

Hello, Up-and-Coming 5th Grade Scholar!

I hope that you have some fun summer plans ahead. This summer I plan on reading, trying out kayaking for the first time, and eating lots of mint chocolate chip ice cream!

I also hope that you're getting excited about 5th grade. I know that I'm excited about getting to know you and the rest of our class! I have lots of ideas for our classroom and our year of learning together. No classroom is complete without some smiling faces- that's where you come in!

Enclosed you will find a **supply list** of items you will need for 5th grade. Please have your supplies ready for the first day of school. We'll have lots of organizing to do over the first few days as we settle in.

Your **required summer reading project** is attached. You'll need to select one of the books and complete one of the projects. I hope you'll also come back to school with some book recommendations for me! I've listed some fun word games on the side- they're excellent fun for a rainy summer day! Magazines can also be a great summer read. *Muse* is one of my favorites and you can find it at Russell Library.

Your **required summer math practice** is also attached. This summer I want you to sharpen your math skills by practicing your facts. On the attached calendar you'll see that you'll need to practice fact fluency on XtraMath.org twice a week. You'll also have some practice skill sheets and games to pick from. You can't beat a good board game, though! Check out some of my favorites on the right. They don't practice math facts, but they strengthen your math "muscles" for pattern recognition, predication, problem-solving, and spatial relations.

Enjoy your summer vacation! ☺

Warmly,

Mrs. Klobukowski



Online Resources

www.russelllibrary.org

Of course, you can find great books here. Did you know that you can also join their Builder's Club or learn the art of Origami?

www.wordcentral.com/buzzword/buzzword.php

Build your vocabulary and learn a new word each day.

<http://www.sheppardsoftware.com/math.htm>

You'll find a variety of learning games for all different subjects here.

ixl.com/math

A great source to practice a variety of math skills at multiple levels.

Word Play

- Bananagrams
- Boggle
- In a Pickle
- Last Letter
- Blurt
- Apples to Apples Junior

Math Games

- Swish
- Set
- Skippity
- Mancala
- Clue
- Chess

5th Grade Summer Reading Project

Directions: Select one of the books below to read, then complete one of the projects based on your selected book. This will be your first reading grade for 5th grade!

• ***The One and Only Ivan***
By Katherine Applegate

• ***The War That Saved My Life***
by Kimberly Brubaker Bradley

• ***Who Was...***

You may select any book from this series

• ***Seven Dead Pirates***
by Linda Bailey

○ **Design a CD Cover and Playlist for Your Book:** If your book's characters and themes reminded you of songs you love, use that inspiration for your project. Design a CD cover that relates to your book, and in the CD booklet, include the reasons you chose each song- how they related to the characters, plot points, theme, or tone.

● *Requirements: CD cover design, CD Booklet with a list of 5 songs or more and a sentence to describe each song's story connection*

○ **Get Crafty with Cartography (Mapmaking):** Look back at the places that were important in your book, and illustrate a map that shows where they all are in relation to one another. Then create a key in which you explain why each place is so important to the story. This works well with books in which the location is really important.

● *Requirements: hand-drawn & colored 8 x 10" map of 3 or more settings in your story, 8 x 10" map key to label each location and a sentence to describe why it is important to the story.*

○ **Create a Film Poster for Your Book:** Imagine that your book has been made into a movie. How would you create a poster that shows something significant about the plot, and/or theme of the story while simultaneously attracting a big audience? On the back of your poster, include a fictional review that describes the main character(s) of the book and highlights the major conflict.

● *Requirements: hand-drawn & colored 8 x 10" movie poster, 5-7 sentence movie review paragraph*

○ **Write Your Own Chapter:** The publishing company has decided that they want to add a chapter to the book and they've asked you to write it! Create a short story about what the main character(s) would be doing one year later. Consider how the events of the story made the characters grow. What new adventures might lay in store for the characters?

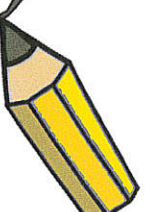
● *Requirements: an original chapter revolving around the book's main character(s), this should be 3-5 paragraphs in length (approximately 1 ½ - 2 pages)*

5th Grade Summer Math Practice

Week Of	Assignment	Complete	Week Off
June 24	1. Complete two sessions on XtraMath.org this week. For extra credit, complete extra sessions. 2. Complete one of the attached worksheets/games or play one of the games listed on my letter.		
July 1	1. Complete two sessions on XtraMath.org this week. For extra credit, complete extra sessions. 2. Complete one of the attached worksheets/games or play one of the games listed on my letter.		
July 8	1. Complete two sessions on XtraMath.org this week. For extra credit, complete extra sessions. 2. Complete one of the attached worksheets/games or play one of the games listed on my letter.		
July 15	1. Complete two sessions on XtraMath.org this week. For extra credit, complete extra sessions. 2. Complete one of the attached worksheets/games or play one of the games listed on my letter.		
July 22	1. Complete two sessions on XtraMath.org this week. For extra credit, complete extra sessions. 2. Complete one of the attached worksheets/games or play one of the games listed on my letter.		
July 29	1. Complete two sessions on XtraMath.org this week. For extra credit, complete extra sessions. 2. Complete one of the attached worksheets/games or play one of the games listed on my letter.		
August 5	1. Complete two sessions on XtraMath.org this week. For extra credit, complete extra sessions. 2. Complete one of the attached worksheets/games or play one of the games listed on my letter.		
August 12	1. Complete two sessions on XtraMath.org this week. For extra credit, complete extra sessions. 2. Complete one of the attached worksheets/games or play one of the games listed on my letter.		
August 19	1. Complete two sessions on XtraMath.org this week. For extra credit, complete extra sessions. 2. Complete one of the attached worksheets/games or play one of the games listed on my letter.		

