3rd Grade Learning Activities
May

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'd like, send some of your responses to your teacher in an email. They would love to hear from you! If you have some extra time in your day, check out the other Ideas section. :) Have fun!

LITERACY:

- Use the first 2 weeks to complete your research book final draft.
- Then, use the videos to help you write an easy opinion paper on your favorite book, sports team, privilege at home, or other topic.
- Practice word wall words for 5 minutes per day. Once you can spell all of the May words by memory, review the April word list. Both lists are in the Word Work section.

MATH:

- Complete the assigned math pages for each day. Plan to check off all of the required math by May 29. 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 may choose to watch the 5 optional science videos on forces and motion if you have 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. Parents and students, please take a picture of your child's daily log and submit it to your teacher's Google Classroom on May 29.

If you have any questions, do not hesitate to reach out to your child's teachers through email. Your continued partnership is always appreciated!

For your convenience, all of the information included in this packet is also available at wsalem.k12.wi.us > Schools > Elementary School > Families > Learning Activities > 3rd Grade > May Learning Activities

Daily Log

Student Name:_____ Grade_____ Teacher_____

Each day, please check off the items on the daily log as they are completed. Also, initial daily when your child has completed the work.

Monday	Tuesday	Wednesday	Thursday	Friday
May 4 **Adult Initials _____** ❏ 30 min. Reading ❏ Watch Math Videos and Lesson 7-1 P. 403 ❏ Practice sight word spelling ❏ MAPL Activity	**May 5** **Adult Initials _____** ❏ 30 min. Reading ❏ Lesson 7-1 Page 404-406 ❏ Writing: final draft-book ❏ MAPL Activity	**May 6** **Adult Initials _____** ❏ 30 min. Reading ❏ Watch Math Video Then Page. 407-408 ❏ Writing: final draft-book ❏ MAPL Activity	**May 7** **Adult Initials _____** ❏ 30 min. Reading ❏ Math Catch up or Optional Activities ❏ Writing: final draft-book ❏ MAPL Activity	**May 8** **Adult Initials _____** ❏ 30 min. Reading ❏ Watch Mystery Science 1 ❏ National Field Day activities (PE)
May 11 **Adult Initials _____** ❏ 30 min. Reading ❏ Watch Math Videos then Page 409-410 ❏ Practice sight word spelling ❏ MAPL Activity	**May 12** **Adult Initials _____** ❏ 30 min. Reading ❏ Math Pages 411-414 ❏ Writing: final draft-book ❏ MAPL Activity	**May 13** **Adult Initials _____** ❏ 30 min. Reading ❏ Math Pages 415-416 ❏ Writing: final draft-book ❏ MAPL Activity	**May 14** **Adult Initials _____** ❏ 30 min. Reading ❏ Math Catch up & Optional Activities ❏ Writing: final draft-book ❏ MAPL Activity	**May 15** **Adult Initials _____** ❏ 30 min. Reading ❏ Watch Mystery Science 2 ❏ MAPL Activity
May 18 **Adult Initials _____** ❏ 30 min. Reading ❏ Watch Math Videos Then 421-422 ❏ Writing: Opinion writing Day 1 ❏ MAPL Activity	**May 19** **Adult Initials _____** ❏ 30 min. Reading ❏ Math Pages 423-425A ❏ Writing: Opinion writing Day 2 ❏ MAPL Activity	**May 20** **Adult Initials _____** ❏ 30 min. Reading ❏ Math Pages 425-427A ❏ Writing: Opinion writing Day 3 ❏ MAPL Activity	**May 21** **Adult Initials _____** ❏ 30 min. Reading ❏ Math pages 427-430 ❏ Writing: Opinion writing Day 4 ❏ MAPL Activity	**May 22** **Adult Initials _____** ❏ 30 min. Reading ❏ Watch Mystery Science 3 ❏ MAPL Activity
May 25 **NO SCHOOL** **Enjoy your time with your family**	**May 26** **Adult Initials _____** ❏ 30 min. Reading ❏ Math Pages 431-434 ❏ Writing: opinion writing Day 5 ❏ MAPL Activity	**May 27** **Adult Initials _____** ❏ 30 min. Reading ❏ Math Pages 435-436 ❏ Writing: Opinion writing Day 6 ❏ MAPL Activity	**May 28** **Adult Initials _____** ❏ 30 min. Reading ❏ Math Pages 437-439A ❏ Writing: Opinion writing Day 7 ❏ MAPL Activity	**May 29** **Adult Initials _____** ❏ 30 min. Reading ❏ Watch Mystery Science 4 ❏ MAPL Activity Submit a picture of this page to Google Classroom

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

- Predict the theme of the story based on the character's actions so far.
- What details in the story help support the theme?
- What events in your story could NOT happen in real life? Explain why not.
- What was the MOST important event in the story? Why?
- What was the most exciting part of the story so far? Explain why.
- Examine the main character at the beginning, middle and end of the story. ,
- What changes would you make to the story?
- Predict how the changes would transform or change the story.
- 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?
- What is your opinion of the story? Did you enjoy reading it?
- How are you feeling as you read?
- How do you know this is fiction?

