place value.

263 = 200 + 60 + 3
215 = 200 + 10 + 5
400 + 70 + 8

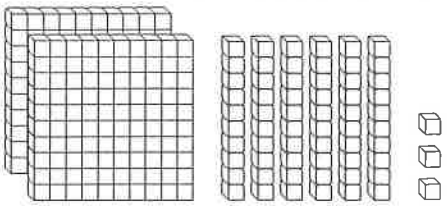
Step 3 Add the sums.

400 + 70 + 8 = **478**

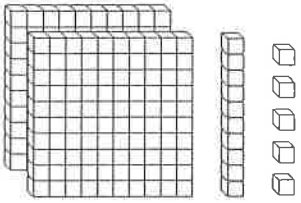
So, 263 + 215 = **478**.

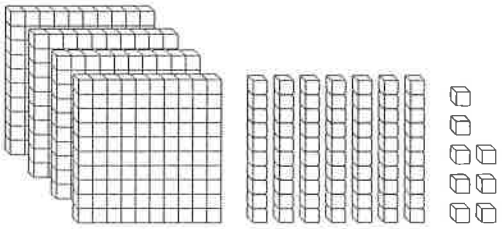
Model

263 = 2 hundreds + 6 tens + 3 ones



215 = 2 hundreds + 1 ten + 5 ones





4 hundreds + 7 tens + 8 ones = 478

Estimate. Then use the break apart strategy to find the sum.

1. Estimate: _____

242 =
+ 536 = _____

2. Estimate: _____

469 =
+ 413 = _____

3. Estimate: _____

385 =
+ 519 = _____

4. Estimate: _____

527 =
+ 266 = _____

Name _____

Find the Errors

Find the error in each problem. Describe the error. Then write the correct sum.

1. Asha used the break apart strategy to find 405 + 503. She added the place values and got 980.

$$\begin{array}{r} 400 + 50 + 0 \\ +\ 500 + 30 + 0 \\ \hline 900 + 80 + 0 \end{array} = 980$$

_____

_____

2. Mick used the break apart strategy to find 580 + 348. He added the place values and got 828.

$$\begin{array}{r} 500 + 80 + 0 \\ +\ 300 + 40 + 8 \\ \hline 800 + 120 + 8 \end{array} = 828$$

_____

_____

3. Karl used the break apart strategy to find 409 + 325 and got a sum of 814.

$$\begin{array}{r} 400 + 90 + 9 \\ +\ 300 + 20 + 5 \\ \hline 700 + 110 + 4 \end{array} = 814$$

_____

_____

4. Write Math ▸ Why is it important to write any zero in the correct place-value position when using the break apart strategy to add?

_____

_____

_____

Name _____

Use Place Value to Add

You can use place value to add 3-digit numbers.

Add. 268 + 195 **Estimate.** 300 + 200 = 500

Step 1 Add the ones. If there are 10 or more ones, regroup as tens and ones.

$$\begin{array}{r} {\scriptstyle 1} \\ 268 \\ +\ 195 \\ \hline 3 \end{array}$$

8 ones + **5** ones = **13** ones

13 ones = **1** ten **3** ones

Step 2 Add the tens. Regroup the tens as hundreds and tens.

$$\begin{array}{r} {\scriptstyle 1\,1} \\ 268 \\ +\ 195 \\ \hline 63 \end{array}$$

1 ten + **6** tens + **9** tens = 16 tens

16 tens = **1** hundred **6** tens

Step 3 Add the hundreds.

$$\begin{array}{r} {\scriptstyle 1\,1} \\ 268 \\ +\ 195 \\ \hline 463 \end{array}$$

1 hundred + **2** hundreds + **1** hundred = **4** hundreds

So, 268 + 195 = **463**.

Estimate. Then find the sum.

1. Estimate: _____

$$\begin{array}{r} 156 \\ +\ 323 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 347 \\ +\ 390 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 472 \\ +\ 108 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 239 \\ +\ 570 \\ \hline \end{array}$$

5. Estimate: _____

$$\begin{array}{r} 110 \\ +\ 576 \\ \hline \end{array}$$

6. Estimate: _____

$$\begin{array}{r} 258 \\ +\ 324 \\ \hline \end{array}$$

7. Estimate: _____

$$\begin{array}{r} 471 \\ +\ 269 \\ \hline \end{array}$$

8. Estimate: _____

$$\begin{array}{r} 585 \\ +\ 309 \\ \hline \end{array}$$

Name _____

Back and Forth Addition

A *palindrome* reads the same forward as it does backward.

Forward		Backward
mom	→	mom
deed	→	deed

A number can also be a palindrome.

Forward		Backward
22	→	22
313	→	313

Try This

Start with a 3-digit number: 142

Reverse it: 241

Add the two numbers: 142 + 241 = 383

You get a palindrome!

You may need to reverse and add more than one time.

Find a palindrome. Show your work.

1. 125

_____

2. 207

_____

3. 316

_____

4. 443

_____

5. Write Math Sandy says that if you add two numbers that are palindromes, the sum will always be a palindrome. Do you agree? **Explain.**

_____

_____

_____

6. Stretch Your Thinking Find a 3-digit number you can use to make a palindrome. Write your number. Then use it to make a palindrome.

_____

Name _____

Estimate Differences

You can use what you know about estimating sums to estimate differences.

Estimate. Use compatible numbers.
78 − 47 = ▒

Think: Compatible numbers are easy to subtract.

78 ——— 75
−47 ——— −50
25

So, 78 − 47 is about **25**.

Another way to estimate is to round to the same place value.

Estimate. Round each number to the nearest hundred. 687 − 516 = ▒

Step 1 Look at the digit to the right of the hundreds place.

- 8 > 5, so the digit in the hundreds place increases by 1.
- 1 < 5, so the digit in the hundreds place stays the same.

687 ——— 700
−516 ——— −500
200

Step 2 Write zeros for the tens and ones places.

So, 687 − 516 is about **200**.

Use rounding or compatible numbers to estimate the difference.

1. 92 − 43 = ____ − ____

2. 271 − 152 = ____ − ____

3. 517 − 249 = ____ − ____

4. 445 − 112 = ____ − ____

5. 92 − 65 = ____ − ____

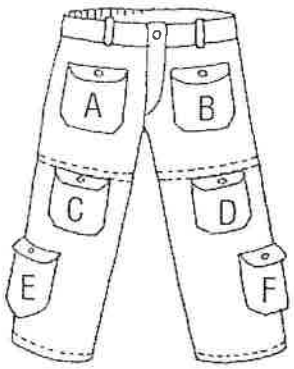
6. 776 − 384 = ____ − ____

Name _____

Estimating Pocket Change

Charlie has a pair of pants with six different pockets labeled A to F. Each pocket has a card for a number of coins inside. The list below shows the number hidden in each pocket.