Completion of your math practice will be a math grade. Have a parent sign the *Complete* column each week as you do the work. You may take off any two weeks during the summer. For these weeks, check the *Week Off* column.

*Please email me right away if you misplace your XtraMath login!





Dear parent of [REDACTED]

We are using a program called XtraMath to increase speed and accuracy in arithmetic. [REDACTED] is invited to spend a few minutes each day practicing math on a computer, tablet, or phone.

If you would like [REDACTED] to do XtraMath on a tablet or smartphone, look for XtraMath in the app store. The app costs \$5. On a laptop or desktop computer, he/she can do XtraMath for free at xtramath.org.



Here's what you need to do: In the app or on the website, select **Enroll**.

Enter your email address and [REDACTED]
enrollment code, [REDACTED]

This will (1) create a parent account for you if you don't have one, (2) link [REDACTED] account to your account so you can review his/her progress, and (3) save [REDACTED] account information for easy sign-in on that computer or device.

If you already have a parent account for [REDACTED] from a previous class or personal use, then this enrollment process will allow [REDACTED] to resume XtraMath where he/she left off rather than starting over in my classroom.

For more information about XtraMath watch the videos on their website, xtramath.org.

Think of XtraMath as a math vitamin! For best results, [REDACTED] should do XtraMath once per day as regularly as possible. It only takes a few minutes so make it a part of your daily routine. Math facts are the building blocks of your child's math education and your child will be well rewarded for the time they spend practicing on XtraMath.

Thank you!
Mrs. Klobukowski

SAMPLE... please email
Mrs. Klobukowski if you
do not have your letter.
aklobukowski@jpii.org



Sum 20!

Players: 2

Students create
addition problems
with sums of 20.

Materials

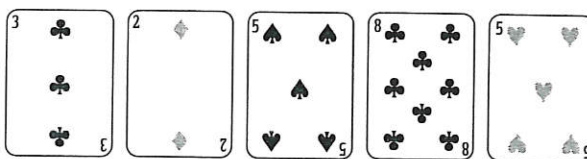
one shuffled deck of cards with jokers and face cards removed

The Way to Play

- 1 One player deals five cards to each player and stacks the remaining cards facedown in a pile.
- 2 Player 1 tries to use some or all of the five cards to create a sum of 20.
 - If the player creates a problem with a sum of 20, the player says "Sum 20!" and places the used cards in a separate pile. (Players keep their used cards in their own separate piles.) The player draws cards to replace those used so that he or she has five cards again, and the turn ends.
 - If the player is unable to create a problem, the turn ends. On the next turn, the player draws a card and tries again to create a problem.
- 3 Player 2 takes a turn in the same way.
- 4 Players continue to take turns until all the cards have been used or until neither player can create a problem. The last player to take a turn may not be able to draw enough cards to replace those used. In this case, the player should draw as many as there are left.
- 5 When all the cards have been used, players count the cards in their piles and subtract the number of cards remaining in their hands from this number. The player with the greatest number of cards (after subtracting the cards in hand) wins the game.

Example:

A player has the following cards.



The player adds these cards to equal 20.

$$\begin{array}{|c|} \hline 2 \\ \hline \text{♦} \\ \hline \end{array} + \begin{array}{|c|} \hline 5 \\ \hline \text{♠} \\ \hline \end{array} + \begin{array}{|c|} \hline 8 \\ \hline \text{♣} \\ \hline \end{array} + \begin{array}{|c|} \hline 5 \\ \hline \text{♥} \\ \hline \end{array} = 20$$

♠ Variation ♣

Change the sum to a different number.



Plus and Minus

Players: 2

Students practice double-digit addition and subtraction.