OTHER (OPTIONAL) IDEAS:

- Email your teacher one of your responses.
- Make a video. (see Fiction Book Hook)
- Combine two characters in the story in order to invent a new character. Write a new story with this combined character as the new main character.
- Draw a picture of the new combined character and describe him/her off to the side your paper.
- Rate your book on a scale of 1 - 10. Defend your rating.

Nonfiction Response Prompts

- What is the most important thing the author wanted you to learn or think about after reading this book? Explain.
- Describe any text features the author used and how they affected your reading experience.
- Imagine you are an expert on the subject you are reading. Describe your job and what you would do.
- Describe what you would change about the book (or part of the book) and why.
- The passage on page(s) ___ is an example of good writing because....
- I wish the author would change this part because...
- Describe new insights or understandings you have after reading the book.
- Describe how you can use what you learned from this book in your own life.
- A situation in the book reminds me of something that happened to me or someone else because...
- How do you know this text is nonfiction?

OTHER (OPTIONAL) IDEAS:

- Email your teacher one of your responses.
- Make a video. (see Nonfiction Book Hook)
- SUMMARIZE - make a mini book version.
- Write a letter to one of the people described or explained in the book.
- Write a letter to the author of the book with your questions and responses to his/her writing.
- 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.

- BookFlix--http://teacher.scholastic.com/products/bookflix/#/ (click login in top right)
  User: wsalem, Password: panther, Explore paired fiction and nonfiction texts.

- TrueFlix--https://sdm-tfx.digital.scholastic.com/?authCtx=U.600107734
  User: wsalem, Password: panther, Read or listen to a variety of nonfiction books..

- Epic! --https://www.getepic.com/students
  - Teacher will provide a class code

Fiction Book Hook

Name: _____

Book Title: _____

HOOK your listeners in an interesting way.

*Make a connection with the audience.
*Make a surprising statement.
*Provide a character quote.
*Ask a question.

_____

_____

Describe the **SETTING(S)**: where and when does this story take place?

_____

_____

Describe a main **CHARACTER**. What kind of person is the character? How does the character behave and interact with others?

_____

_____

What is a **PROBLEM** the above-mentioned main character faces?

_____

_____

How does an **ACTION** of the described character affect the story?

How does the character you described **CHANGE** over time?

Give your book a **RATING**. The more stars you shade, the better the book!

Make a **RECOMMENDATION**; who do you think would like this book and why?

Nonfiction Book Hook

Name:_____

Book Title:_____

HOOK your listeners in an interesting way: write 1-3 complete sentences, please.

*Ask a question.
*Use a sound effect.
*Make a surprising statement.
*Make an exclamation.

_____

_____

_____

In complete sentences, write 5 INTERESTING FACTS you learned about the topic.

1._____

_____

2._____

_____

3._____

_____

4.

5.

Ask a **QUESTION**. What else are you wondering about the topic?

RATE your book. The more stars you shade, the better the book!

WRAP IT UP! Write 3-5 sentences explaining your rating. Be persuasive and include who should read this book!

LITERACY

Word Work

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:

- Say each letter while marching in place or doing jumping jacks.
- 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.
- Say the letters in chunks to practice saying them (wr … ite)

May words to learn: children, once, animal, world, school, want

Review words from April's packet when you know the words above: knew, study, second, near, today, sure, took, four, head, country, father, picture, earth, year, mother, enough, above, live

___ I can spell these high-frequency words correctly from memory.

Writing - Complete Nonfiction Book AND Write an Opinion Piece

Weeks of May 4 and May 11 Nonfiction Book

___ Write the final draft of your book in your neatest handwriting.

Reminder: Your book should include the following:

___ Book cover with the title, author's name, and a beautiful picture.
___ Table of Contents listing all of the chapters you have written.
___ 3-5 organized chapters on various topics about your subject.
___ At least one text feature per topic (picture, caption, diagram, labels, map, comparisons, lists, etc).
___ Glossary of bolded words with their definitions (5-10 words)
___ Optional: title page (placed after your cover) and an index (placed after the glossary). HAVE FUN! :)

Week of May 18 Basic Opinion Writing Paper (all videos are short; they are 2 - 4 minutes long)

Day 1 ___ Begin by watching the following 2 videos: Opinion Writing Episode 1 (youtu.be/KEK2oGBSsHk) and Opinion Writing Episode 2 (youtu.be/qv4rHG6rrr8)
___ Choose an opinion writing topic. Your opinion is what you think or how you feel about something.
___ Watch Opinion Writing Episode 3 (youtu.be/7kYtkqfXMOg)
___ Fill in your opinion outline (attached). Remember that reasons tell WHY you believe something.

