## 3rd Grade Learning Activities April

Dear Students, Parents, and Families:

As our break extends, your teacher is providing this packet of resources to continue your child's learning. We recommend that your elementary child spends 1-2 hours daily on engaged learning activities, in addition to free time to play, explore, and spend time with family.

Please plan times for the following activities for your child. **NOTE: If your child becomes** frustrated or overwhelmed with any of these activities, please contact your child's teacher for assistance.

#### **READING:**

- Read for 30 minutes. This could be broken up into two 15-minute chunks.
- Then respond to one reading prompt by discussing it with someone or by writing about it in your notebook. If you have some extra time in your day, check out the Other Ideas sections. :) Have fun!

#### LITERACY:

- Research book on nonfiction topic of choice
- Other Writing Activities are optional.
- Practice word wall words for 5 minutes per day. Choose 4 to practice each week.
- There are also 2 phonics activities for you to complete this month.

#### MATH:

• Do 30 minutes of math per day. Plan to check off all of the required items by May 3. Choose other activities from the optional math activities as your child has time.

#### **SCIENCE:**

- Watch the 4 mystery science videos in order (check the calendar).
- You can watch the bonus science video on hand sanitizer any time.

#### **OTHER:** (LMC/Tech, PE, Art & Music)

• Choose activities from the Enrichment Activities pages for your child to explore.

Each day, check off the items on the calendar as they are completed. Initial each day when your student has completed the work. Students should bring the calendar and notebook back to school to share with their teacher when school is back in session.

If you have any questions, do not hesitate to reach out to your child's teachers through email.

<u>For your convenience</u>, all of the information included in this packet is also available on the website under the "Families" tab.

Your continued partnership is always appreciated!

## Daily Log

Student Name:		Grade	Teacher	
	check off the items	•	they are completed	d. Also, initial
daily when your c	hild has completed	the work.		
April 6 Adult Initials  30 min. Reading 30 min. Math Writing: research/ note-taking MAPL Activity	April 7 Adult Initials 30 min. Reading  30 min. Math  Writing: research/ note-taking  MAPL Activity	April 8 Adult Initials  30 min. Reading  30 min. Math Writing: research/ note-taking MAPL Activity	April 9 Adult Initials 30 min. Reading  30 min. Math  Watch Mystery  Science 1  MAPL Activity	April 10  NO SCHOOL Enjoy your time with your family
April 13  NO SCHOOL Enjoy your time	April 14 Adult Initials 30 min. Reading 30 min. Math Writing: rough	April 15 Adult Initials  30 min. Reading 30 min. Math Writing: rough	April 16 Adult Initials 30 min. Reading 30 min. Math Writing: rough	April 17 Adult Initials Read 30 min. Watch Mystery Science 2
with your family	draft  MAPL Activity	draft  MAPL Activity	draft  MAPL Activity	☐ MAPL Activity
April 20 Adult Initials  30 min. Reading	April 21 Adult Initials 30 min. Reading	April 22 Adult Initials  30 min. Reading	April 23 Adult Initials 30 min. Reading	April 24 Adult Initials Read 30 min.
30 min. Math Phonics act. 1 MAPL Activity	□ 30 min. Math □ Writing: rough draft □ MAPL Activity	30 min. Math Writing: rough draft MAPL Activity	30 min. Math Writing: rough draft MAPL Activity	Watch Mystery Science 3 MAPL Activity
April 27 Adult Initials 30 min. Reading	April 28 Adult Initials 30 min. Reading	April 29 Adult Initials 30 min. Reading	April 30 Adult Initials 30 min. Reading	May 1 Adult Initials Read 30 min.
□ 30 min. Math □ Phonics act. 2 □ MAPL Activity	□ 30 min. Math □ Writing: revising and editing □ MAPL Activity	<ul><li>30 min. Math</li><li>Writing: revising and editing</li><li>MAPL Activity</li></ul>	□ 30 min. Math □ Writing: revising and editing □ MAPL Activity	□ Watch Mystery Science 4 □ MAPL Activity

#### **READING**

Please read for at least 30 minutes each day and take 5 minutes to respond to what you read. You may choose to read a book that you have with you or use an online book using a resource below. Respond to one prompt below by discussing it with someone or by writing about it in your notebook. Please remember to check off your reading in the calendar.

#### **Fiction Response Prompts**

#### What is the theme of your book? Explain why you chose that theme.

- Was there a problem in this book? What was it? How was it solved?
- How would you describe the main character?
- What was your favorite part of the book? Why?
- Did you learn anything from the book?
- What was the MOST important event in the story? Why?
- Was there a character you didn't like? Why?
- Would you recommend this book to someone else? If so, who?
- Which character is most similar to you?
- If you could change the title, what would you change it to?
- What was the author's purpose in writing this book?
- What does the character want? Do you think he/she will get it? If so, how?
- If you could ask the author a question about the text, what would you ask?
- What questions do you have about the text?
- How are you feeling as you read?
- What do you think is going to happen next? How do you know?

#### OTHER (OPTIONAL) IDEAS:

- Choose your favorite chapter and make a comic strip.
- Make a book cover! If your book had a sequel, what would it look like?
- Talk show! Interview one of the characters.
   List your questions along with their answers.

#### **Nonfiction Response Prompts**

- Tell or write about your favorite part of the text.
- Tell or write the main topic of the text
- Tell or write one detail the author shared about the main topic.
- Tell or write two details the author shared about the main topic.
- Tell or write something you learned.
- How do you know this text is nonfiction?
- Tell or write about a text to self connection.
- Tell or write about a text to text connection.
- What do you still wonder about this topic?
- Why did the author choose this

#### OTHER (OPTIONAL) IDEAS:

- Make a video book talk.
- SUMMARIZE make a mini book version.
- Create some new text features to go along with your book.

#### **Online Book Resources**

- Scholastic Learn at Home--www.scholastic.com/learnathome Daily learning activities on one topic include several books to read, a related video, and a writing activity.
- Book Flix--<u>http://teacher.scholastic.com/products/bookflix/#/</u> (click login in top right) Fiction and nonfiction books that can be read or read aloud.
- True Flix--https://sdm-tfx.digital.scholastic.com/?authCtx=U.600107734
   Nonfiction books on a large variety of topics to be read or read aloud.
- Epic! --<u>https://www.getepic.com/students</u>
  - o Teacher will provide a class code