Pocket
A = 394
B = 147
C = 610
D = 198
E = 782
F = 336



Estimate the difference.

1. Pocket E − Pocket B = _____

2. Pocket C − Pocket F = _____

3. Pocket A − Pocket B = _____

4. Pocket A − Pocket F = _____

5. Pocket D − Pocket B = _____

6. Pocket E − Pocket D = _____

7. Write Math For Exercise 5, Tom estimates 100 coins and Nina estimates 50 coins. Whose estimate is closer to the exact answer? **Explain.**

_____

_____

_____

_____

_____

8. **Stretch Your Thinking**
Charlie has two back pockets with numbers for coins in each pocket. The difference between the numbers is about 150. What numbers could he have in each pocket? **Explain.**

_____

_____

_____

_____

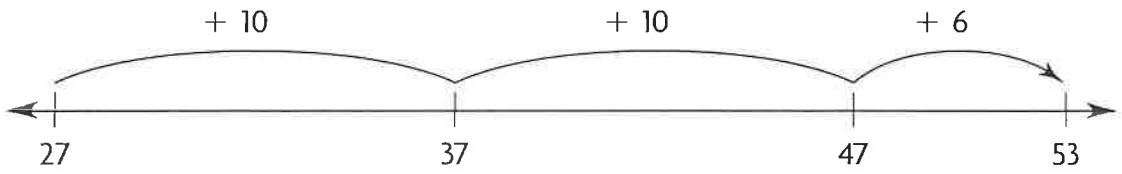
Mental Math Strategies for Subtraction

You can count up on a number line to find a difference.

Find 53 – 27.

Step 1 Count up by tens.
Start at 27. Count up to 47.

Step 2 Count up by ones.
Start at 47. Count up to 53.



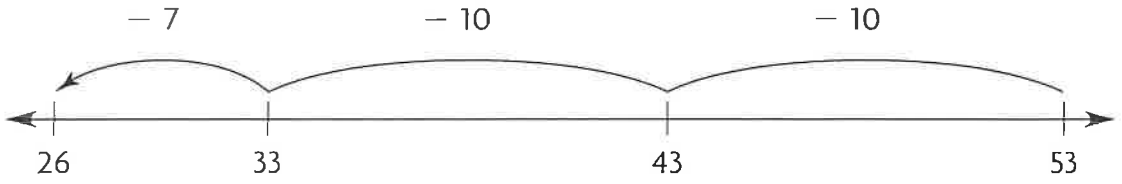
Think: 10 + 10 + 6 = 26.

So, 53 – 27 = 26.

You can take away tens and ones to find a difference.

Step 1 Take away tens.
Start at 53.

Step 2 Take away ones.
Start at 33.



Think: 53 – 10 – 10 – 7 = 26.

So, 53 – 27 = **26**.

1. Find 92 – 65. Draw jumps and label the number line to show your thinking.

92 – 65 = _____.

Name _____

Friendly Numbers Puzzle

Combine pairs of numerals in the puzzle pieces to form a friendly subtraction sentence to help you complete the table below. Use each puzzle piece only once.

	Subtraction	Puzzle Piece 1		Puzzle Piece 2	Difference
1.	43 − 19		−		
2.	72 − 39		−		
3.	64 − 28		−		
4.	46 − 9		−		
5.	433 − 99		−		

6. Write Math Describe the strategy you used to find the puzzle pieces to help you subtract in Exercise 3.

Name _____

Use Place Value to Subtract

You can use place value to subtract 3-digit numbers.

Subtract. 352 − 167 **Estimate.** 400 − 200 = 200

Step 1 Subtract the ones.

$$\begin{array}{r} {}^{4}\not{3}\,{}^{12}\not{5}\not{2} \\ -\,167 \\ \hline 5 \end{array}$$

Are there enough ones to subtract 7?
There are not enough ones.
Regroup **5** tens **2** ones as **4** tens **12** ones.
12 ones − 7 ones = **5** ones

Step 2 Subtract the tens.

$$\begin{array}{r} {}^{1}\not{2}\,{}^{14}\not{5}\not{2} \\ -\,167 \\ \hline 85 \end{array}$$

Are there enough tens to subtract 6?
There are not enough tens.
Regroup **3** hundreds **4** tens as **2** hundreds **14** tens.
14 tens − 6 tens = **8** tens

Step 3 Subtract the hundreds.

$$\begin{array}{r} {}^{1}\not{2}\,{}^{14}\not{5}\not{2} \\ -\,167 \\ \hline 185 \end{array}$$

2 hundreds − **1** hundred = **1** hundred

So, 352 − 167 = 185.

Estimate. Then find the difference.

1. Estimate: _____

$$\begin{array}{r} 537 \\ -\,123 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 268 \\ -\,157 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 426 \\ -\,218 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 785 \\ -\,549 \\ \hline \end{array}$$

5. Estimate: _____

$$\begin{array}{r} 354 \\ -\,206 \\ \hline \end{array}$$

6. Estimate: _____

$$\begin{array}{r} 679 \\ -\,482 \\ \hline \end{array}$$

7. Estimate: _____

$$\begin{array}{r} 787 \\ -\,378 \\ \hline \end{array}$$

8. Estimate: _____

$$\begin{array}{r} 843 \\ -\,675 \\ \hline \end{array}$$

Name _____

Mystery Subtraction

Find the unknown digit.

1. $\begin{array}{r} 426 \\ -1\square 8 \\ \hline 268 \end{array}$

2. $\begin{array}{r} 698 \\ -38\square \\ \hline 309 \end{array}$

3. $\begin{array}{r} 710 \\ -\square 05 \\ \hline 605 \end{array}$

4. $\begin{array}{r} 572 \\ -397 \\ \hline \square 75 \end{array}$

5. $\begin{array}{r} 543 \\ -29\square \\ \hline 249 \end{array}$

6. $\begin{array}{r} 475 \\ -2\square 9 \\ \hline 236 \end{array}$

7. $\begin{array}{r} 832 \\ -2\square 8 \\ \hline 554 \end{array}$

8. $\begin{array}{r} 986 \\ -67\square \\ \hline 308 \end{array}$

9. Write Math **Explain** how you found the unknown digit in Exercise 6.

10. **Stretch Your Thinking** What is the greatest 3-digit number you can subtract from 426 so that you would need to regroup? **Explain**.

Name _____

Combine Place Values to Subtract

You can combine place values to subtract. Think of two digits next to each other as one number.

Subtract. 354 − 248

Estimate. 350 − 250 = 100

Step 1 Look at the digits in the ones place.

Think: 8 > 4, so combine place values.

$$\begin{array}{r} 354 \\ -\ 248 \\ \hline \end{array}$$

Step 2 Combine the tens and ones places.