Day 2 ___ Watch Opinion Writing Episode 4: (youtu.be/JmEWpwB85E0)
___ Write a rough draft of your introduction. Be sure to hook your reader, name the topic, and tell your opinion.

Day 3 ___ Watch Opinion Writing Episode 5: (youtu.be/X1e8Zg-fYgE)
___ Continue writing your rough draft including reasons and examples. Remember to include transition words such as: for example, and, also, because, first of all, secondly, lastly, one example, another example.

Week of May 25

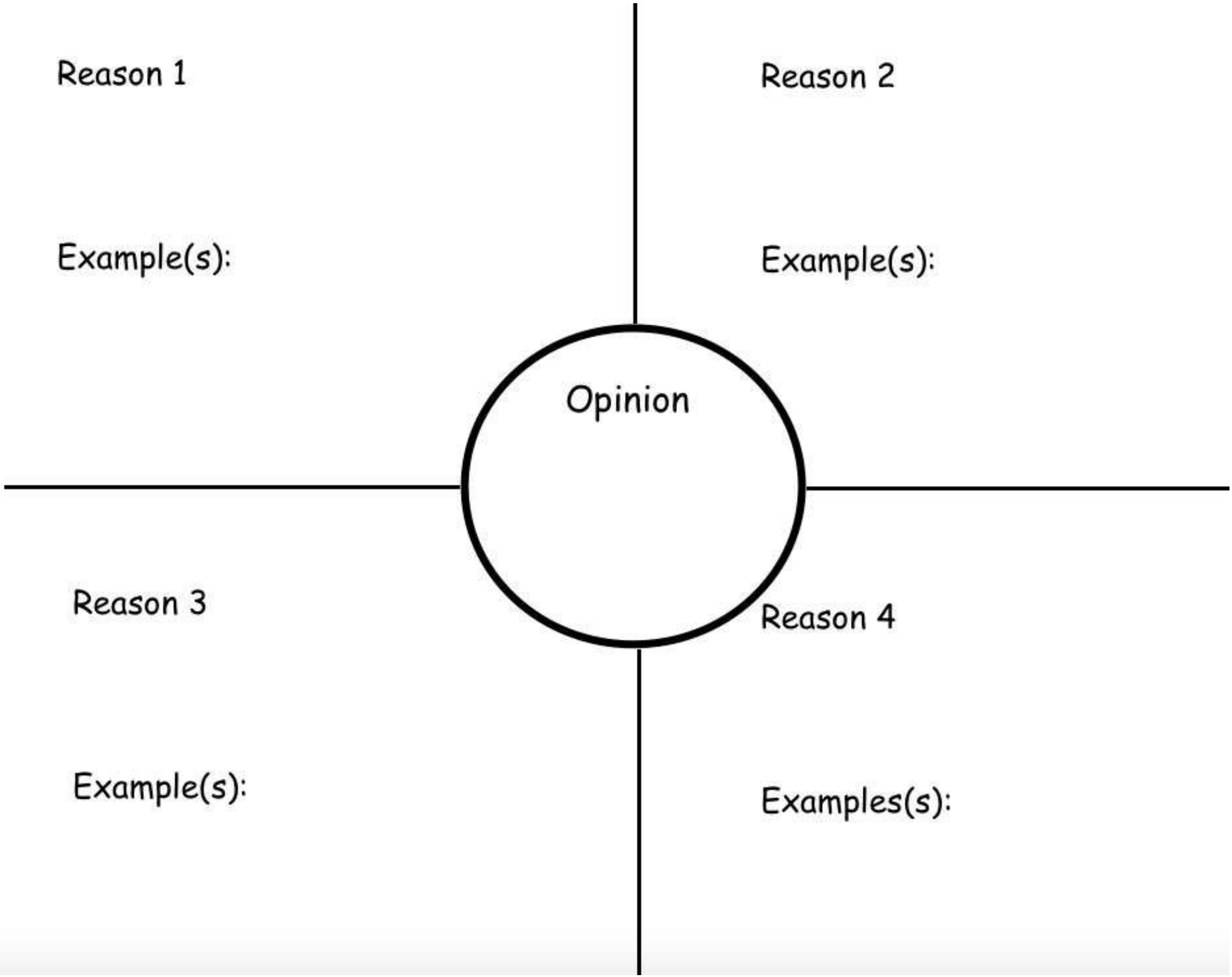
Day 4 ___ Watch Opinion Writing Episode 6 (youtu.be/3Xo9C8BxgWE)
___ Write your conclusion: Restate your writing, summarize your reasons, and add one final thought.