## LITERACY

Word Work
Phonics activity 1: Review the Rules Poster for spelling when adding suffixes to words. Practice by doing Phonics Worksheet 1.
Phonics activity 2: Practice spelling when adding suffixes to words by doing Phonics Worksheets 2 and 3.
Practice the high-frequency spelling words for this month. Please choose 3-4 per week for your child to practice until they have them committed to memory. Here are a few ideas for practicing: <ul> <li>Say each letter while marching in place or doing jumping jacks.</li> <li>Form the word with letter cards or magnets. Remove one letter at a time, spelling the word each time, until there are no letters left and you are spelling from memory.</li> <li>Say the letters in chunks to practice saying them (wr ite)</li> </ul>
knew, study, second, near, today, sure, took, four, head, country, father, picture, earth, year, mother, enough, above, live  L can spell these high-frequency words correctly from memory.
Writing Activity - Nonfiction Book
<ul> <li>Week of April 6:         <ul> <li>Research nonfiction topic of your choice (animal, person, place, etc.) Use a book, online resources (check out PebbleGo and World Book for Kids etc. on the LMC resource page) or a combination of both.</li> <li>Take notes using an outline. An outline is attached. Remember to read, close your book, and then take notes.</li> <li>Number the topics on your outline in an order that makes sense for your book.</li> </ul> </li> <li>Weeks of April 14-24:         <ul> <li>Write a rough draft remembering to skip lines and circle misspelled words. *No plagiarizing, please! Don't forget to include an introduction (with a hook), transition words (first, second, lastly, for example, one example, in addition, in fact, as a matter of fact, as you can see, in conclusion, etc) and a nice conclusion.</li> </ul> </li> <li>Week of April 27:         <ul> <li>Revise your paper using a pen. Make your writing better by elaborating (adding more details) and deleting unnecessary information. Bold words that you would like to define in your glossary.</li> <li>Edit your paper. Be sure to check for capitalization, punctuation, and correct your spellings.</li> </ul> </li> <li>First 2 weeks in May:         <ul> <li>Write the final draft of your book in your neatest handwriting.</li> </ul> </li> <li>Your book should include the following:                  <ul> <li>Book cover with the title, author's name, and a beautiful picture.</li> <li>Table of Contents listing all of the chapters you have written.</li> <li>3-5 organized chapters on various topics about your subject.</li> <li>At least one text feature per topic (picture, caption, diagram, labels, map, comparisons, lists, etc).</li> <li>Glossary of bolded words with their definitions (5-10 words)</li></ul></li></ul>
Optional Writing Activities
Have fun choosing from these writing activities. These are feel-good activities, if you have time. :)  Write a thank you card or letter. Think about someone older (a grandparent, great-grandparent, neighbor) who is not getting out and about as much as they would like. Brighten their day and ask them to write you back!  Write up a daily schedule for yourself. It's nice to stick (somewhat) to a routine.  Write about a time that someone did something kind for you. What did they do and how did it make you feel?  Describe a special day that you shared with a friend or your family. What made it so memorable?  If you have a pet, describe a day from their point of view.  What are you thankful for? Make a list of 8-10 people or things and explain WHY you are thankful for them.

## Research Outline

Subject:

Topic	
Supporting Details:	
1	
2	
3	
4	
Topic	
Supporting Details:	
1	
3	
4	
5	
Topic	
Supporting Details:	
1.	
2	
3	
4	
5.	

## Research Outline

Subject: \_\_\_\_\_

Topic
Supporting Details:
1
2
3
4
5
Topic
Supporting Details:
1
2
3
4
5
Topic
Supporting Details:
1
2
3
4
5.

#### **MATH**

- Complete these required math activities in the order they are listed.
- Work for 30 minutes and then put it aside for the day. We expect that the workbook lessons (included in this packet) will each take two days to complete.
- If you still have time during your 30 minutes of daily math, choose skills to review from the choices in the bottom box.

#### Required Math Activities--Complete all

Math Expressions Unit 5 Measurement and Fractions Watch the introduction videos then complete the lessons in the order listed. Flocabulary is offering a free 60 day trial - Please sign up and enjoy these instructional videos and many more!
Area and Perimeter:
https://www.flocabulary.com/unit/area-and-perimeter/
https://bit.ly/2vVNRpP
https://bit.ly/2yheC95
https://bit.ly/3as3qon
Lesson 5.1 (Workbook Pages 309-312)
Lesson 5.2 (Workbook Pages 313-316)
Lesson 5.4 (Workbook Pages 319-322)
Lesson 5.5 (Workbook Pages 323-326)
Lesson 5.6 (Optional)
Equivalent Fractions:
https://www.flocabulary.com/unit/fractions/
https://www.flocabulary.com/unit/equivalent-fractions/
https://www.flocabulary.com/unit/mixed-numbers-improper-fractions/
Lesson 5.7 (Workbook Pages 335-336)
Lesson 5.8 (Workbook Pages 337-338)
Lesson 5.9 (Workbook Pages 339-340)
Lesson 5.10 (Optional)

#### **Optional Math Activities**

Online Learning: Khan Academy (access through Google Classroom)

**Math Games:** 

Prodigy <a href="https://www.prodigygame.com">https://www.prodigygame.com</a>

Math Playground <a href="https://www.mathplayground.com/">https://www.mathplayground.com/</a>

Abcya https://www.abcya.com/

(Does not work on ipads, phones, or tablets. Works on desktops and laptops.)

- Fraction Games
  - Equivalent Fraction Bingo
  - Feed Me Fractions
  - Pecking Order
  - Fraction Fling
  - Equal Ratio Asteroids

#### Area and Perimeter / Fraction Videos

https://www.youtube.com/watch?v=qNqml0f16Ql

https://www.youtube.com/watch?v=8cz\_IB65pZM

https://www.youtube.com/watch?v=MTSIKifo4js

https://www.flocabulary.com/unit/adding-fractions/

#### **ENRICHMENT ACTIVITIES**

Complete the 4 Mystery Science Lessons on weather and climate in order this month. Choose to explore other activities as you have time.

Science Activities
If you would like to show your child the effectiveness of soap in removing germs, try this experiment with water, pepper, and soap.
Take some pepper and sprinkle it in a dish with plain water. Get a second dish and fill it with soap and water. Now, dip your finger into the dish with pepper water. Look at your finger. It may have a few specks of pepper on it. Dip your finger in the dish with soap water, making sure it is fully submerged. Now dip your soap-covered finger back into the dish of pepper water. You should see the pepper immediately move away from your finger. This shows how soap works to repel germs so that they can be washed away.
Mystery Science Bonus Video: How does hand sanitizer kill germs? (Do this any time.)  https://mysteryscience.com/mini-lessons/germs-sanitizer?code=38666f196fe2ec5808e297aaa2551cb7
The links below will take you right to the science lessons. Check them off once you've watched each one. Don't worry about doing the activities at home, unless you have the supplies to do so and you want to!
Mystery Science learning videos: April's unit is stormy skies (weather and climate).
Lesson 1: Water cycle and phases of matter: Where do clouds come from? <a href="https://mysteryscience.com/weather/mystery-1/water-cycle-phases-of-matter/46?code=NDExNDY1NDM&amp;t=student">https://mysteryscience.com/weather/mystery-1/water-cycle-phases-of-matter/46?code=NDExNDY1NDM&amp;t=student</a>
Lesson 2: Local Weather Patterns & Weather Prediction: How can we predict when it's going to storm? <a href="https://mysteryscience.com/weather/mystery-2/local-weather-patterns-weather-prediction/47?code=NDExNDY1NDM&amp;t=student">https://mysteryscience.com/weather/mystery-2/local-weather-patterns-weather-prediction/47?code=NDExNDY1NDM&amp;t=student</a>
Lesson 3: Climate, Geography, & Global Weather Patterns: Why are some places always hot? <a href="https://mysteryscience.com/weather/mystery-3/climate-geography-global-weather-patterns/98?code=NDExNDY1NDM&amp;t=student">https://mysteryscience.com/weather/mystery-3/climate-geography-global-weather-patterns/98?code=NDExNDY1NDM&amp;t=student</a>
Lesson 4: Natural Hazards & Engineering: How can you keep a house from blowing away in a windstorm?
https://mysteryscience.com/weather/mystery-4/natural-hazards-engineering/153?code=NDExNDY1NDM&t=student

#### LMC/Tech Activities from Mrs. Hundt & Mrs. Mead

\_\_\_Advertising/Media Literacy - Be an advertising sleuth and tally the number of ads you see in one day. Click on the link for more Advertising information. https://www.pbslearningmedia.org/tools/storyboard/view/b591504a-c214-41a4-8ead-266de8e9e8bf/