Think: There are 54 ones and 48 ones.

Subtract the ones. Write 0 for the tens.

$$\begin{array}{r} 354 \\ -\ 248 \\ \hline 06 \end{array}$$

Step 3 Subtract the hundreds.

$$\begin{array}{r} 354 \\ -\ 248 \\ \hline 106 \end{array}$$

So, 354 − 248 = **106**.

Remember: You can also combine hundreds and tens to subtract.

Estimate. Then find the difference.

1. Estimate: _____

$$\begin{array}{r} 485 \\ -376 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 657 \\ -424 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 347 \\ -198 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 623 \\ -397 \\ \hline \end{array}$$

5. Estimate: _____

$$\begin{array}{r} 443 \\ -207 \\ \hline \end{array}$$

6. Estimate: _____

$$\begin{array}{r} 500 \\ -338 \\ \hline \end{array}$$

7. Estimate: _____

$$\begin{array}{r} 835 \\ -548 \\ \hline \end{array}$$

8. Estimate: _____

$$\begin{array}{r} 712 \\ -289 \\ \hline \end{array}$$

Name _____

Recycling Problems

Solve the problem. Estimate first. Then write and solve a similar problem using different numbers.

1. Tim and Alex collected aluminum cans for recycling. Tim collected a total of 942 cans. Alex collected 327 cans. How many fewer cans did Alex collect than Tim?

   Estimate: _____

   Answer: _____ cans

2. Stewart collected 842 used tires to recycle. Angel collected 529 used tires. How many fewer tires did Angel collect than Stewart?

   Estimate: _____

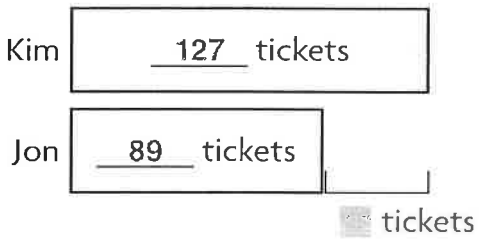
   Answer: _____ tires

3. Yesterday, a recycling center collected 679 cans. The center collected 225 fewer bottles than cans, and 178 fewer newspaper bundles than bottles. How many newspaper bundles did the center collect yesterday?

Name _____

Problem Solving • Model Addition and Subtraction

Kim sold 127 tickets to the school play. Jon sold 89 tickets. How many more tickets did Kim sell than Jon?

Read the Problem	Solve the Problem
What do I need to find? I need to find how many more tickets Kim sold than Jon _____.	Complete the bar model. 
What information do I need to use? I know that Kim sold 127 tickets and Jon sold 89 tickets.	Subtract to find the unknown part. 127 − 89 = 38 ▢ = 38 tickets
How will I use the information? I will draw a bar model to help me see what operation to use to solve the problem.	So, Kim sold 38 more tickets than Jon.

1. Kasha collected 76 fall leaves. She collects 58 more leaves. How many leaves does she have now?

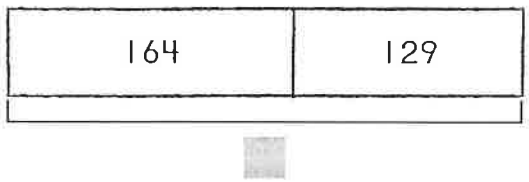
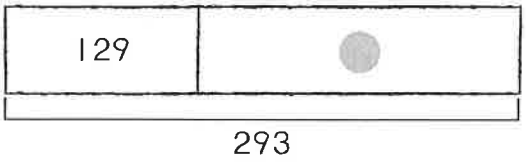
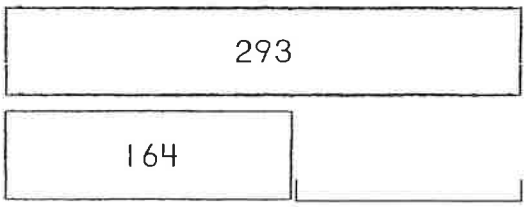
2. Max has 96 stamps. Pat has 79 stamps. How many more stamps does Max have than Pat?

Name _____

Get the Picture?

The students at Audubon School voted for their favorite color. The color green had 164 votes. The color blue had 293 votes. The color red had 129 votes.

Draw a line to match the problem with the bar model that can be used to solve it. Then solve.

Problem	Bar Model
1. How many more students voted for blue than green? _____	
2. How many more students need to vote for red for it to have the same number of votes as blue? _____	
3. **What if** 129 more students voted for green? How many votes would green have now? _____	
4. **What if** 129 more students voted for blue? How many votes would blue have now? _____	

Use Picture Graphs

A **picture graph** shows information using small pictures or symbols.

A **key** tells what the symbol stands for.
A symbol can stand for more than 1.

Which state in the picture graph below has 9 national park areas?

The key for the picture graph shows that each = **6** national park areas.

Count the number of next to each state.

Oregon has one tree picture and half of a tree picture.

Think:
= 6 park areas
= 3 park areas

National Park Areas	
Michigan	
Minnesota	
Missouri	
New York	
Oregon	

Key: Each = 6 national park areas.

So, **Oregon** has 9 national park areas.

Use the Favorite Ice Pop Flavor picture graph for 1–4.

Favorite Ice Pop Flavor	
Orange	
Lemon	
Blueberry	
Strawberry	

Key: Each = 2 votes.

1. How many people chose orange?

_____

2. How many people chose lemon?

_____

3. How many fewer people chose lemon than chose strawberry?

_____

4. How many people in all were surveyed?

_____

Name _____

Using Picture Keys

The key shows how many each picture stands for.

KEY			
♥ = 3	◆ = 5	■ = 7	▼ = 8

Use the key to complete the addition sentence.

1. ♥ ♥ ▼ ▼ ▼ ▼ ▼

   3 + 3 + 8 + _____ + _____ + _____ + _____ = _____

2. ■ ◆ ■ ◆ ■

   _____ + _____ + _____ + _____ + _____ = _____

3. ♥ ♥ ♥ ◆ ◆

   _____ + _____ + _____ + _____ + _____ = _____

4. ♥ ■ ▼ ◆ ♥

   _____ + _____ + _____ + _____ + _____ = _____

5. **Stretch Your Thinking** Draw four different combinations of pictures that represent a sum of 20.

Name _____

Algebra • Find Unknown Numbers

Lily has 20 stuffed animals. She wants to put the same number of stuffed animals on each of 5 shelves. How many stuffed animals will Lily put on each shelf?