Materials

♦♦♦♦♦♦♦♦♦♦

one shuffled deck of cards with tens, jokers, and face cards removed
pencils and scrap paper

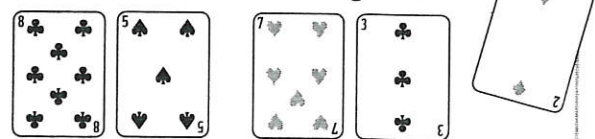
The Way to Play

♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦

- 1 Player 1 deals five cards to each player. Each player selects any four cards to create the greatest two double-digit numbers possible. Each player adds the two numbers together, records the sum, and places the cards in a discard pile.
- 2 Player 1 deals three cards to each player. Each player selects any two cards to create the smallest two-digit number possible. Each player subtracts this number from the number recorded in Step 1, records the difference, and places the cards in a discard pile.
- 3 Player 1 deals three cards to each player. Each player creates the greatest possible two-digit number. Each player adds this number to the number recorded in Step 2, records the sum, and places the cards in a discard pile. This number is the player's score.
- 4 The player with the higher score wins the game. If at any point a player's score is less than 0, the other player wins.

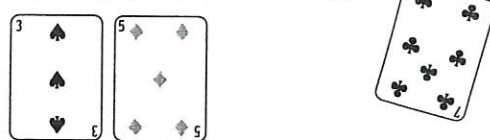
Example:

A player is dealt five cards. The player creates two numbers and adds them together.



$$85 + 73 = 158$$

A player is dealt three cards. The player creates a number and subtracts it.



$$158 - 35 = 123$$

A player is dealt three cards. The player creates a number and adds it.



$$123 + 87 = 210$$

The player's final score is 210.



Players: 2

Time to Multiply

Students practice
multiplication facts
from 0 to 10.

Materials

one shuffled deck of cards (including jokers for 0) with face cards removed
scrap paper and pencils
calculators (optional)

The Way to Play

- 1 One player stacks the cards facedown in a pile.
- 2 Player 1 draws two cards, multiplies the numbers, and says the product.
- 3 Player 2 takes a turn in the same way.
- 4 The player with the greater product finds the difference between those two products. The player records the difference as the number of points earned for the round. The used cards are placed in a discard pile. If it's a tie, neither player earns points for the round.
- 5 Play continues in the same way until all the cards have been used. The player with the most points at the end of the game wins.

Example:

Player 1 multiplies $7 \times 5 = 35$

$$7 \times 5 = 35$$

Player 2 multiplies $10 \times 6 = 60$

$$10 \times 6 = 60$$

Player 2 earns 25 points. ($60 - 35 = 25$)

♠ Variation ♣

To play a game that reinforces speed, each player draws two cards without looking at them. Each player turns over one of the cards. At the same time, each player turns over the second card and multiplies the two numbers. The first player to say the correct product wins all four cards. If it's a tie, neither player wins the cards. Play continues in the same way until there are no cards left. The player with more cards wins.

EXPERIENCE 3 / Activity 1

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Compatible Numbers

Find as many as you can!

Find two or more numbers in a row, across or down, with a sum of 20.

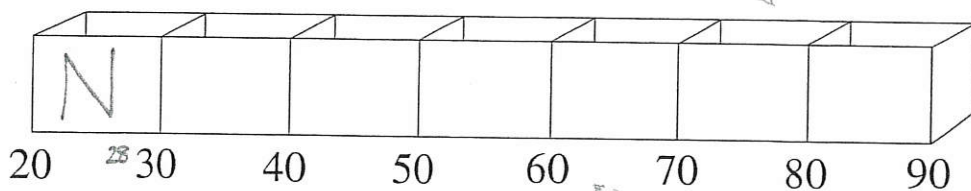
4	7	9	8	12	3
7	9	17	3	7	9
6	11	4	6	13	8
7	5	8	3	4	ex: 7
6	13	8	11	4	5
14	2	10	10	12	8

EXPERIENCE 8 / Activity 1

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Sorting Products

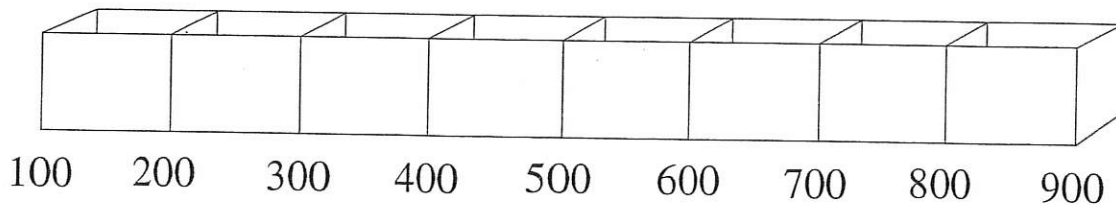
1. Decide in which box each letter should be placed. Explain your decisions.



ex: $N = 7 \times 4 = 28$ $O = 9 \times 8$ $I = 8 \times 4$ $J = 7 \times 9$
 $C = 7 \times 6$ $E = 7 \times 8$ $B = 9 \times 9$

What is the message?

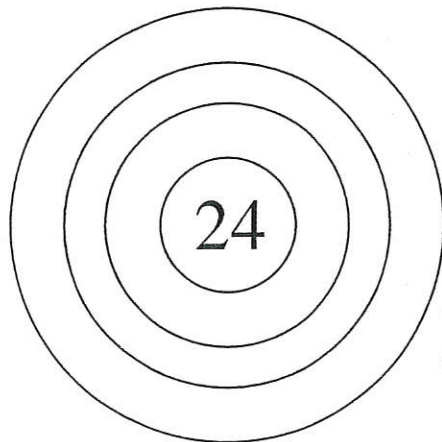
2. Decide in which box each letter should be placed. Explain your decisions.