**\_\_\_Famous People** - Interview a family member. Ask them if they have a hero and ask them to tell you about that hero. Click on the link for more resources. <a href="https://www.pbslearningmedia.org/tools/storyboard/view/8b4efb24-1d37-48dc-8c86-a03843104949/">https://www.pbslearningmedia.org/tools/storyboard/view/8b4efb24-1d37-48dc-8c86-a03843104949/</a>

\_\_\_LMC Resources - Pick out a LMC resource and show a family member how to use it.

https://www.pbslearningmedia.org/tools/storyboard/view/142f24cb-af00-48a6-9617-eb5d299899c8/

**Be an explorer!** Draw a path and the sites a bug would see if it traveled around your house. If you have access to the internet, click on this link for more ideas: https://wisconsin.pbslearningmedia.org/tools/storyboard/view/3fb5deae-bac3-401d-9e45-50b61a6484c8

**Be a computer programmer!** Design an obstacle course inside or outside your home and create a program for someone to follow from start to finish with LEFT, RIGHT, UP, DOWN, and any other directions necessary. If you have access to the internet, click on this link for more ideas: <a href="https://wisconsin.pbslearningmedia.org/tools/storyboard/view/46ba3621-1e82-43b6-8fe3-980c91adeaa2">https://wisconsin.pbslearningmedia.org/tools/storyboard/view/46ba3621-1e82-43b6-8fe3-980c91adeaa2</a>

Check out "Mrs. Mead's Technology Links" for some of your favorite websites.

#### **Enrichment Activities**

#### Music Activities from Mrs. Jones & Mrs. Martin

- \*Watch this greeting from Mrs. Jones and Mrs. Martin: https://youtu.be/bgH8k6AUuhU
- \*Watch this short video about woodwind instruments: <a href="https://www.youtube.com/watch?v=Cwfj9Xx2LF4">https://www.youtube.com/watch?v=Cwfj9Xx2LF4</a>
- \*Explore Rhythm or Songmaker on: https://musiclab.chromeexperiments.com/Experiments
- \*Sing along with a karaoke YouTube video
- \*Make up your own words to a song (create a song parody)
- \* Dance along to your favorite song!

#### Art Ideas from Ms. Lotspaih & Mrs. Finch

- \*Watch a greeting from Ms. Lotspaih and Mrs.Finch! <a href="https://youtu.be/g8JNW1m0VxA">https://youtu.be/g8JNW1m0VxA</a>
- \*Watch this video about artist Paul Klee. <a href="https://youtu.be/egHJ9gDLkL8">https://youtu.be/egHJ9gDLkL8</a>
- \*After you have watched the video on Paul Klee, make a collage of a dream or story from imagination.
- \*Create a drawing of your bedroom, a favorite toy, your home, or your backyard. Use your OBSERVATION skills to LOOK at what you're drawing as you are drawing it. Tip: only draw what you see!
- \*While eating a snack, arrange your food in a pattern before eating it up! (ex: trail mix- peanut, raisin, m&m, peanut, raisin, m&m)
- \*Do a random act of kindness by making a card for someone you miss. With the help of an adult send it to them in the mail.

#### Physical Education with Mrs. Meyers, Mr. Merrill & Ms. Tischler

\*During this extended learning time, it's more important than ever for students to be active. Click on the link for our **PE CHOICE BOARD**, which offers a variety of ways to be active! We hope you have fun!! <a href="https://drive.google.com/file/d/1x41\_M8S9vlOxD8K1HSBm1-zQyxG4Jw-x/view?usp=sharing">https://drive.google.com/file/d/1x41\_M8S9vlOxD8K1HSBm1-zQyxG4Jw-x/view?usp=sharing</a>

\*SHARE WITH US!! We would love to hear from you about the ways you are staying active at home! Click on this link to fill out a short form! <a href="https://forms.gle/7iEBr1LucRWByPFM9">https://forms.gle/7iEBr1LucRWByPFM9</a>

	WSES	PE Ch	oice Bo	oard (	
	Go for a bike ride as a family!	You are going to love this <u>Stairway to</u> <u>Fitness Activity</u>	Strike a balloon in the air with your hand! How many times can you keep it up?	Strategy and fitness collide in Connect 4 Fitness!	Family Challenge: Dance to your favorite song, and see who has the best dance moves!
Students & parents- We hope you enjoy	Dribble a ball 100x with each hand. Can you dribble 100x with each hand while moving?	Have a coin? Try playing this game! Coin Flip	Make a decision and do an exercise in this Would you rather? activity!	Use your body to act out these words in this <u>charades</u> activity! Have Fun!	Money, money, money! Try this fun game called <u>Spare</u> <u>Change Basketball</u> !
choosing a variety of ways to be active! Most of all,	Hunt for these items around the house, and then get ready to exercise!	Go outside, and kick a ball around your house 2 times or more!	3, 2, 1 Try this activity called <u>Buzzer Beater</u> <u>Basketball</u>	Help your family cook a healthy meal together. When you are done, clean up the dishes!	Find your Uno cards, and play <u>Uno Fitness!</u>
have fun! Mr. Merrill, Mrs. Meyers & Ms. Tischler	Roll a dice 3 times to create your story and then act it out!	Teach your family your favorite tag game, and play it!	Create a game with these 4 items: coat hanger, pillow, sock ball, plastic bottle! Be creative!!	All you need is a piece of paper for this fun fitness activity!	Stair Challenge: Find a set of stairs in your house and go up & down as many times as you can!

#### **URL Links For Above Activities:**

CHOICE BOARD: https://drive.google.com/file/d/1x41\_M8S9vlOxD8K1HSBm1-zQvxG4Jw-x/view?usp=sharing

Stairway to Fitness Activity: <a href="https://www.youtube.com/watch?v=LvmZTCXq2Ts&feature=youtu.be">https://www.youtube.com/watch?v=LvmZTCXq2Ts&feature=youtu.be</a>

#### **Connect 4 Fitness:**

https://docs.google.com/document/d/1NN4ZjRb9FmxGp7B7roKiMSrOIFd781RHTycO617rMCc/edit

Coin Flip: <a href="https://docs.google.com/document/d/1RS6B6wK0cL2PtVBkaYjF6NJ7KkkzMA2H9MjRn3fiT1I/edit">https://docs.google.com/document/d/1RS6B6wK0cL2PtVBkaYjF6NJ7KkkzMA2H9MjRn3fiT1I/edit</a>

Would You Rather: <a href="https://www.youtube.com/watch?v=jAuhWjMRCpg&feature=youtu.be">https://www.youtube.com/watch?v=jAuhWjMRCpg&feature=youtu.be</a>

Charades Activity: https://drive.google.com/file/d/1StOtrQsBZ7YHCLuWl2YC4KYAVO8Bk81b/view

Spare Change Basketball: <a href="https://drive.google.com/file/d/1v">https://drive.google.com/file/d/1v</a> NsbH MBYIgPQR6LR74CZDvSEZu10iB/view