Days 5-7 ___Watch Opinion Writing Episode 7 (youtu.be/6sZao2fUhSw)
___ Lastly, revise, edit, and write your final draft!

Optional Writing Activities

Have fun choosing from these writing activities. These are feel-good activities, if you have time. :)

___Make a list of your favorite things to do while learning from home.
___What would be a dream vacation for you and your family? Where would you go? What would you do?
___Write a story about the day we are able to go back to school! What would the perfect day look like?
___Write a thank you card or letter (again OR to someone else). Think about someone older (a grandparent, great-grandparent, neighbor, aunt, uncle).
___Write a story about your favorite people. Be sure to list reasons **why** they are so special to you. :)


Reason 1
Example(s):
Reason 2
Example(s):
Opinion
Reason 3
Example(s):
Reason 4
Examples(s):

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 7: Measurement and Polygons

Watch the introduction videos then complete the lessons in the order listed.

Capacity, Weight, and Mass:

___https://www.youtube.com/watch?v=mLRYCaYVWFc
___https://www.youtube.com/watch?v=eqKnx5Yk508
___https://www.youtube.com/watch?v=9UVgO8zS474
___https://www.youtube.com/watch?v=umEp6VMT5kQ
___Lesson 7.1 Customary Units of Liquid Volume
___https://www.youtube.com/watch?v=LhMEqsL_M5o&t=174s
___Lesson 7.2 Metric Units of Liquid Volume
___https://www.youtube.com/watch?v=Dj1rbIP8PHM
___https://www.youtube.com/watch?v=TD1zuENbEdk
___Lesson 7.3 Customary Units of Weight / Metric Units of Mass
___Lesson 7.4 Word Problems with Liquid Volume and Mass

Geometry: Triangles and Quadrilaterals

___https://www.youtube.com/watch?v=JcqCf762y9w
___https://www.youtube.com/watch?v=D5lZ3thuEeA
___https://www.youtube.com/watch?v=jXczCSpWqdg (Challenge / Extension Video)
___https://www.youtube.com/watch?v=ALhv3RIydig
___Lesson 7.5 Triangles
___https://www.youtube.com/watch?v=10dTx1Zy_4w
___https://www.youtube.com/watch?v=H-ykHosJW9c
___https://www.youtube.com/watch?v=0OW2bU0So-4
___Lesson 7.6 Parallelograms, Rectangles, Squares, and Rhombuses
___Lesson 7.7 Draw Quadrilaterals
___Lesson 7.8 Classify Quadrilaterals

Optional Math Activities

Khan Academy (access through Google Classroom)
Prodigy https://www.prodigygame.com (students have login information from classroom teachers)
Math Playground https://www.mathplayground.com/

Keep practicing those multiplication facts ("Flash to Pass" is a good iPad app)

Flocabulary is a website offering a free 60-day trial. Sign up to enjoy extra instructional videos such as these.
Geometry: Quadrilateral and Triangle Videos
___https://www.flocabulary.com/unit/weve-got-some-shapes/
___https://www.flocabulary.com/unit/types-of-angles/
___https://www.flocabulary.com/unit/types-of-triangles/
___https://www.flocabulary.com/unit/parallel-perpendicular-lines/
___https://www.flocabulary.com/unit/symmetry/

ENRICHMENT ACTIVITIES

Complete the Mystery Science Lessons in order by watching the videos below. Remember that doing the activity or the extensions are optional. Choose to explore the optional Invisible Forces unit as you have time.

Expected Science Activities

Expected Unit: Power of Flowers (plant life cycle and heredity)

May 8 - Lesson 1: Pollination & Plant Reproduction: Why do plants grow flowers?
https://mysteryscience.com/flowers/mystery-1/pollination-plant-reproduction/91?code=NDExNDY1NDM&t=student

May 15 - Lesson 2: Seed Dispersal & Plant Life Cycle: Why do plants give us fruit?
https://mysteryscience.com/flowers/mystery-2/seed-dispersal-plant-life-cycle/89?code=NDExNDY1NDM&t=student

May 22 - Lesson 3: Trait Variation, Inheritance, & Artificial Selection: Why are some apples red and some green?
https://mysteryscience.com/flowers/mystery-3/trait-variation-inheritance-artificial-selection/90?code=NDExNDY1NDM&t=student