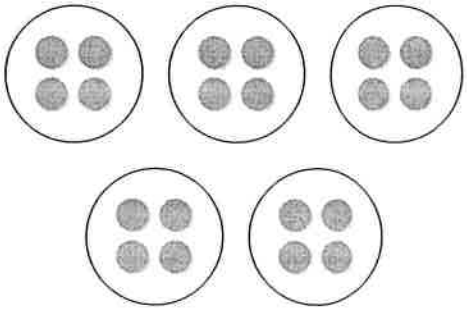
Find the unknown number. $5 \times c = 20$

You can use counters to find the unknown number.

Step 1 Use 20 counters.

Step 2 Make 5 equal groups. Place 1 counter in each of the groups until you have placed all 20 counters.

Step 3 Count the number of counters in each group.
4 counters



$c = 4$

$5 \times 4 = 20$

So, Lily will put 4 stuffed animals on each of the 5 shelves.

Find the unknown number.

1. $3 \times b = 24$

$b =$ _____

2. $n \times 7 = 21$

$n =$ _____

3. $36 = 4 \times z$

$z =$ _____

4. $7 \times 8 = s$

$s =$ _____

5. $r \times 5 = 45$

$r =$ _____

6. ■ $\times 4 = 40$

■ = _____

7. $p = 3 \times 4$

$p =$ _____

8. $m \times 6 = 42$

$m =$ _____

9. $6 \times h = 36$

$h =$ _____

10. $63 = 7 \times d$

$d =$ _____

11. $3 \times y = 6$

$y =$ _____

12. $32 = 4 \times$ ▲

▲ = _____

Name _____

Factor Riddles

Solve the riddles.

1. I have 4 factors. Three of my factors are 1, 2, and 10. What is my fourth factor?

_____

2. I have 4 factors. Three of my factors are 1, 2, and 6. What is my fourth factor?

_____

3. I am the product 30. Two of my factors are 2 and 3. What are my other factors?

_____

4. Our product is equal to 3 + 3 + 3. What factors are we?

_____

5. Our product is equal to 6 + 2. What factors are we?

_____

6. One of my factors is equal to 5 − 2. I am the product 24. What are my other factors?

_____

7. I am a 2-digit product. One of my digits is the same as one of my factors, 8. The other digit doubled is 8. What product am I?

_____

8. My product can be written using repeated addition as 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5. What are my factors?

_____

9. Write Math **Explain** how you solved the riddle in Exercise 7.

_____

_____

_____

_____

10. **Stretch Your Thinking** Write your own riddle and solve it.

_____

_____

_____

_____

Name _____

Size of Equal Groups

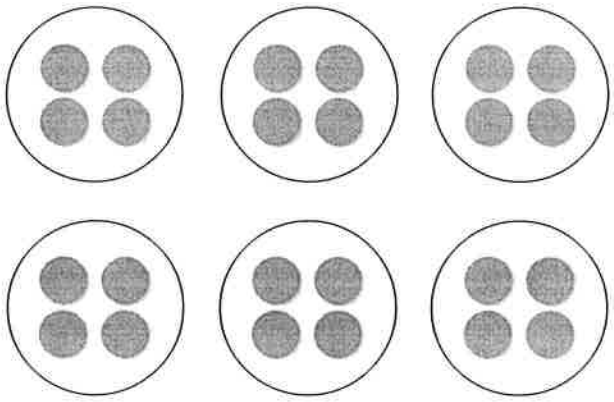
When you **divide**, you separate into equal groups.

Use counters or draw a quick picture. Make equal groups. Complete the table.

Counters	Number of Equal Groups	Number in Each Group
24	6	

The number in each group is unknown, so divide.

Place 1 counter at a time in each group until all 24 counters are used.



There are **4** counters in each of **6** groups.

Use counters or draw a quick picture. Make equal groups. Complete the table.

	Counters	Number of Equal Groups	Number in Each Group
1.	12	2	
2.	10	5	
3.	16	4	
4.	24	3	
5.	15	5	

Name _____

Matching Models

Draw a line to match each word problem with the model you can use to solve it. Then write the answer.

1. Sean has 15 baseball cards. He puts them into equal groups. How many baseball cards does Sean put in each group?

_____

2. Lucy has a box of 24 cookies. She divides them equally among some friends. How many cookies does each friend receive?

_____

3. Eddie has 56 coins in his collection. He separates the coins into equal groups. How many coins are in each group?

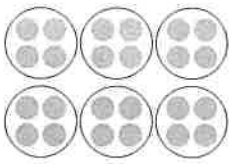
_____

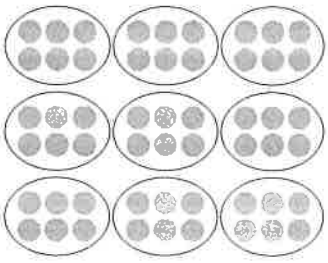
4. Michael bought 54 juice boxes for a picnic. He plans to put an equal number at each of the picnic tables. How many juice boxes will Michael put at each table?

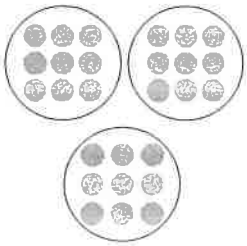
_____

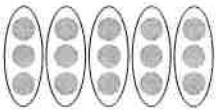
5. Leona has 27 feathers to put on some masks. She uses the same number of feathers on each mask. How many feathers does she use on each mask?

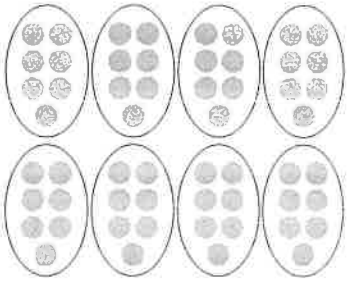
_____

A 

B 

C 

D 

E 

Name _____

Problem Solving • Two-Step Problems

Chloe bought 5 sets of books. Each set had the same number of books. She donated 9 books to her school. Now she has 26 books left. How many books were in each set that Chloe bought?

Read the Problem	Solve the Problem
What do I need to find? I need to find how many books were in each set.	First, begin with the number of books left. Add the number of books donated. books left ↓ + books donated ↓ = t, total number of books ↓ 26 + 9 = t 35 = t
What information do I need to use? I need to use the information given: Chloe bought 5 sets of books. She donated 9 books. She has 26 books left.	Then divide to find the number of books in each set. t, total number of books ↓ ÷ sets of books ↓ = s, books in each set ↓ 35 ÷ 5 = s 7 = s So, 7 books were in each set.
How will I use the information? I will use the information to act out the problem.	

Solve the problem.

1. Jackie had 6 equal packs of pencils. Her friend gave her 4 more pencils. Now she has 52 pencils. How many pencils were in each pack?

_____

2. Tony had 4 equal sets of sports cards. He gave his friends 5 cards. Now he has 31 cards. How many cards were in each set?

_____

Name _____

Division Steps

Solve. Show your steps to find the answer.