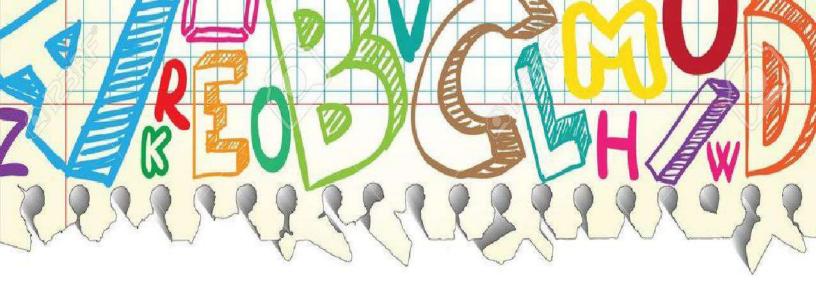
Hunt Around the House: <a href="https://drive.google.com/file/d/1KgAIOQV2CwQ9\_uYCROIQOSzZJyB9GoD\_/view">https://drive.google.com/file/d/1KgAIOQV2CwQ9\_uYCROIQOSzZJyB9GoD\_/view</a>

Buzzer Beater Basketball: https://drive.google.com/file/d/1 CyJ3V5HQgSqvZGndl-Lu6FxoyC4bEAz/view

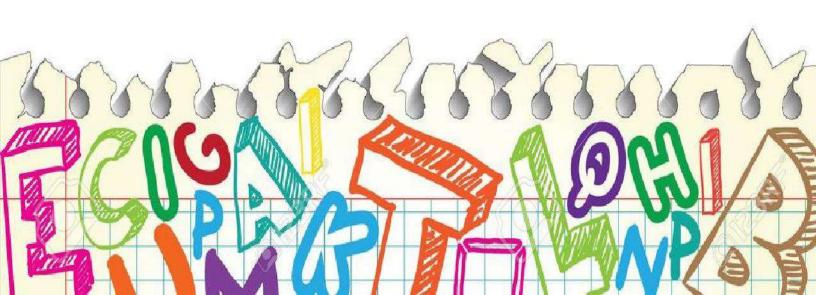
Uno Fitness: https://www.youtube.com/watch?v=Hzy9lOrInpQ&feature=youtu.be

Roll a Dice 3 Times: <a href="https://drive.google.com/file/d/1AEC-mz6ZRXZCOWOgeB-6SF9Nd9GB">https://drive.google.com/file/d/1AEC-mz6ZRXZCOWOgeB-6SF9Nd9GB</a> 3-u/view

Fitness Paper Activity: <a href="https://www.youtube.com/watch?v=v3kTUdWM7U4&feature=youtu.be">https://www.youtube.com/watch?v=v3kTUdWM7U4&feature=youtu.be</a>



## Word Work Activities



## Rules Poster

After studying the Doubling Rule, the Silent E Rule, and the Change the Y Rule, students may enjoy making rules posters for their home study areas as an excellent way to reinforce these rules. Color the posters and mount them on colored paper.







## 1-1-1 Words

DOUBLE

The final consonant if the suffix begins with a **Vowe!**Example: sad, sadder, sadness

(do not double if the suffix begins with a consonant)

Recipe for Reading pgs. 183-184



## Silent E Words

The final e if the suffix begins with a **Vawe!**Example: name, naming, nameless
(keep the e if the suffix begins with a consonant)

Recipe for Reading pgs. 214-216

## Words Ending in Y



The y to i if there is a Consonant before the y Example: cry \* ed = cried

Exception:

love each other and are never separated

Example: cry + ing = crying (keep the y if a vowel comes before the y)

Example: play + ed = played

Recipe for Reading pg. 217

(Rudinsky & Haskell, 1985:p.86)

Name:			Date:			Phanres —	Warksheet 28	1
		Thr	ree Gr	eat Rul	es			
		1-1-1 Doubling	Drop the ø	Change y to i	Do Nothing			
trim	+ er							
happen	+ ing							
envy	+ ed							
suppose	+ ing							_
paint	+ er							
order	+ ing							
spot	+ ed							
brave	+ est						NWH 10/14	
							1411 10/14	

		Phonecs	Worksheet	2
Name:	Date:		29	

## Three Great Rules

		1-1-1 Doubling	Drop the e	Change y to i	Do Nothing		
bit	+ en						
bark	+ ing						
chase	+ ing						
need	+ y					2	
hope	+ ful						
easy	+ er						

NWH 10/14

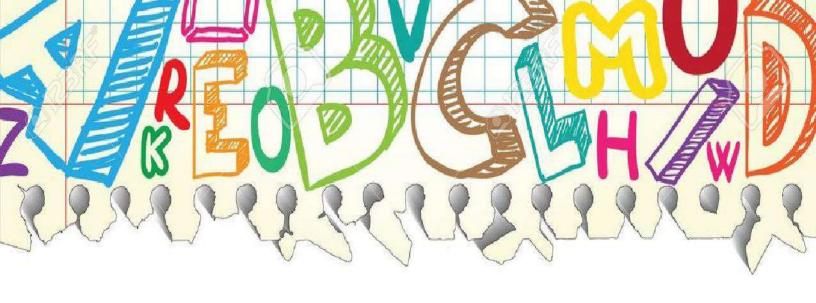
Phones	Worksheet	3
interesta de la composición del composición de la composición de l	30	-

All the second second		
Norme:		

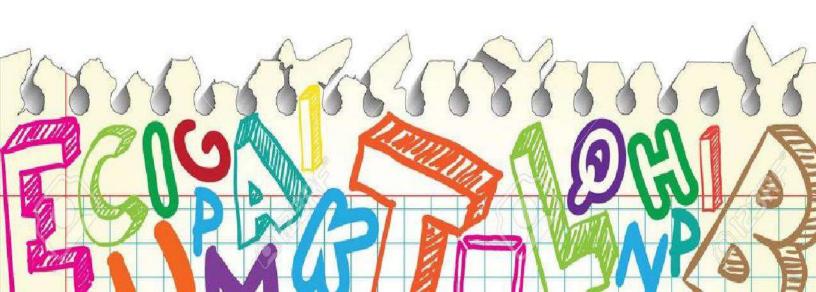
Date:

## Three Great Rules

		1-1-1 Doubling	Drop the e	Change y to i	Do Nothing	
place	+ ed					
clap	+ ing					
jump	+ ing					
humy	+ ed					
ship	+ ment			15		
safe	+ ty					



# Math Assignments

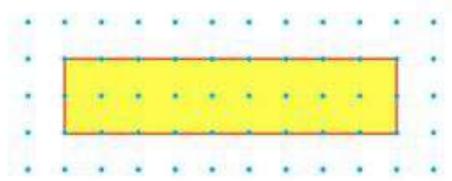


## Recognize Perimeter and Area

perimeter unit square

VOCABULARY

On this page, the dots on the dot paper are 1 cm apart. Use the rectangle for Exercises 1–4.



- What part of the rectangle is its perimeter?
- What part of the rectangle is its area?
- Find the perimeter. Draw tick marks to help.
- Find the area. Draw unit squares to help.
- 6) Draw a rectangle 4 cm long and 3 cm wide on the dot paper. Find the perimeter and area.
- Explain how you found the area of the rectangle in Exercise 5.

	*	٠
*	*	*
	٠	٠

Perimeter \_\_\_\_\_

Area \_\_\_\_

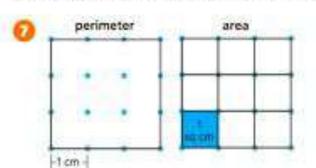
Distugtion Methin Harcourt Publishing Company

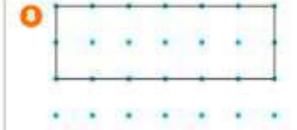
## Find Perimeter and Area

(3

Find the perimeter and area of each figure.

Remember to include the correct units in your answers.