May 29 - Lesson 4: Trait Variation, Inheritance, & Artificial Selection: How could you make the biggest fruit in the world?
https://mysteryscience.com/flowers/mystery-4/trait-variation-inheritance-artificial-selection/92?code=NDExNDY1NDM&t=student

Optional Science Activities

Optional Unit: Invisible Forces: (forces, motion, and magnets)

Lesson 1: Balanced and Unbalanced Forces: How could you win a tug-of-war against a bunch of adults?
https://mysteryscience.com/forces/mystery-1/balanced-unbalanced-forces/111?code=NDExNDY1NDM&t=student

Lesson 2: Balanced Forces & Engineering: What makes bridges so strong?
https://mysteryscience.com/forces/mystery-2/balanced-forces-engineering/43?code=NDExNDY1NDM&t=student

Lesson 3: Friction & Pattern of Motion: How can you go faster down a slide?
https://mysteryscience.com/forces/mystery-3/friction-pattern-of-motion/44?code=NDExNDY1NDM&t=student
Lesson 4: Magnets & Forces: What can magnets do?
https://mysteryscience.com/forces/mystery-4/magnets-forces/45?code=NDExNDY1NDM&t=student

Lesson 5: Magnets & Engineering: How can you unlock a door using a magnet?
https://mysteryscience.com/forces/mystery-5/magnets-engineering/151?code=NDExNDY1NDM&t=student

MAPL (Music, Art, PE, LMC) Activities

Music Activities from Mrs. Jones & Mrs. Martin

___ Explore Rhythm or Songmaker on: https://musiclab.chromeexperiments.com/Experiments
___ Watch the LaCrosse Symphony: https://www.lacrossesymphony.org/la-crosse-arts-online-symphony-online/
___ **Music Escape room**:
https://drive.google.com/open?id=1UXpO7x9_v0ME8uZGS_6VZi2TCEWD_auvFsYQoVhchHg
___ Sing along to a favorite song!
___ Watch The Masked Singer or American Idol and talk about what you observe in the performance.
___ Try Find a Family Member Who: https://drive.google.com/open?id=1Pw5AUhWuHLqjxy_1KVNtnWrgShq0RBme

Art Ideas from Ms. Lotspaih & Mrs. Finch

___Close one eye. Hold your hand about 6 inches from your open eye. Use your pointer finger and thumb to measure the height of objects around you. Start by measuring something close to you, then something far away. Objects that are close appear larger and objects that are far away appear smaller. This is called **perspective**. Artist David Zinn uses perspective to make his drawings look real!
___David Zinn is a street artist. Watch this video about his work! https://www.youtube.com/watch?v=nW-MbHbLpBE
___After you have watched the video, use chalk to create a work of art outside that interacts with its surroundings. (ex: use chalk to draw a worm coming out of a crack in the sidewalk) *Feel free to move this activity indoors.
___Play Pictionary: Draw a picture and have someone guess what it is as you draw!
___Create a maze and have someone in your family solve it! (Can be drawn on paper, made with furniture, or sidewalk chalk outside)

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

*Click on the link for our MAY **PE CHOICE BOARD**, which offers a variety of ways to be active! We hope you have fun!! https://drive.google.com/file/d/1KJTc90S7g6YqvQRhcli8srcqsoPuo7yg/view?usp=sharing

***NATIONAL FIELD DAY,** Friday May 8th 2020! Watch for more information on this exciting event or click on the links on the choice board.

***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! https://forms.gle/7iEBr1LucRWByPFM9

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

***LMC - LMC Choice Board!** Pick and choose from the links on the LMC Choice Board
https://drive.google.com/file/d/1c3xpCxv004xaQaSRoySZ41migZbV68iS/view?usp=sharing
If you do not have internet connection, pick and choose from the Library Bingo Sheet included in this packet.

***Technology - Technology Choice Board!** Pick and choose from the links on the 3-4 Tech Choice Board:
https://drive.google.com/file/d/1l01K5bgXLXHTnYhhRtfvWk3oDuQfv4Ql/view?usp=sharing

READ AT HOME BINGO

When you complete a task, color in the box! How many times can you get BINGO? Can you complete the card?

read aloud to someone	read a book about animals	read for 15 minutes	read your favorite book	let a parent choose a book
read under the table	read then draw a picture	read in bed	read a silly book	make a fort and read inside
take turns reading a page with someone	read for 10 minutes		read to a pet or stuffed animal	read while enjoying a snack
read with a flashlight	read on a couch or comfy chair	read a fairy tale	read twice in one day	read a book then retell it to someone
read a book then write a review	have someone read to you	read while snuggling	read in the tub (blanket and pillow)	read for 20 minutes

Gr 3/4 Tech Choice Board

Here are some fun technology choices to do at home.