1. Veronica bought a pack of 50 CDs. She gave 8 to her friend, Leslie. Then she made 6 equal sets of CDs. How many CDs are in each set?

2. Sid has 2 boxes of markers with the same number of markers in each box. He gives 3 markers to his sister. Now Sid has 13 markers. How many markers were in each box?

3. Casey bought 30 basketball trading cards. He gave 6 to his sister and then put the rest in an album. If 6 cards fit on one page of the album, how many pages did Casey use?

4. Barron bought a 25-pound bag of dog food. He still had 3 pounds from an older bag. If he feeds his dogs 4 pounds of food each week, how many weeks until all the dog food is gone?

5. Manny ordered 16 skateboard wheels. If he sold 4 wheels to Brad, how many skateboards can he put wheels on if each board uses 4 wheels?

6. Kiera has 27 balls of yarn. Her mother gave her 5 more balls. If she makes scarves that use 4 balls each, how many scarves can she make?

7. Write Math Thomas starts with 36 photos and throws away 6 that are too dark. Then he organizes the rest of them on scrapbook pages so that there are 5 photos on each page. How many pages will he use? Draw to **explain.**

Fractions on a Number Line

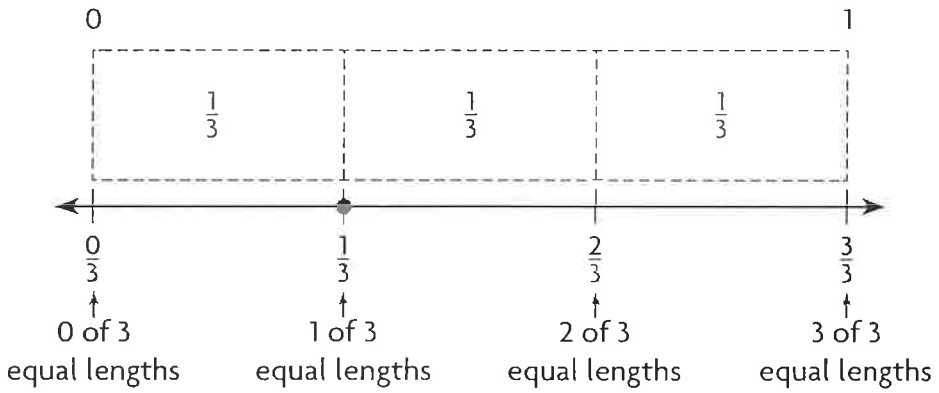
Use the fraction strips to help name the points on the number line.

Draw a point to show $\frac{1}{3}$.

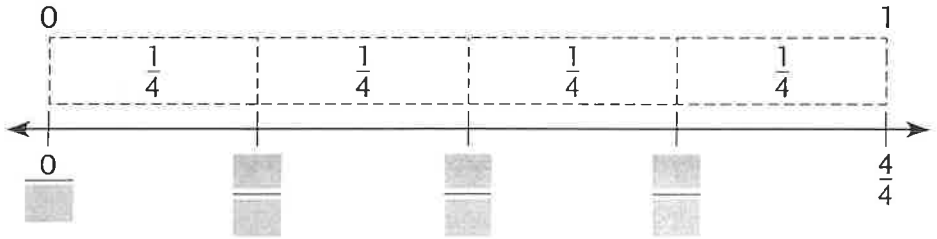
Step 1 The denominator is 3, so use fraction strips for thirds. Place the fraction strips above the number line. Use the fraction strips to divide the number line into three equal lengths.

Step 2 Label each mark on the number line.
Think: The distance between each mark is $\frac{1}{3}$ of the total distance, so count the number of $\frac{1}{3}$ lengths.

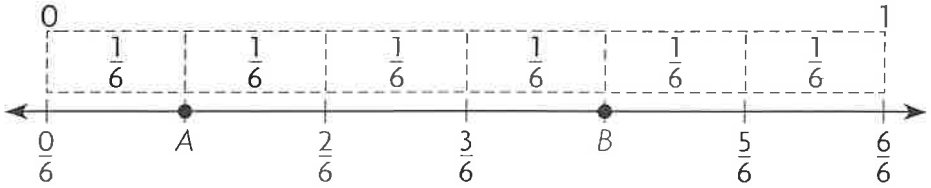
Step 3 Draw a point on the number line to show $\frac{1}{3}$.



1. Complete the number line. Draw a point to show $\frac{2}{4}$.



Write the fraction that names the point.



2. point A _____

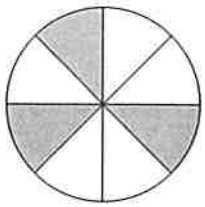
3. point B _____

Name _____

Fraction Find

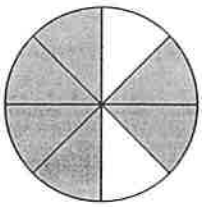
Write a fraction that names the shaded part of each whole. Then locate the fraction on the number line below. Write the letter of the model that represents the fraction.

A.



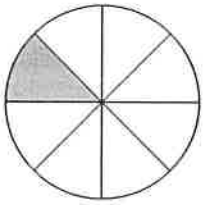
_____

B.



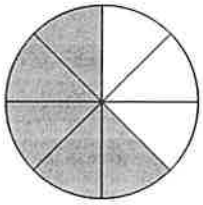
_____

C.



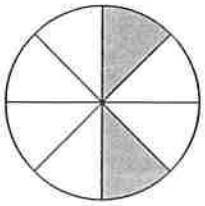
_____

D.



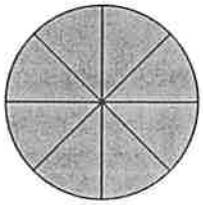
_____

E.

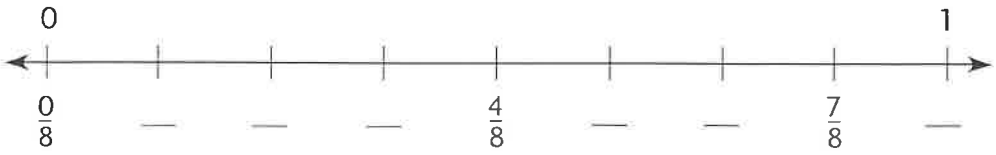


_____

F.



_____

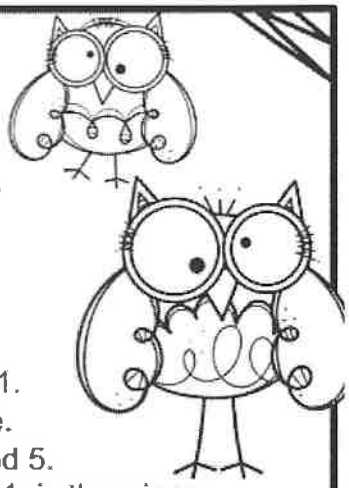


Fluency Games Choice Board

Choose one fluency game to play each day. The directions for each game are attached. Color in the box for the game you complete each day. You have throughout the month of April to complete them all. Feel free to play the games as often as you like, but be sure to try all of the games at least once. If you have any questions, please contact your child's teacher.