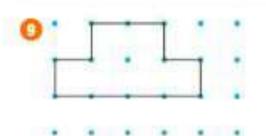


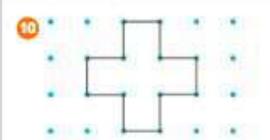
Perimeter =

Area =

Perimeter =

Area =



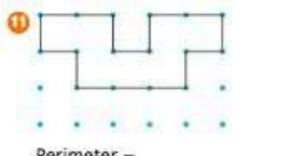


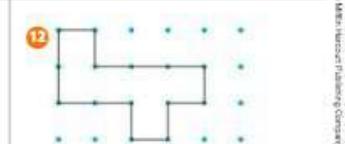
Area =

Perimeter =

Area =

Perimeter =





Perimeter = \_\_\_\_

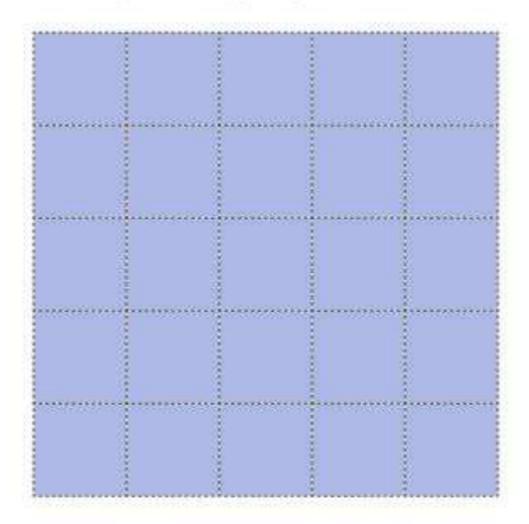
Area =

Perimeter = \_\_\_\_\_ Area =



## Tile a Rectangle

Cut out the 1-inch unit squares along the dashed lines. Try to cut as carefully and as straight as you can.



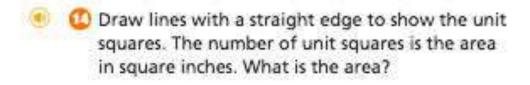


## Tile a Rectangle

Use the 1-inch unit squares from page 311A to cover the rectangle below.

Be sure there are no gaps between the unit squares.

Be sure no unit squares overlap.



Use an inch ruler to measure the side lengths of the rectangle. Label the length and the width.



Write a multiplication equation to show the area.

UNIT 5 LESSON 4

D Haghen Mith Harourt Patients Company

- Tile a Rectangle (continued)
- Cover each rectangle with 1-inch unit squares. Count the squares to find the area. Then write an equation to show the area.



The area is \_\_\_\_\_\_.

The equation is \_\_\_\_\_

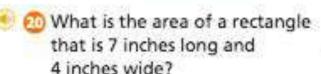


The area is

The equation is \_\_



How many 1-inch unit squares
 are needed to cover a rectangle
 that is 7 inches long and
 4 inches wide?





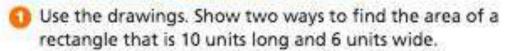
#### Check Understanding

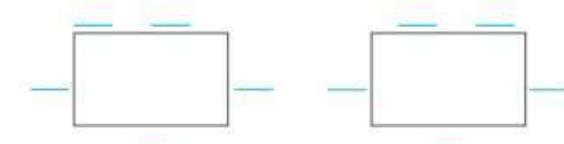
Complete the sentences.

Perimeter measures

Area measures







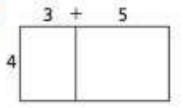
- Write equations for your two rectangle drawings.
- Suppose the rectangle is 10 feet long and 6 feet wide. What is its area?
- Suppose the rectangle is 10 meters long and 6 meters wide. What is its area?
- Use drawings and write equations to show two ways to find the area of a rectangle that is 9 yards long and 5 yards wide.



- Rectangle Equations and Drawings
- Write an equation for each rectangle.



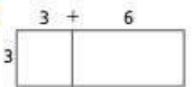




0



0



0



- Oraw a rectangle for each equation.
- (3 × 3) + (3 × 5) = 3 × 8

$$\bigcirc$$
 (4 × 5) + (4 × 3) = 4 × 8

- ①  $(5 \times 3) + (5 \times 6) = 5 \times 9$
- ①  $(4 \times 6) + (4 \times 4) = 4 \times 10$



- Find Unknown Side Lengths
- Find the unknown side length in each rectangle.

8 cm

Area = 72 sq cm

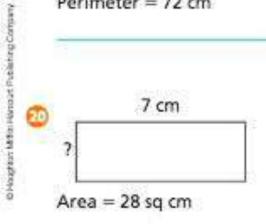
12 cm Perimeter = 38 cm

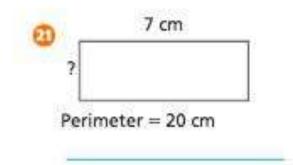
24 cm Perimeter = 64 cm

7 cm Area = 56 sq cm

30 cm Perimeter = 72 cm

? 7 cm Area = 63 sq cm





## Unknown Side Length Problems

Solve. Draw a rectangle to represent the situation.

Show your work.

- Alexander and his grandfather are tiling their rectangular kitchen floor. They need to use 42 tiles. They are making rows of 7 tiles. How many rows do they make?
- Martha has 63 quilt squares ready to sew together. She wants the quilt to be 9 rows long. How many squares will be in each row?
- Rick is painting a mural of different sizes of rectangles, with no gaps or overlaps of the rectangles. He has enough paint to cover 15 square yards. He wants the mural to be 3 yards long. How wide can the mural be?
- Mr. Baker is making a box using all of a 48-inch strip of oak. The box will be 14 inches wide. How long will the box be?

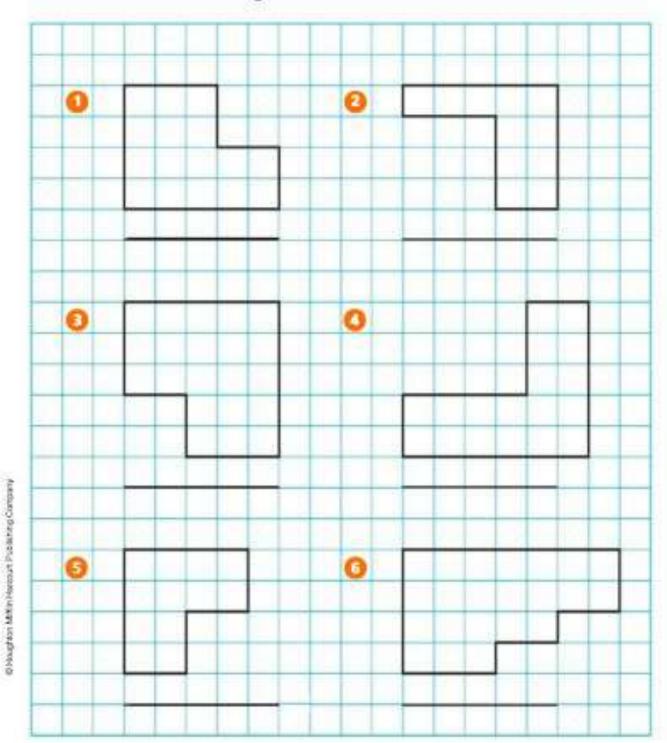
## Check Understanding

Draw and label a rectangle with an area of 36 square centimeters and one side length of 4 centimeters. Find the unknown side length. Then find the perimeter.