"Design Your Own Robot"
Build a robot out of recyclable materials you can find around the house. Click on the link for additional directions.

"A to Z Photo Scavenger Hunt"

Use your iPad's camera to take pictures of something (found inside or outside your home) starting with every letter, A through Z.

Using Google Docs or Google Slides, create a project to share your photos with me.

Watch "As Fast As Words Could Fly" by Dule Hill on the Storyline Online website.

Play "Secret Robot Builder 3000" with a family member. Click on the link for directions.

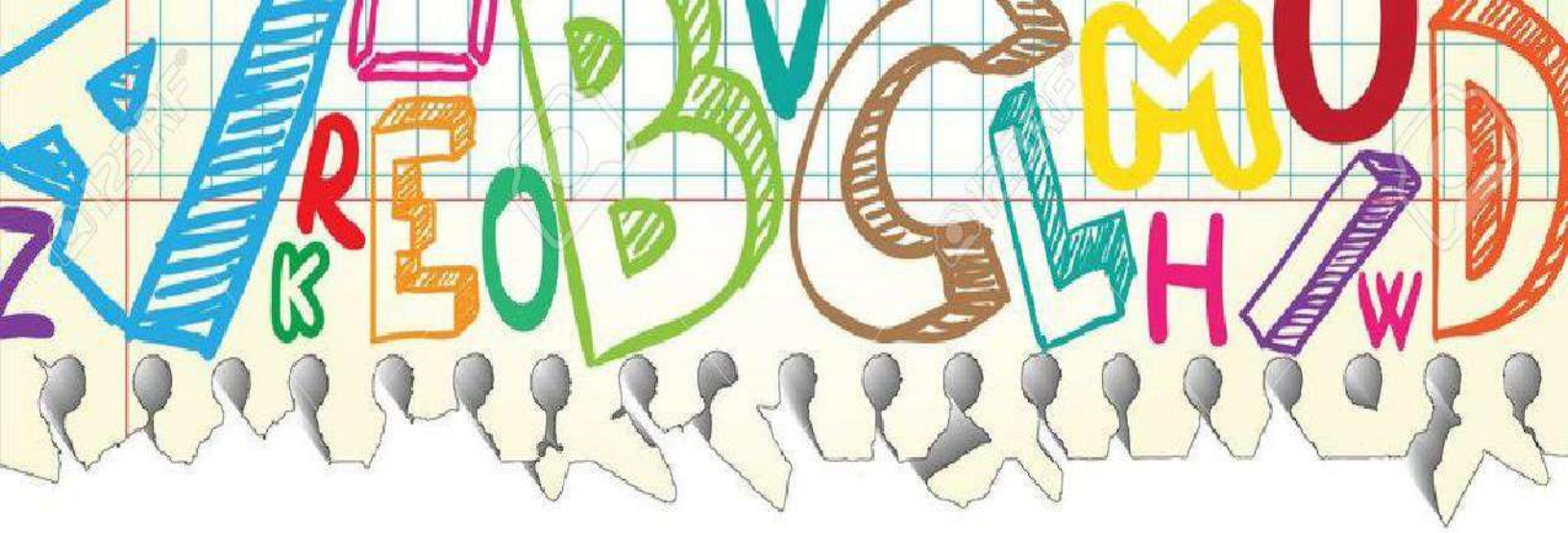
Create a picture using only the letters, numbers, and symbols found on a keyboard.

Check out the new coding sites bookmarked on "Mrs. Mead's Technology Links"