Owl Pairs – Add to 11 and 15 *See attachments*	Race to the Moon *See attachments*	Guess Who? *See attachments*
How Close Can You Get to 100? *See attachments*	Fraction Concentration *See attachments*	Making Ten Memory *See attachments*
Multiplication Headbands *See attachments*	Rounding Dice Game *See attachments*	Division Go Fish! *See attachments*

Owl Pairs - Add to 11



Color two adjoining numbers that add to 11.

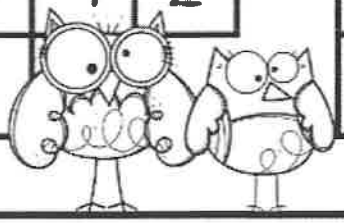
a game for 2 players

Need: Pencils

Players take turns to color 2 adjoining numbers that add to 11.
The numbers must be in squares that are joined along a side.
For example – on a turn, a player could color 3 and 8 or 6 and 5.
The last player who can color a pair of numbers that add to 11, is the winner.

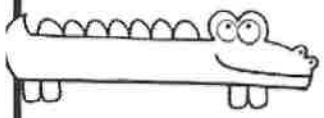
Game 1				
5	4	7	4	5
6	7	3	8	6
5	3	8	1	5
6	10	1	10	4
9	1	3	8	2
2	3	8	9	5
8	4	7	5	6
6	5	3	9	2
7	4	8		

Game 2				
8	7	4	2	9
3	6	5	8	3
9	2	8	3	8
7	4	1	9	5
4	5	10	2	6
5	6	0	9	2
6	8	11	0	9
3	7	4	3	8
8	5	6	2	9



Alligator Pairs and Trios - Add to 15

Color any two or three numbers that add to 15.

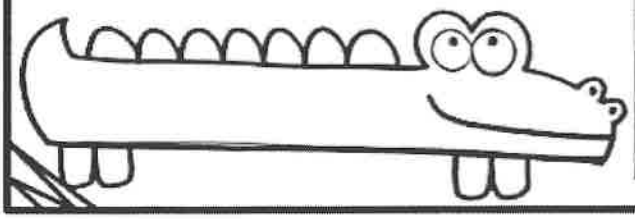


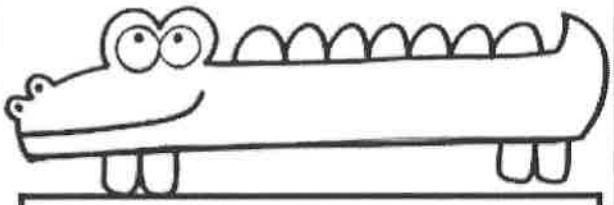
a game for 2 players **Need: Pencils**

Players take turns to color 2 or 3 numbers that add to 15. The numbers can be anywhere on the board and do not have to be in adjoining squares. For example – on a turn, a player could color 8 and 7 or 6, 4 and 5. The last player who can color a pair or a trio that adds to 15, is the winner.

Game 1

4	12	8	5	4	2	8
5	4	1	9	6	9	3
3	2	6	3	7	5	12
7	9	5	11	1	9	2
4	8	3	2	7	4	8
9	6	7	11	1	10	3
4	2	8	5	14	6	13
10	5	1	11	3	12	7





Game 2

5	12	2	13	4	9	1
1	4	8	1	6	7	10
6	14	3	5	8	3	9
4	2	6	7	4	7	6
8	7	0	8	9	3	9
3	9	11	2	4	13	10
12	1	7	10	6	2	8
7	3	6	1	9	5	4

RACE TO THE MOON

SUBTRACTING TO 20

Race to the Moon is a fun series of games which involve trying to make a path of unbroken counters from the Earth to the Moon. As well as developing quick recall of number facts, this game also involves strategy in blocking your partner whilst making your path.

Age range: 2nd Grade +
Number of players: 2 or 3
Learning: Subtract with numbers to 20, strategy
You will need

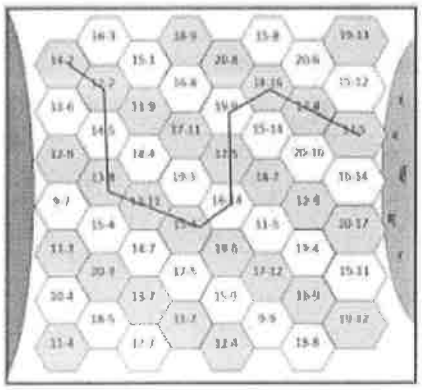
- Each player will need about 20 counters of their own color.

Instructions

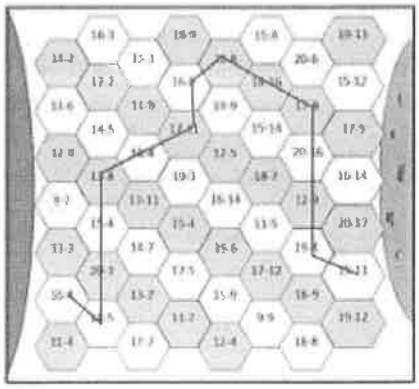
- Choose a subtraction you want to work out on one of the uncovered hexagons on the game board.
- Work out the answer in your head. You can use the number line to help you.
- Say the calculation and the answer.
- Your partner will check in their head (or using the number line).
- If you are right, you place a counter on the hexagon. Then it is your partner's turn. If you are wrong, you don't get to place a counter.
- The winner is the first person to complete an unbroken path of counters from the Earth to the Moon (path can go across, down, diagonally). See below.

Variations

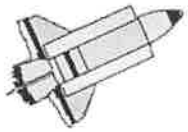
- If you get an answer wrong, your partner can remove one of your counters from the board.



Examples of winning paths.