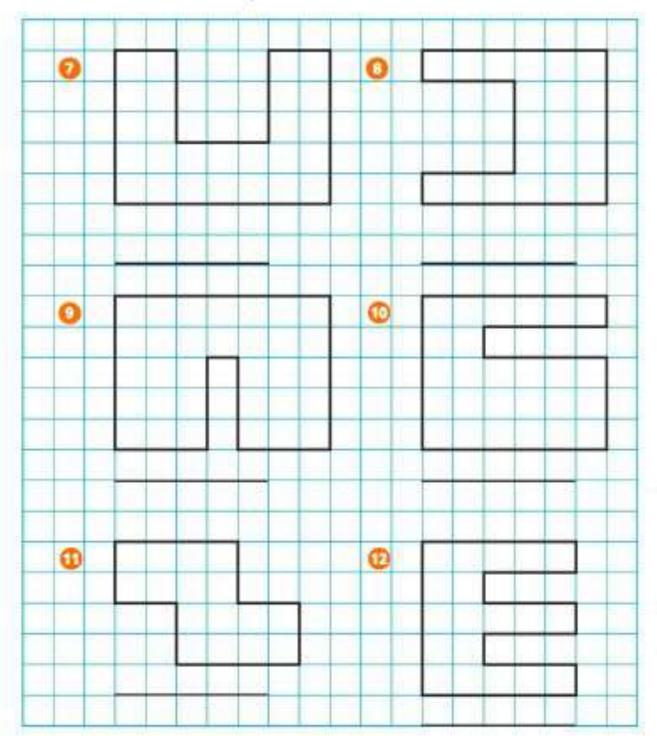
Decompose each figure into rectangles. Then find the area of the figure.





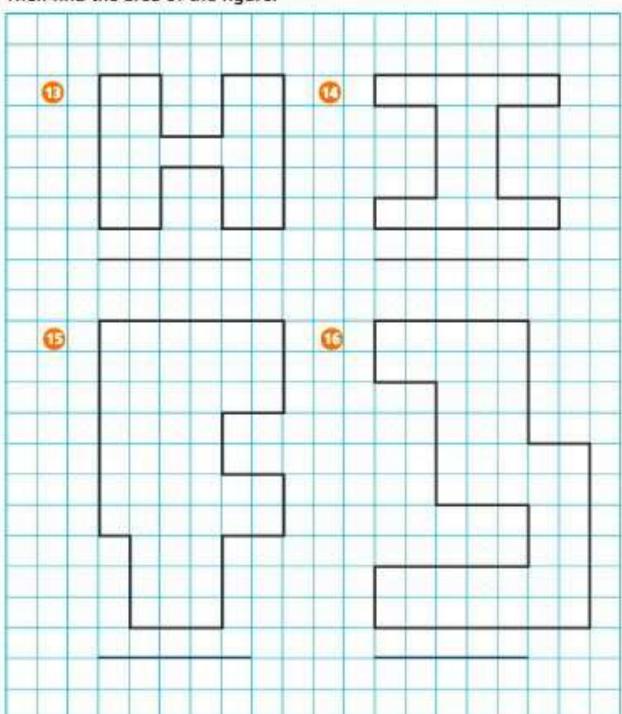
## Find Area by Decomposing into Rectangles (continued)

Decompose each figure into rectangles. Then find the area of the figure.



Dirbughon Million Harbourt Publishing Company

- Find Area by Decomposing into Rectangles (continued)
- Decompose each figure into rectangles. Then find the area of the figure.







#### What's the Error?



Dear Math Students.

Today my teacher asked me to find the area of a figure. I knew that I could decompose the figure into rectangles. This is what I did.

3	Rectang	le 1		
		-		

Area of Rectangle I: 3 x 6 = 18 square units

Area of Rectangle 2: 5 x 4 = 20 square units

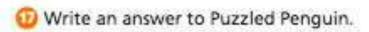




Area of Figure: 18 + 20 = 38 square units

Is my work correct? If not, please correct my work and tell me what I did wrong. How do you know my answer is wrong?

Your friend, Puzzled Penguin







#### Check Understanding

Decompose the figure Puzzled Penguin decomposed into rectangles a different way and find the area of the figure.



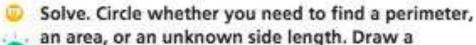
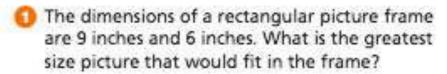


figure to represent each situation.

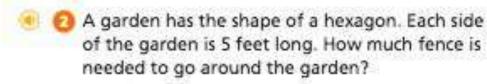
Show your work.



Perimeter

Area

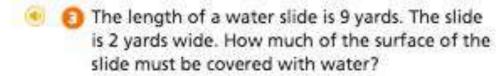
Side Length



Perimeter

Area

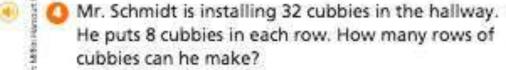
Side Length



Perimeter

Area

Side Length



Perimeter

Area

Side Length





## Solve Perimeter and Area Problems (continued)

Solve. Circle whether you need to find a perimeter, an area, or an unknown side length. Draw a figure to represent each situation.

Show your work.

The floor of a delivery van has an area of 56 square feet and is 8 feet long. How many rows of 8 boxes that measure 1 foot by 1 foot can be put on the floor of the delivery van?

Perimeter

Area

Side Length

Zack is planning to make a flower garden. He has 24 one-yard sections of fence that he plans to place around the garden. He wants the garden to be as long as possible. What is the longest length he can use for the garden? How wide will the garden be?

Perimeter

Area

Side Length

An exercise room is 9 yards long and 7 yards wide. A locker room 8 yards long and 6 yards wide is attached to one end of the exercise room. How much floor space do the exercise room and the locker room take up?

Perimeter

Area

Side Length

Rosa's dog Sparky is 24 inches long. One side of Sparky's doghouse is 36 inches long and the other side is twice as long as Sparky. What is the distance around Sparky's doghouse?

Perimeter

Area

Side Length



## Solve Perimeter and Area Problems (continued)

Solve. Circle whether you need to find a perimeter, an area, or an unknown side length. Draw a figure to represent each situation. Show your work.

O Joanne made 16 fruit bars in a square pan. The fruit bars are 2 inches by 2 inches. What are the dimensions of the pan she used to bake the fruit bars?

Perimeter

Area

Side Length



A scout troop is making triangular pennants for their tents. Two sides of each pennant are 2 feet long and the third side is 1 foot long. How much binding tape is needed to go around 4 pennants?

Perimeter

Area

Side Length



A rectangular quilt is 5 feet wide and 7 feet long. How many feet of lace are needed to cover the edges of the quilt?

Perimeter

Area

Side Length



Amy has a piece of fleece fabric that is 4 feet wide and 6 feet long. How many squares of fleece fabric that are 1 foot wide and 1 foot long can she cut from the fabric?

Perimeter

Area

Side Length



## Solve Perimeter and Area Problems (continued)

Solve. Circle whether you need to find a perimeter, an area, or an unknown side length. Draw a figure to represent each situation.

Show your work.

(b) Vanita has 23 tiles with dimensions of 1 foot by 1 foot. She wants to tile a hallway that is 8 feet long and 3 feet wide. Does she have enough tiles? If not, how many more does she need?

Perimeter

Area

Side Length

Mrs. Lee has 48 one-foot pieces of garden fence. What dimensions should she use for the garden to have as much room as possible?