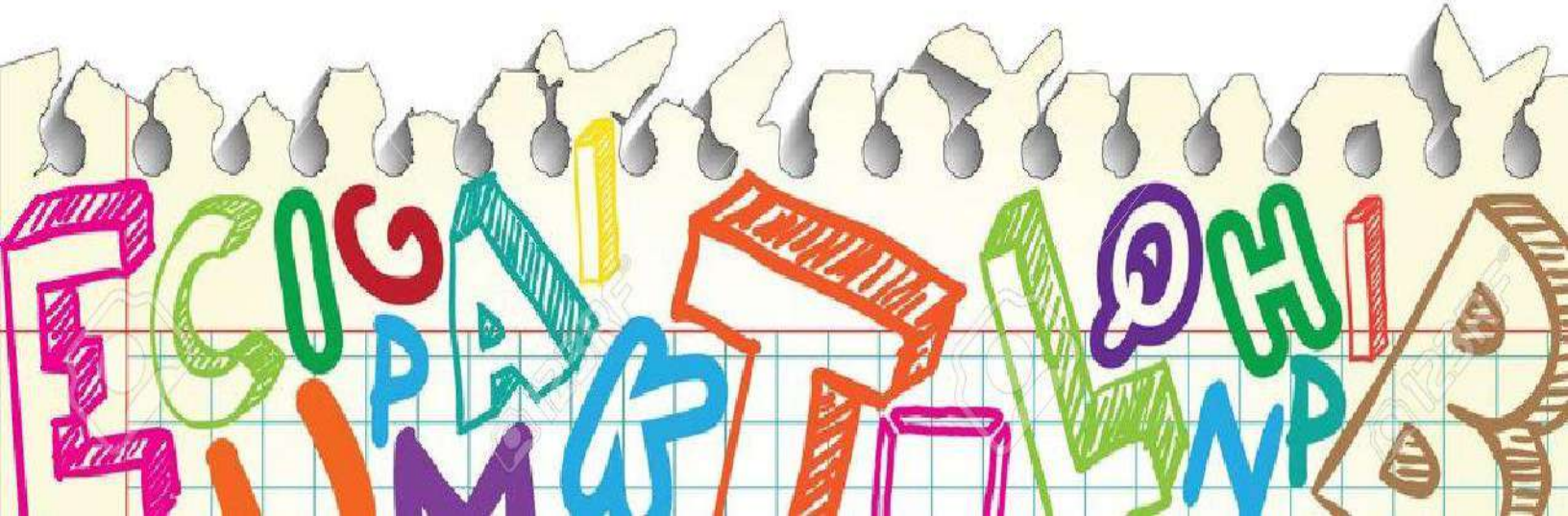
"Google Quick Draw"
Check out this website! A game where your computer/iPad tries to guess what you're drawing.

"Mystery Picture"

Click on the link and follow the directions to create a picture through keyboarding.



Math Assignments



Name _____

Choose the Unit

Choose the best unit to use to measure the liquid volume. Write *cup*, *pint*, *quart*, or *gallon*.

VOCABULARY	
liquid volume	quart (qt)
cup (c)	gallon (gal)
pint (pt)	fluid ounce (fl oz)

1. a carton of heavy cream

   _____

2. a flower vase

   _____

3. a swimming pool

   _____

4. a wash tub

   _____

What's the Error?

Dear Math Students,

Today I had to choose the best unit to use to measure how much water is needed to fill a kitchen sink. I said the best unit to use is cups. Is my answer correct? If not, please correct my work and tell me what I did wrong.

Your friend,
Puzzled Penguin

5. Write an answer to Puzzled Penguin.

   _____

   _____

   _____

6. **Math Journal** Think of a container. Choose the unit you would use to measure its capacity. Draw the container and write the name of the unit you chose. Explain why you chose that unit.

Content Standards 3.OA.A.3, 3.NBT.A.2, 3.MD.A.2
Mathematical Practices MP1, MP2, MP4

Estimate Customary Units of Liquid Volume

Ring the better estimate.

7. 

2 cups

2 quarts

8. 

5 cups

5 gallons

9. 

1 pint

1 gallon

10. 

1 cup

1 pint

11. 

1 cup

1 gallon

12. 

30 cups

30 gallons

Solve.

13. Jamie makes a shopping list for a picnic with his four friends. He estimates that he'll need 5 quarts of lemonade for the group to drink. Do you think his estimate is reasonable? Explain.

Name _____

Use Drawings to Solve Problems

Use the drawing to represent and solve the problem.

14. A painter mixed 5 pints of yellow and 3 pints of blue paint to make green paint. How many pints of green paint did he make?

15. Ryan bought a bottle of orange juice that had 16 fluid ounces. He poured 6 fluid ounces in a cup. How many fluid ounces are left in the bottle?

16. A restaurant made 8 quarts of tea. They used all the tea to fill pitchers that hold 2 quarts each. How many pitchers were filled with tea?

17. An ice cream machine makes 5 pints of ice cream in a batch. If 3 batches were made, how many pints of ice cream were made?

18. Fran has a water jug that holds 24 quarts of water. She fills it with a container that holds 4 quarts. How many times must she fill the 4-quart container and pour it into the jug to fill the jug with 24 quarts?

Solve Problems

Use the drawing to represent and solve the problem.

Show your work.

19 Shanna bought 8 juice boxes filled with her favorite juice. Each box holds 10 fluid ounces. How many fluid ounces of her favorite juice did Shanna buy?

20 Juana filled her punch bowl with 12 cups of punch. She gave some of her friends each a cup of punch. There are 7 cups of punch left in the bowl. How many cups did she give to friends?

21 Mrs. Chavez made 20 quarts of pickles. She made 4 quarts each day. How many days did it take her to make the pickles?

22 A mid-sized aquarium holds 25 gallons of water and a large aquarium holds 35 gallons of water. How many gallons of water is needed to fill both aquariums?