$U = 60 \times 6$ $I = 70 \times 8$ $Y = 20 \times 6$ $D = 8 \times 80$
 $I = 90 \times 8$ $O = 30 \times 9$ $D = 80 \times 6$ $T = 90 \times 9$

What is the message?

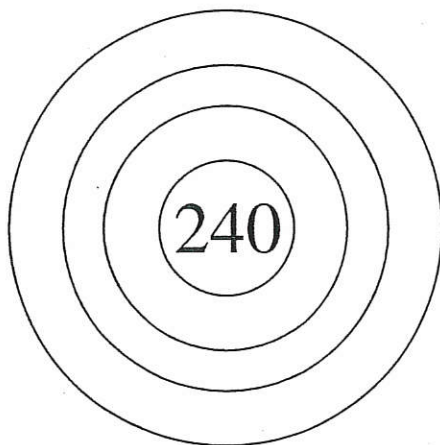
Finding Equivalent Products



0	1	2
3	4	6
8	12	24

ex: $8 \times 3 = 24$
 ex: $4 \times 2 \times 3 = 24$

- Using any values from the box, list as many products equal to the Target Number as you can. Values may be used more than once.



1	2	3
4	5	6
8	12	24

- Using any values from the box, list as many products equal to the Target Number as you can. Values may be used more than once.
 - What other useful numbers could be added to the box?
 - Would 120 be useful in the box? Explain.
 - Would $\frac{1}{2}$ and 480 be useful in the box? Explain.

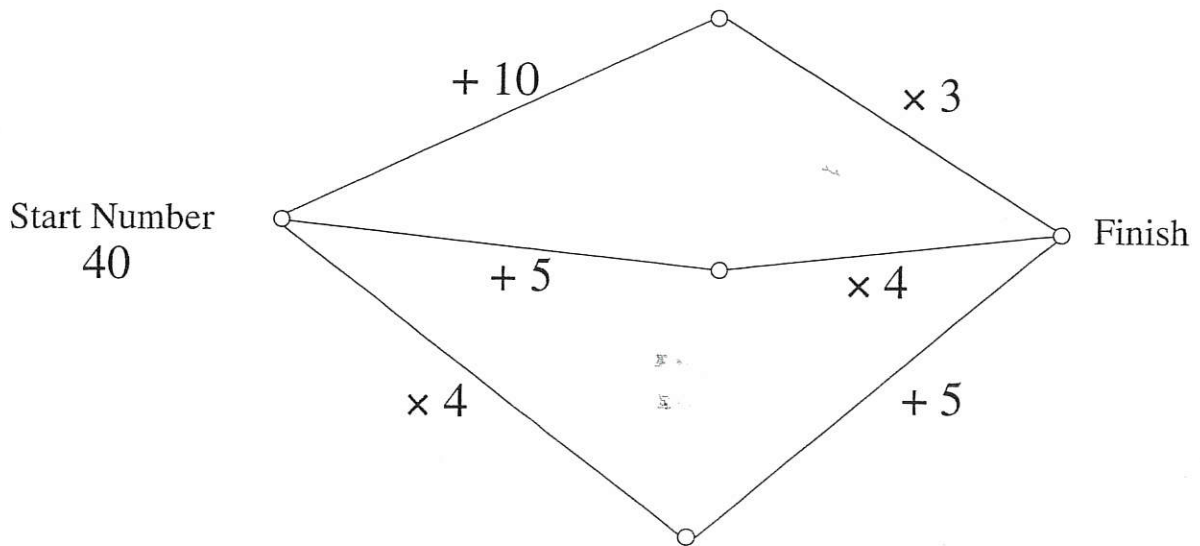
How Could It Happen?

Choose Your Numbers!

Rule: Choose one number from each circle, and add or multiply them.

1. Alex chose two numbers and got 15. What number did he pick from each circle?
2. Ben chose two numbers and got 50. What numbers did he choose?
3. Sook Leng got a result in the twenties. What numbers could she have chosen?
4. Shamariah got the largest result possible. What did she get, and how did she get it?
5. Chalise named a number less than 50 that could not be made using the rules. What number did she name?

Choose Your Path



Rules:

- Begin at the Start Number.*
- Use each result in the next step.*
- Work your way to the right.*
- Do not retrace or move left.*

1. Which path has the greatest result?
2. Which path has the least result?
3. Which path has a result of 165?
4. Change exactly one number so that a path will have a result of 200.