Perimeter

Area

Side Length

Martha has 27 striped squares and 27 dotted squares. She wants a quilt with rows of 6 squares. How many rows will the quilt have?

Perimeter

Area

Side Length

O A 20-mile bike path is in the shape of a triangle. Don rode 6 miles and 8 miles on the two sides. How long is the third side of the path?

Perimeter

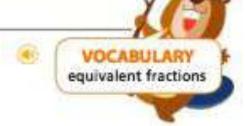
Area

Side Length



#### Check Understanding

Describe a real world situation when you would need to find perimeter and another for area.



- Halves, Fourths, and Eighths
- Two fractions are equivalent fractions if they name the same part of a whole.

Use your halves, fourths, and eighths strips to complete Exercises 1–4.

	1/2						
1		1		1		1	
1 8	1 1	1 1	1	1	1	1 8	1

If you compare your halves strip and your fourths strip, you can see that 2 fourths are the same as 1 half.

Complete these two equations:

$$\frac{1}{4} = \frac{1}{2}$$

- (
- 6 How many eighths are in one half?

Complete these two equations:

$$\frac{1}{8} = \frac{1}{2}$$

- •
- 6) What are two fractions that are equivalent to  $\frac{1}{2}$ ?



O How many eighths are in one fourth?

Complete these two equations:

eighths = 1 fourth

$$\frac{1}{8} = \frac{1}{4}$$

- Thirds and Sixths
- Use your thirds and sixths strips to answer Exercises 5–6.
  - How many sixths are in one third?

    Complete these two equations:

sixths = 1 third

$$\frac{\Box}{6} = \frac{1}{3}$$

O How many sixths are in two thirds?

Complete these two equations:

sixths = 2 thirds

$$\frac{\Box}{6} = \frac{2}{3}$$

- What's the Error?
- 0

Dear Math Students.

Today my teacher asked me to name a fraction that is equivalent to  $\frac{1}{2}$ 

I wrote  $\frac{2}{6} = \frac{1}{2}$ .

Is my answer correct? If not, please correct my work and tell me what I did wrong.

Your Friend, Puzzled Penguin



Write an answer to Puzzled Penguin.



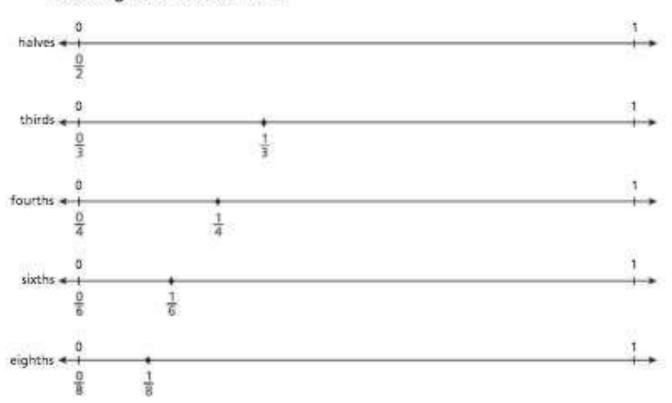
Check Understanding

Name another fraction equivalent to  $\frac{1}{2}$  that Puzzled Penguin could have written.

## Equivalent Fractions on Number Lines



Complete each number line. Show all fractions including each fraction for 1.



Write an equivalence chain with fractions that equal  $\frac{2}{2}$ .

 $\frac{3}{2}$  1 Why are the fractions in the equivalence chain for  $\frac{2}{2}$  equal?

Why does the length of unit fractions grow smaller as their denominators get larger?

# 210

## Equivalence Chains

- Use your number lines from page 337 to write an equivalence chain.
  - With fractions that equal
  - With fractions that equal 
     \( \frac{1}{3} = \)
  - With fractions that equal 2/3
  - With fractions that equal 
     \( \frac{1}{4} \)
  - With fractions that equal
  - With fractions that equal 8 \_\_\_\_\_\_\_
- Solve. Use what you have learned about equivalent fractions and about comparing fractions.
- Jaime has ½ foot of red ribbon and ¼ foot of green ribbon. Does he have more red ribbon or green ribbon?

Show your work.

Chin and Maya collected conch shells at the beach. They both used the same kind of basket. Chin's basket is <sup>3</sup>/<sub>4</sub> filled, and Maya's basket is <sup>3</sup>/<sub>3</sub> filled. Who collected more shells?

# Check Understanding

Explain how you could use a number line to help you solve Problem 12. © Houghton Mittle Hasbourt Publishing Company



### Solve Fraction Problems

- Solve. Draw diagrams or number lines if you need to.
- The shelves in Roger's bookcase are <sup>7</sup>/<sub>8</sub> yard long. Ana's bookcase has shelves that are <sup>5</sup>/<sub>8</sub> yard long. Whose bookcase has longer shelves? How do you know?
- Rosa buys <sup>3</sup>/<sub>4</sub> pound of cheese. Lucy buys <sup>3</sup>/<sub>8</sub> pound of cheese. Who buys more cheese? Explain your answer.
- Vera has same-size muffin pans. She fills <sup>8</sup>/<sub>4</sub> pans with cranberry muffins and <sup>8</sup>/<sub>6</sub> pans with banana muffins. Does Vera have fewer cranberry muffins or banana muffins? How do you know?
- Lester walks <sup>3</sup>/<sub>4</sub> mile to school. Bert said that he walks farther because he walks <sup>6</sup>/<sub>8</sub> mile to school. Is his statement correct? Explain your answer.
- Rusty painted <sup>5</sup>/<sub>6</sub> of a mural for a hallway. Has he painted more than half of the mural? Explain your answer. Hint: Find an equivalent fraction in sixths for <sup>1</sup>/<sub>2</sub>.



### Solve Fraction Problems (continued)

- Solve. Draw diagrams or number lines if you need to.
  - Pearl used <sup>3</sup>/<sub>3</sub> yard of fabric to make a pillow. Julia made her pillow from <sup>4</sup>/<sub>4</sub> yard of fabric. They both paid \$5 a yard for their fabric. Who paid more for fabric? How do you know?

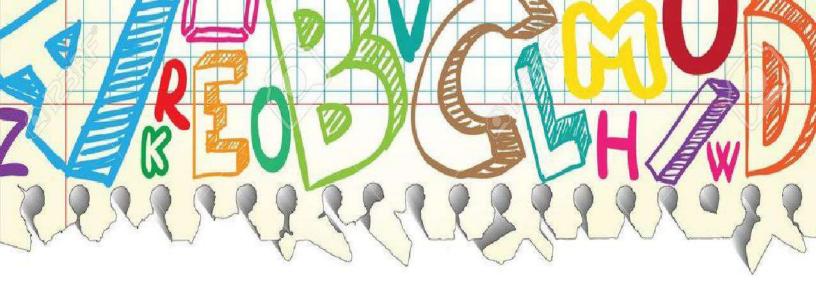
Deena's pan has a total of <sup>2</sup>/<sub>5</sub> liter of water. John's pan has a total of <sup>5</sup>/<sub>2</sub> liters of water. Whose pan has more water? How do you know?

Andy, Lu, and Carlos have 3/3, 3/4, and 3/6 dozen pencils, but not in that order. Andy has the fewest pencils and Lu has the most. How many pencils does each boy have? Explain.