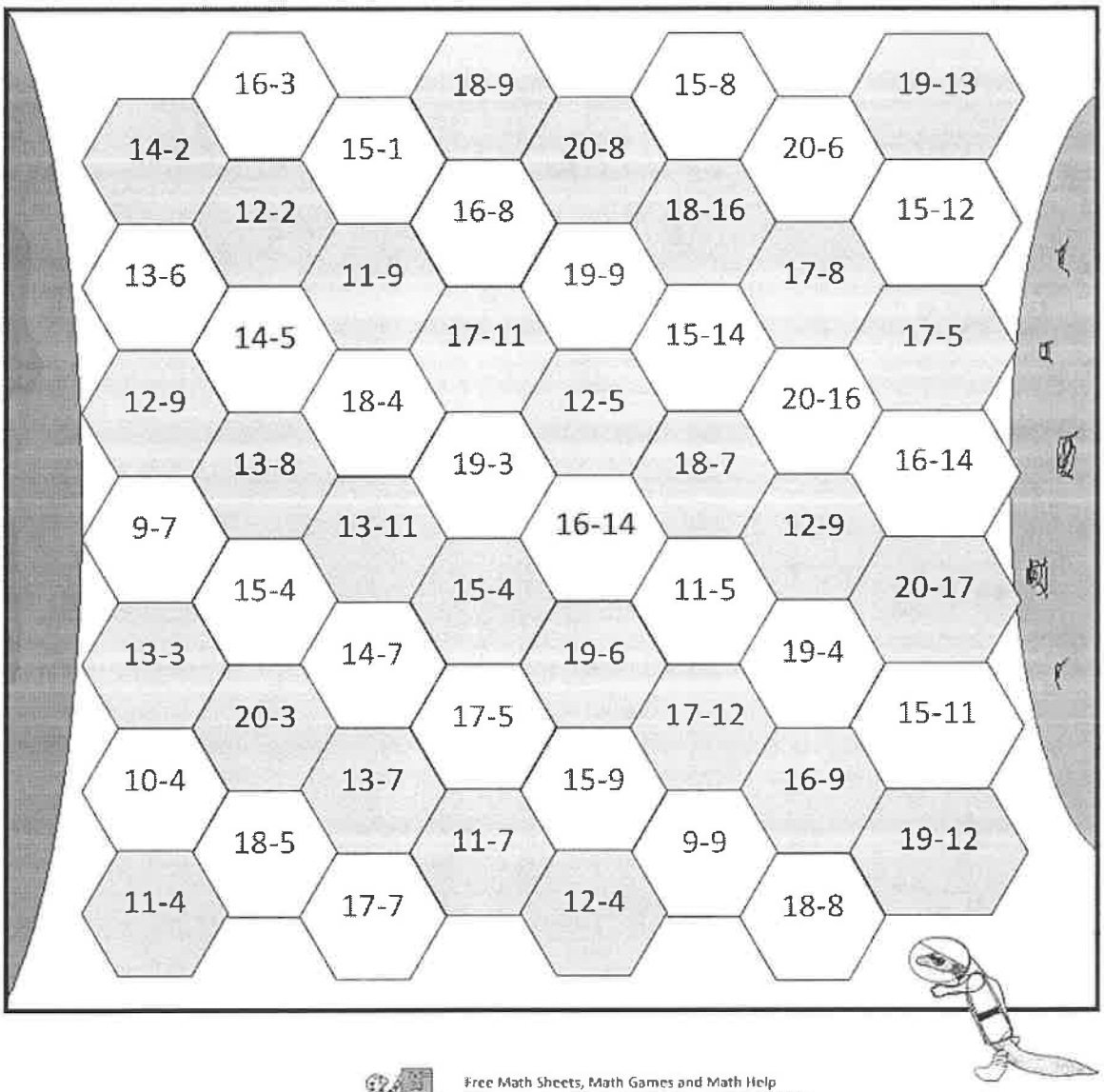
RACE TO THE MOON



SUBTRACTING TO 20

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Who will be first to get from Earth to the Moon?



Guess Who?

Choose a shape... but don't let your partner know which shape you've chosen!

Each partner will ask **yes and no** questions to the other about their mystery shape. Each time you ask a question, use your partner's answer to cover up shapes that it couldn't be until you know which shape it is!

Use the questions card if you need help!

Talk like a mathematician!

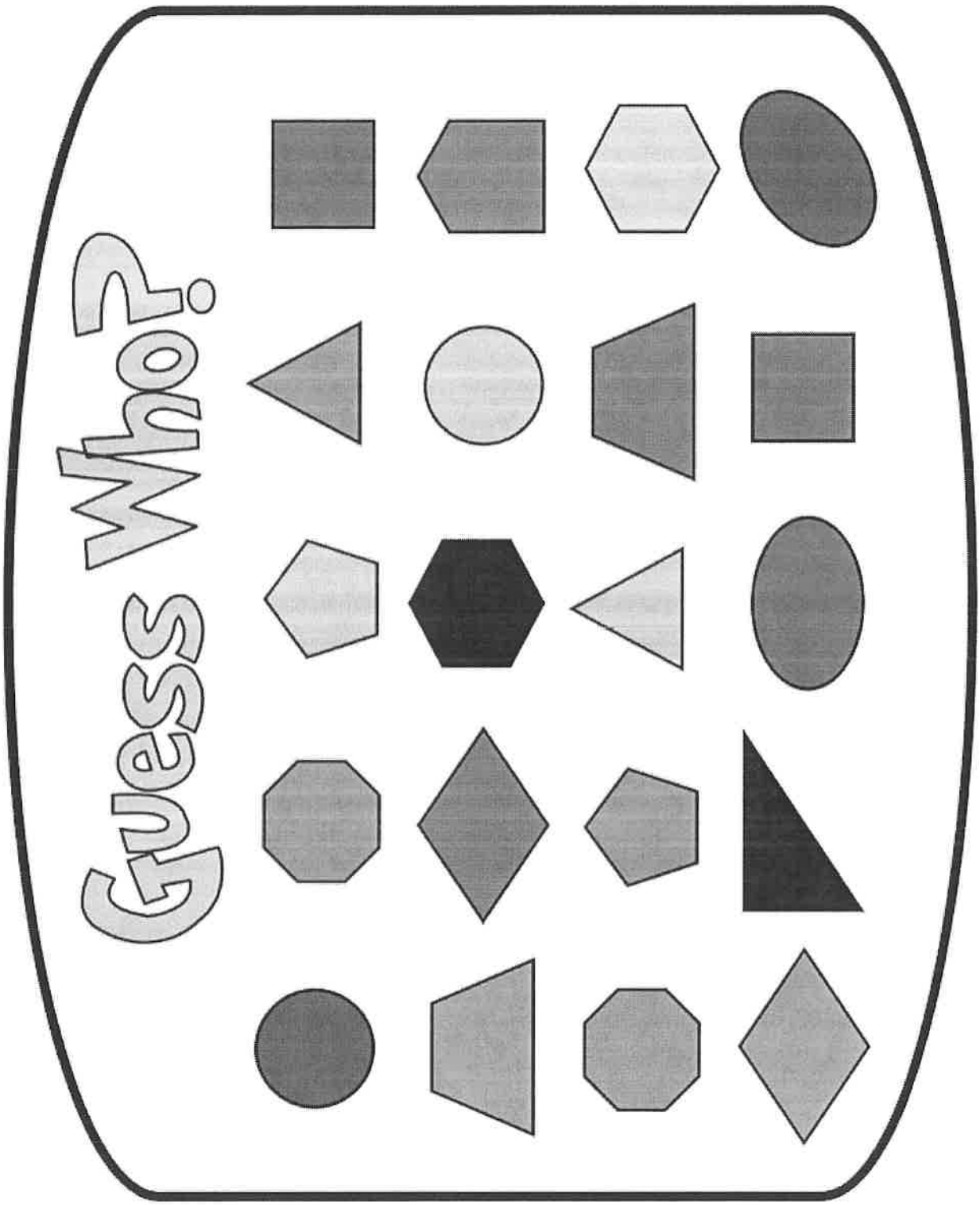
Does your shape have 4 sides?