Name That Whole Number

The Mystery Number

1. *Clue a:* is between 400 and 600

Clue b: is greater than 450

Clue c: is a multiple of 100

Clue d: is a multiple of 500

2. *Clue a:* is a prime number

Clue b: is an even number

Clue c: is a one-digit number

3. *Clue a:* is a square number

Clue b: is halfway between 20 and 30

Clue c: is an odd number

Clue d: is a two-digit number

4. *Clue a:* is within 3 numbers of 48

Clue b: is a prime number

Clue c: is a two-digit number

Clue d: is not an even number

Solution

Mystery Number _____

Unnecessary clues _____

Mystery Number _____

Unnecessary clues _____

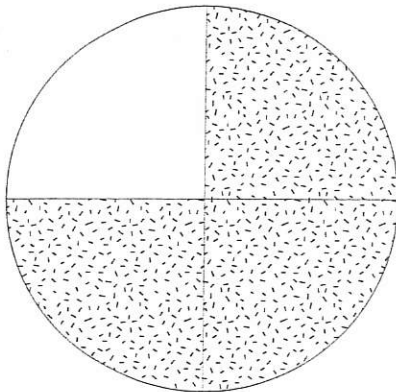
Mystery Number _____

Unnecessary clues _____

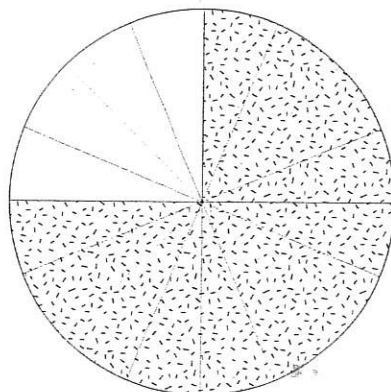
Mystery Number _____

Unnecessary clues _____

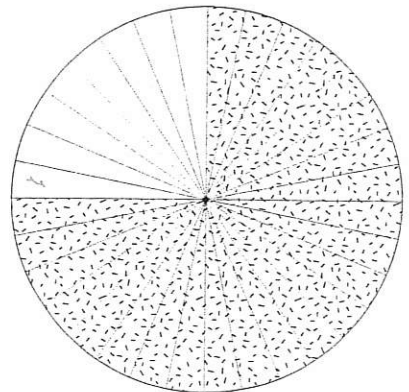
Finding Compatible Fractions



Circle A



Circle B

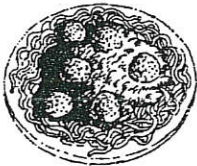

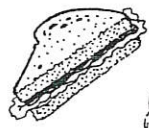







Circle C

1. For each circle, name the fraction shaded. What patterns or relationships do you see among the three fractions?
2. For Circle B, name a fraction that is a little larger than $\frac{3}{4}$. Name the equivalent fraction for Circle C.
3. For Circle A, name a fraction one section larger than $\frac{1}{4}$. How does it compare with a fraction one section larger than $\frac{1}{4}$ for Circle B? for Circle C?
4. For Circle C, name two fractions close to but less than $\frac{1}{2}$. Do the same for Circle B.
5. If you continued the pattern from Circle B to Circle C to another circle, Circle D, how many sections would it have? Explain how you decided.
6. What fraction in Circle D would be equivalent to the shaded area in the other circles?

What Did I Buy?

Today's Lunch Menu

Small Juice	\$1.25	Green Salad	\$2.75
Medium Juice	\$1.50	Chef's Salad	\$4.25
	Spaghetti	\$4.50	
	Tostada	\$3.25	
	Sandwich	\$2.25	
	Hot Dog	\$1.75	
	Chicken and Chips	\$3.50	
	Hamburger with Chips and Drink	\$3.75	
	Apple	\$.50	
	Muffin	\$.75	

Find pairs of items that cost exactly \$5.

Fishing for Answers

Draw a line to match each word problem with the correct equation. Then solve each word problem.

Flying fish can jump up to 6 meters. How many times higher is that than a person who can jump 2 meters?

An adult whale shark has 4,000 teeth. A baby whale shark has 10 teeth. How many times more teeth does an adult have than a baby?

If a red snapper weighs 40 pounds, how many times heavier is a red snapper than a fish that weighs 8 pounds?

A human eye can be 3 centimeters long. An octopus has an eye 13 times as long. How long is the octopus eye?

BONUS: Hammerhead sharks can live in schools of 500 sharks. How many times larger is a hammerhead school than a school of 50 angelfish?

$$13 \times 3 = e$$

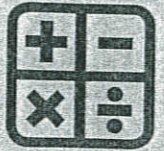
$$6 \div 2 = j$$

$$10 \times t = 4,000$$

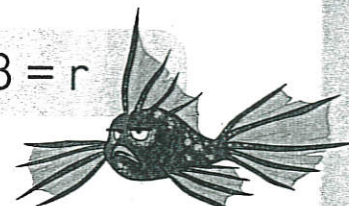
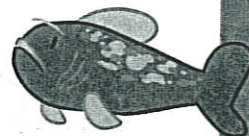
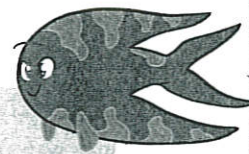
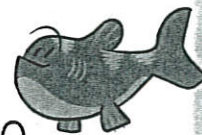
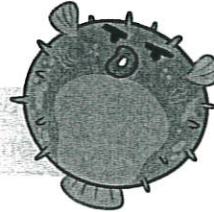
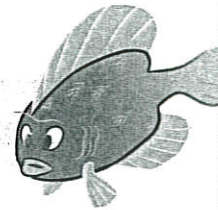
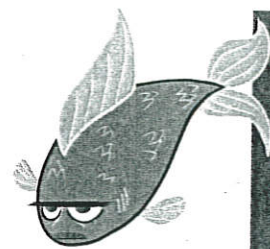
$$6 \times 2 = y$$