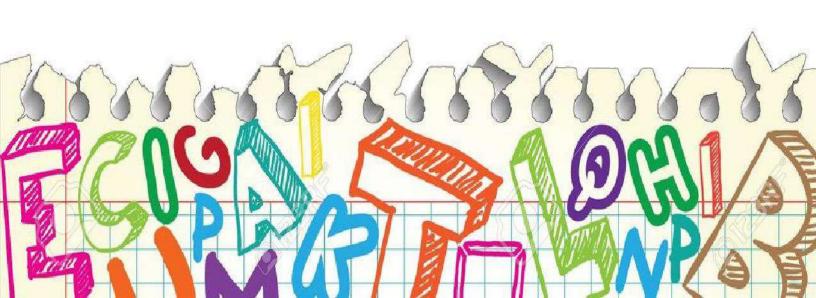


### Check Understanding

Draw fraction bars or a number line to compare the fractions in Problem 8.



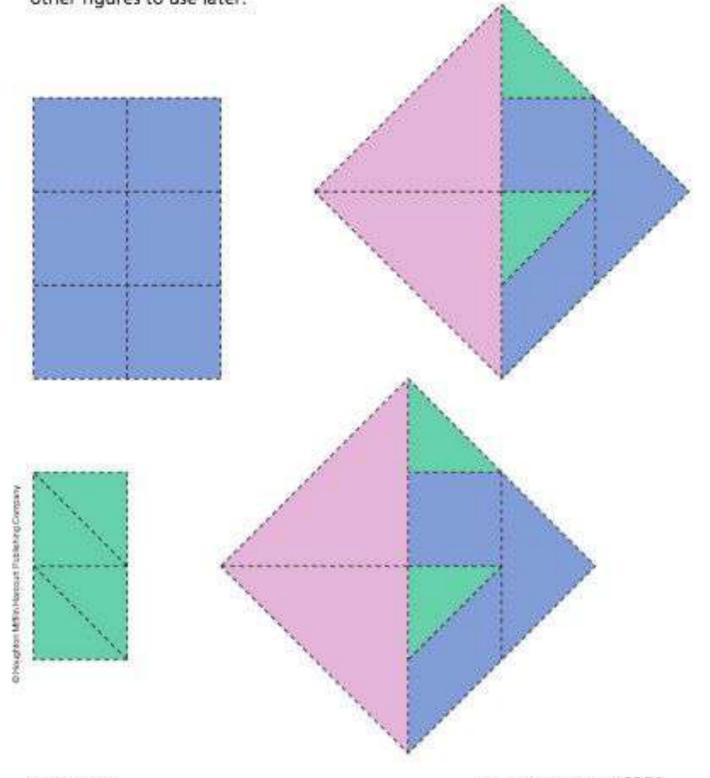
# Optional Math Activities



# Explore Tangrams

Cut one tangram figure into pieces along the dotted lines.

Try to cut as carefully and as straight as you can. Save the other figures to use later.

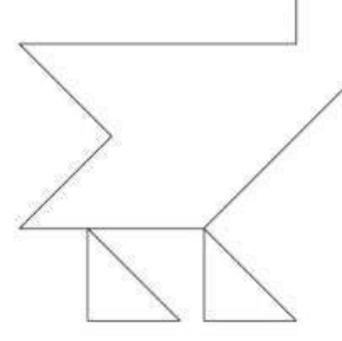






Use the tangram pieces from page 327A.

Make this bird. When you finish, draw lines to show how you placed the pieces.



Make this rectangle. Draw lines to show how you placed the pieces. Hint: You do not need all the pieces.

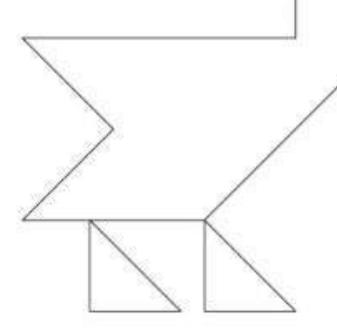






Use the tangram pieces from page 327A.

Make this bird. When you finish, draw lines to show how you placed the pieces.



Make this rectangle. Draw lines to show how you placed the pieces. Hint: You do not need all the pieces.

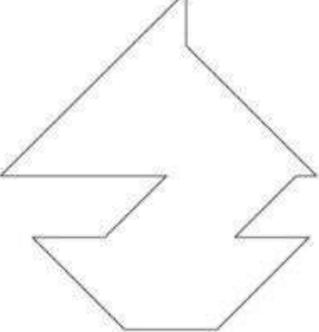


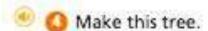


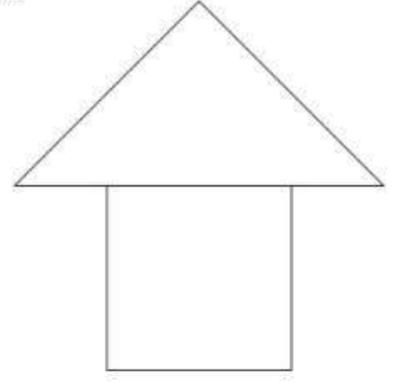
# Solve Tangram Puzzles (continued)

Use the tangram pieces. Draw lines to show how you placed the pieces.

Make this boat.







Distingtion Militar Headout Publishing Company

- Use Tangram Pieces to Find Area
- Use all seven tangram pieces. Cover this rectangle.



- What is the area of the rectangle?
- O Use any tangram pieces. Cover this rectangle.



O What is the area of the rectangle?

- Use Tangram Pieces to Find Area (continued)
- Use any tangram pieces. Cover each rectangle.



What is the area of the rectangle?



What is the area of the square?











What is the area of the square?

What is the area of the rectangle?



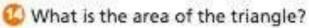


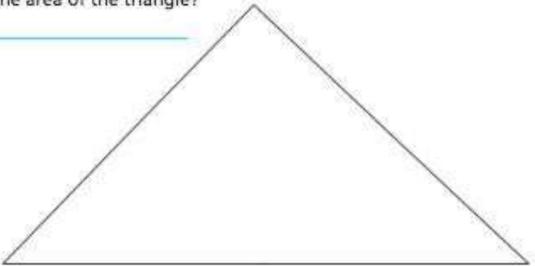


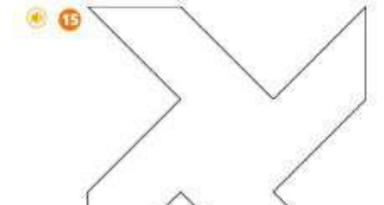
What is the area of the figure?



- Use Tangram Pieces to Find Area (continued)
- Use any tangram pieces. Cover each figure.







What is the area of the figure?



### Check Understanding

What is the area of a figure made with the seven tangram pieces?

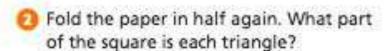
# Fractions and Paper Folding

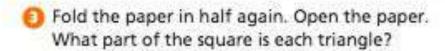
The art of paper folding began in China. Later, Japan's version of paper folding, called origami, became very popular. Origami sculptures are made by folding and sculpting a flat sheet of square paper without cuts or glue.



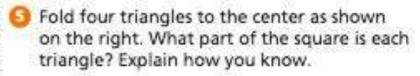
### Complete.

Fold a square sheet of paper in half diagonally. What part of the square is each triangle?





Explain how you know the eight parts have the same area.





This basic origami fold is used for making many objects.



## Fractions and Design



- Complete.
  - Open the paper. Choose two different colors.

    Color every other rectangle or triangle one color.

    Color the other rectangles or triangles the second color.
- Write 3 equivalent fractions for the part of the square that has the same color.
- Predict the number of shapes you would make if you folded the square 4 times. Explain.

Dirbugton Million Harbourt Publishing Company