Does your shape have any parallel lines?

I know it can't be a hexagon.

Is it red?

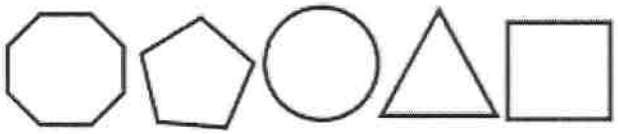
does it have three angles?



Guess Who?

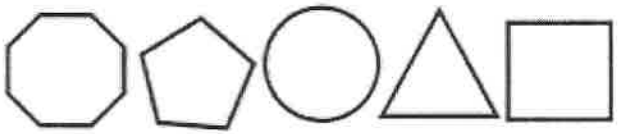
Guess Who?
recording sheet

After you choose your mystery shape, draw and color it here. Be sure you keep it a secret from your partner!



Guess Who?
recording sheet

After you choose your mystery shape, draw and color it here. Be sure you keep it a secret from your partner!



Guess Who?

☆Question Ideas☆

Try to find out how many sides it has by asking questions like,
"Does it have 3 sides?"

try to find out what color it is by asking questions like,
"is it purple?"

Try to find out if it is symmetrical by asking questions like,
"Does it have a line of symmetry?"

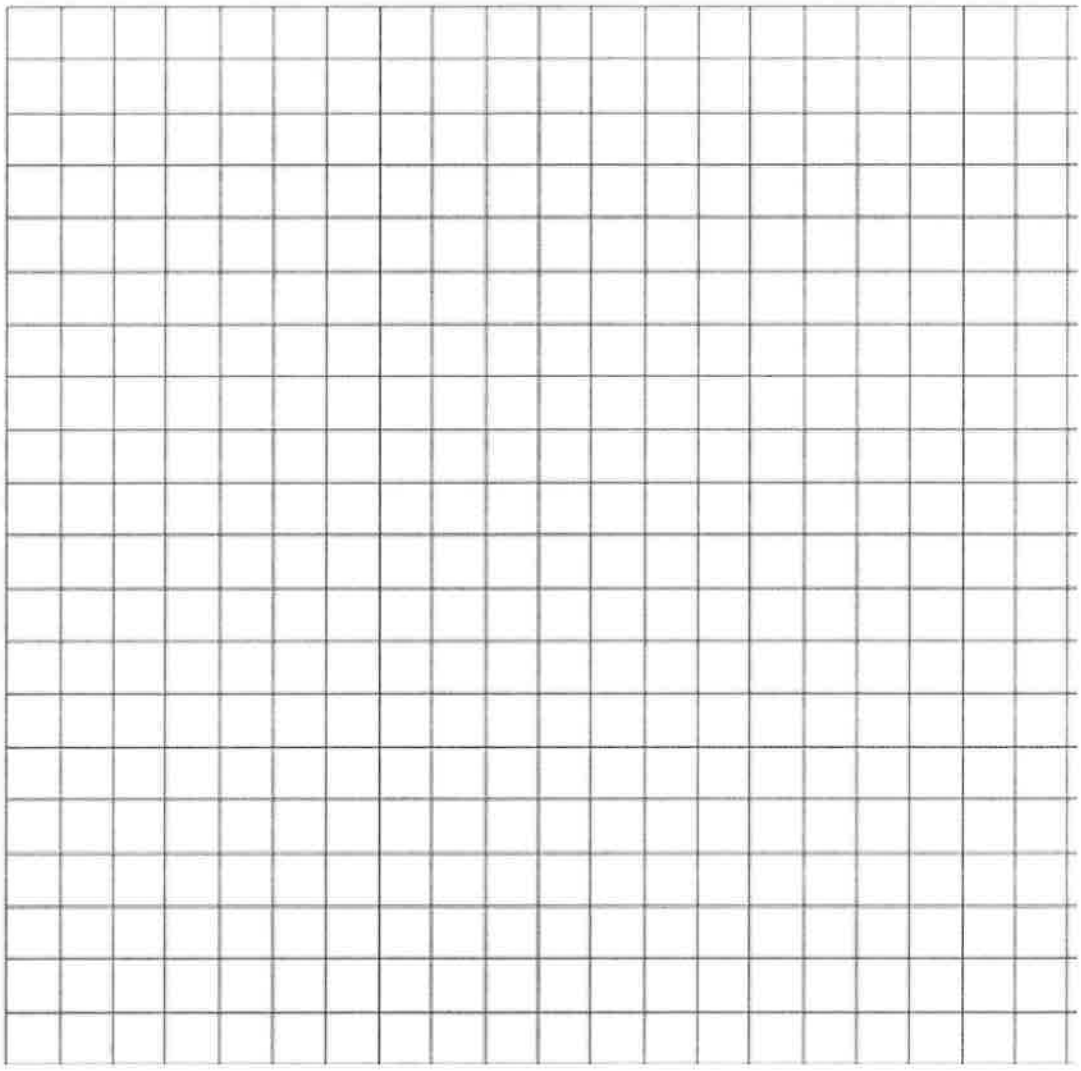
Try to find out what else it is shaped like by asking questions like,
"Could a book be the same shape?"

Ask some questions of your own
and when you think you know what the shape is ask,
"Is it a yellow triangle?"

Name: _____ Date: _____

How Close Can You Get to 100?

Roll two dice and make a rectangular array using the numbers rolled. If you roll 3 and 4, you can make a 3 x 4 array or a 4 by 3 array. Outline the array or shade it in and find the area. Roll the dice 10 times each time recording the multiplication problem at the bottom, making the array and finding the area of the array. After ten rolls, add the area of all arrays. How close are you to 100?



1. _____ x _____ = _____
2. _____ x _____ = _____
3. _____ x _____ = _____
4. _____ x _____ = _____
5. _____ x _____ = _____
6. _____ x _____ = _____
7. _____ x _____ = _____
8. _____ x _____ = _____
9. _____ x _____ = _____
10. _____ x _____ = _____

Challenge: Find the perimeter of each array. How close are you to having a perimeter of 100?