$$s = 40 \times 8$$

$$40 \div 8 = r$$



Multiplication
and Division
Comparisons



Solve each word problem.

43

If there are 84 firefish hiding in 7 different crevices of the reef with the same number in each, how many firefish are in each crevice?

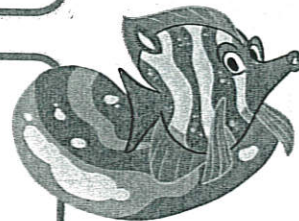
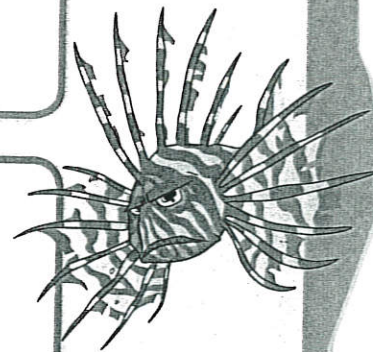
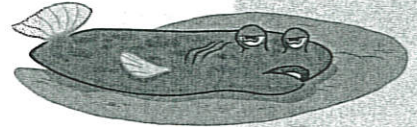
6 trumpet fish eat 216 gobies. If each trumpet fish sucked in the same number of gobies, how many gobies did each trumpet fish eat?

Peacock flounders have 2 eyes on the same side of their flat bodies. If you see 74 eyes resting on coral, how many flounders is that?

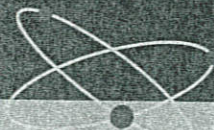
There were 135 parrotfish sleeping in 5 equal groups in protected areas of the reef. How many parrotfish were sleeping in each area?

If 3 clownfish share 912 plankton equally, how many plankton does each clownfish eat?

BONUS: Starfish have an eye at the end of each of their 5 arms. If there are 95 eyes in a group of starfish, how many starfish are in the group?



Long Division



Decompose
Fractions

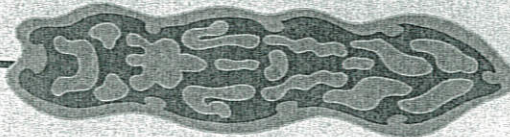
Segmented Worms

Write numbers in the equations to make the sum $\frac{7}{10}$. Then color the segments in different colors to match your equation.

$$\frac{\square}{10} + \frac{\square}{10} + \frac{\square}{10} = \frac{7}{10}$$

Now color the segments using 3 colors to make $\frac{7}{10}$.

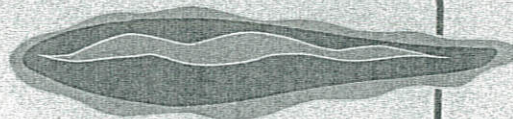
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$$\frac{1}{10} + \frac{\square}{10} + \frac{\square}{10} + \frac{\square}{10} = \frac{7}{10}$$

Now color the segments using 4 colors to make $\frac{7}{10}$.

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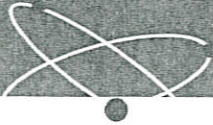


$$\frac{1}{10} + \frac{\square}{10} + \frac{\square}{10} + \frac{\square}{10} + \frac{\square}{10} = \frac{7}{10}$$

Now color the segments using 5 colors to make $\frac{7}{10}$.

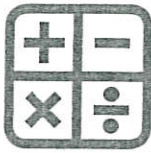
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Puffed-Up Patterns

Write how many times bigger each puffer fish can blow up to.



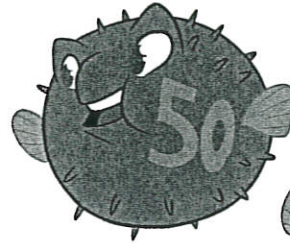
Multiples
of Ten

Upon
completion,
add this
sticker to
your path on
the map!



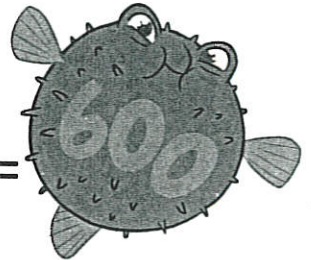
x

=



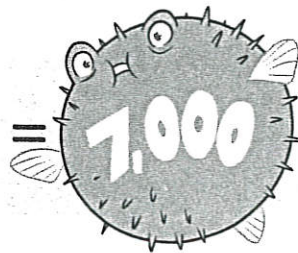
x

=



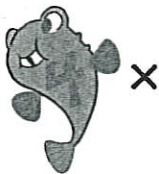
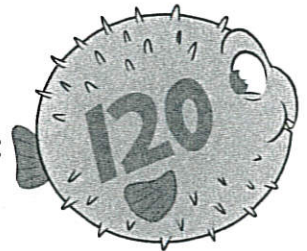
x

=



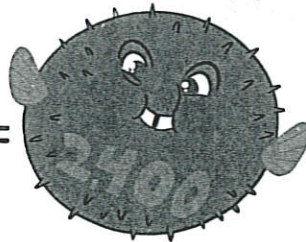
x

=



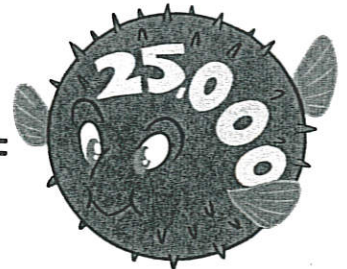
x

=



x

=



x

=



Brain Box

To multiply with multiples
of ten, first multiply using
the basic factor.

Then count the number
of zeros in both factors.

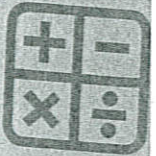
$$30 \times 70 = ?$$

$$3 \times 7 = 21$$

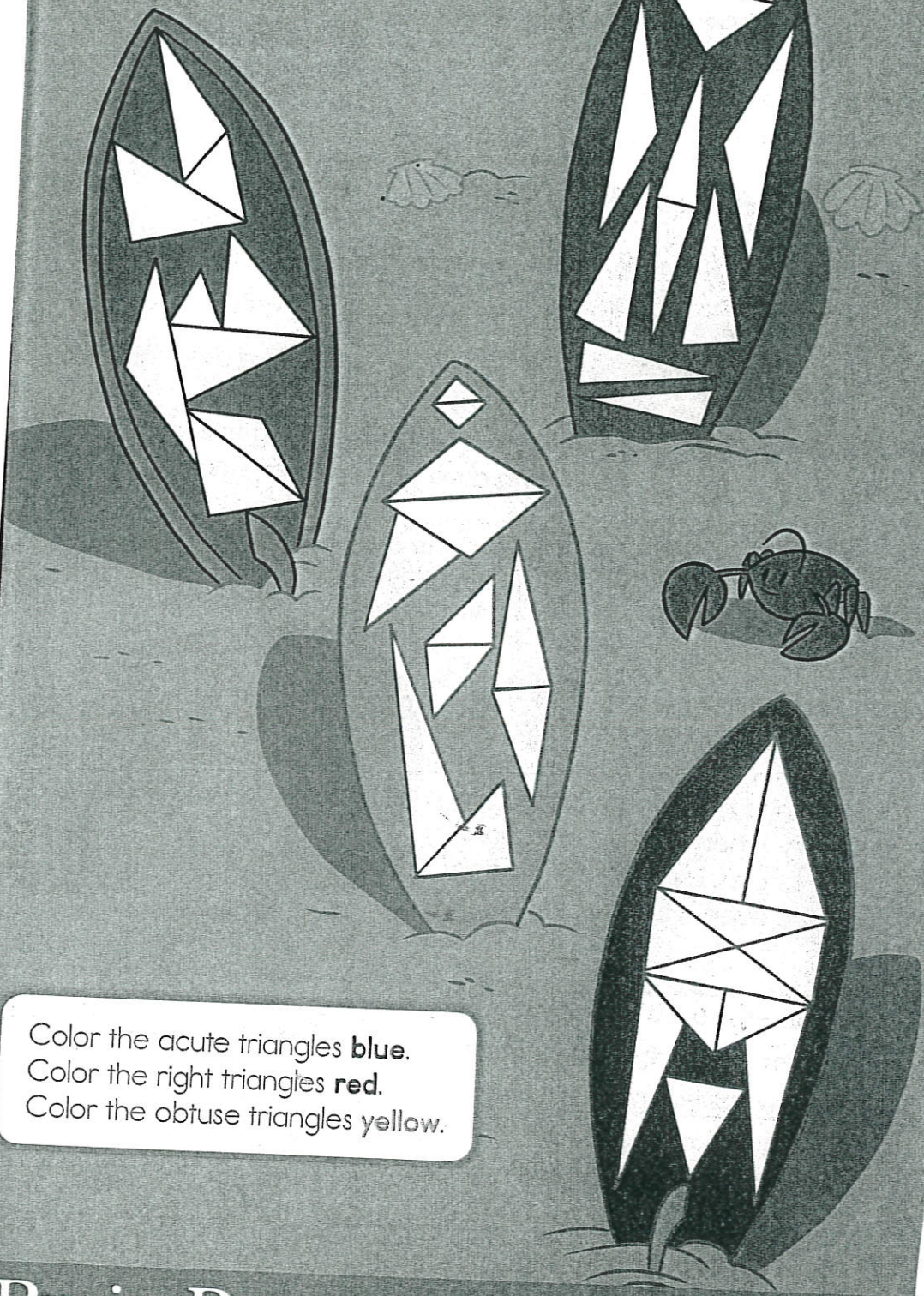
$$30 \times 70, \text{ two zeros}$$

$$30 \times 70 = 2100$$

Last, write the
product followed by
the number of zeros
in both factors.



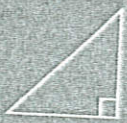
Angles



Color the acute triangles **blue**.
Color the right triangles **red**.
Color the obtuse triangles **yellow**.

Brain Box

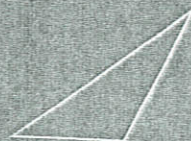
Every triangle has three angles.



When a triangle has one right angle, it is a **right triangle**.



When all angles in a triangle are acute, it is an **acute triangle**.



When a triangle has one obtuse angle, it is an **obtuse triangle**.

Water, Water Everywhere?

Read about the earth's water and study the pie chart. Then fill in the chart.

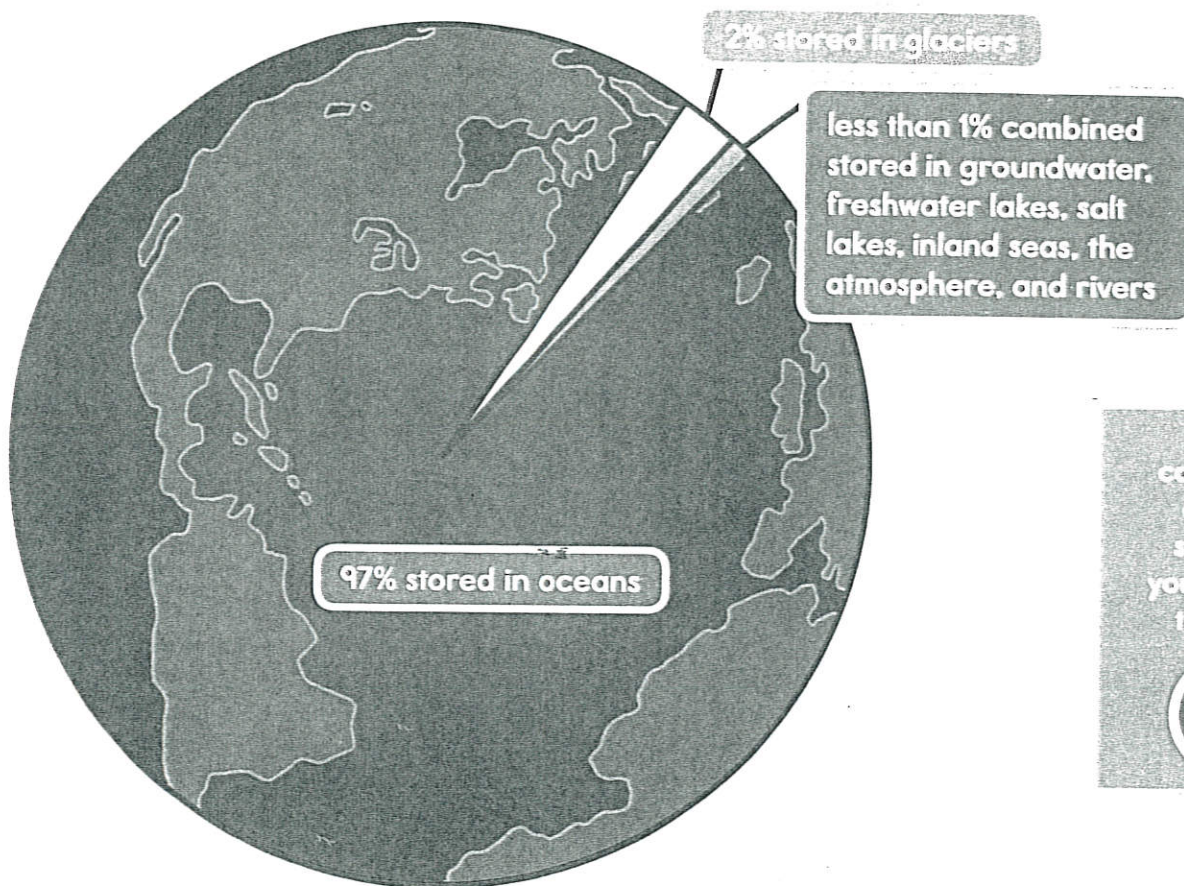
121



Water Cycle

Because 75 percent of Earth is covered by water, it may seem like an abundant resource. However, we currently use only freshwater, not salt water, for drinking, cooking, and irrigating fields. Moreover, much of our freshwater is unusable because it is frozen in glaciers or polluted.

Where Earth's Water Is Stored



Upon completion, add this sticker to your path on the map!



Body of Water	Percentage of the World's Water
Ocean	
Glacier	
Groundwater, freshwater lakes, saltwater lakes, inland seas, the atmosphere, and rivers	