23

Check Understanding

Name the 5 units of liquid volume in this lesson from largest to smallest.

Name _____

VOCABULARY
milliliter (mL)
liter (L)

Choose the Appropriate Unit

Choose the unit you would use to measure the liquid volume of each. Write *mL* or *L*.

1. a kitchen sink _____
2. a soup spoon _____
3. a teacup _____
4. a washing machine _____

Circle the better estimate.

5. a juice container 1 L 1 mL
6. a bowl of soup 500 L 500 mL

Use Drawings to Represent Problems

Use the drawing to represent and solve the problem.

7. There were 900 milliliters of water in a pitcher. Terri poured 500 milliliters of water into a bowl. How many milliliters of water are left in the pitcher?

_____

8. Mr. Rojo put 6 liters of fuel into a gas can that can hold 10 liters. Then he added more liters to fill the can. How many liters of fuel did he add to the can?

_____

9. Shelby needs to water each of her 3 plants with 200 milliliters of water. How many milliliters of water does she need?

_____

Content Standards 3.OA.A.3, 3.NBT.A.2, 3.MD.A.3, 3.MD.A.2
Mathematical Practices MP1, MP2, MP3, MP4, MP6

Make Sense of Problems Involving Liquid Volume

Use the drawing to represent and solve the problem.

10. The deli sold 24 liters of juice in 3 days. The same amount was sold each day. How many liters of juice did the deli sell each day?

11. Tim has a bucket filled with 12 liters of water and a bucket filled with 20 liters of water. What is the total liquid volume of the buckets?

12. Sara made a smoothie and gave her friend 250 milliliters. There are 550 milliliters left. How many milliliters of smoothie did Sara make?

Solve. Use a drawing if you need to.

13. Diane has 12 liters of iced tea to divide equally among 4 tables. How many liters should she put at each table?

14. Mr. Valle filled 7 large jars with his famous barbeque sauce. Each jar holds 2 liters. How many liters of sauce did he have?

Check Understanding

Describe the relationship between a liter and a milliliter.

Name _____

Choose the Appropriate Unit

VOCABULARY
weight
pound (lb)
ounce (oz)

Choose the unit you would use to measure the weight of each. Write *pound* or *ounce*.

1. a backpack full of books _____
2. a couch _____
3. a peanut _____
4. a pencil _____

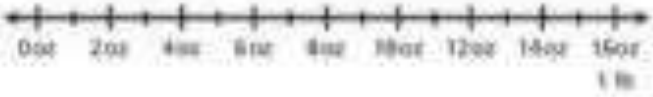
Circle the better estimate.

5.	a student desk	3 lb	30 lb
6.	a television	20 oz	20 lb
7.	a hamster	5 oz	5 lb
8.	a slice of cheese	1 lb	1 oz

Use Drawings to Represent Problems

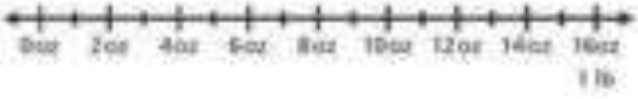
Use the drawing to represent and solve the problem.

9. Selma filled each of 3 bags with 5 ounces of her favorite nuts. How many ounces of nuts did she use altogether to fill the bags?



_____

10. Two apples together weigh 16 ounces. If one apple weighs 9 ounces, how much does the other apple weigh?

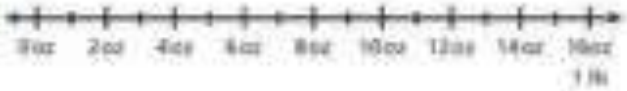


_____

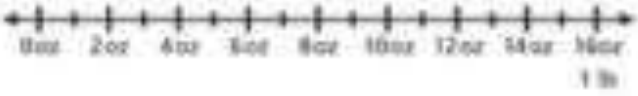
Use Drawings to Represent Problems (continued)

Use the drawing to represent and solve the problem.

11 Noah bought 16 ounces of turkey meat. If he uses 4 ounces to make a turkey patty, how many patties can he make?



12 A package of silver beads weighs 6 ounces and a package of wooden beads weighs 7 ounces more. How much does the package of wooden beads weigh?



Solve Word Problems

Solve. Use a drawing if you need to.

13 Ted has two dogs. Together they weigh 88 pounds. If one dog weighs 70 pounds, how much does the other dog weigh?

14 Emma has 20 ounces of popcorn kernels in a bag. If she pops 4 ounces of kernels at a time, how many times can Emma pop corn?

15 Susan mailed 3 packages. Each package weighed 20 ounces. What was the total weight of the 3 packages?

16 Bailey caught two fish. The smaller fish weighs 14 ounces and the larger fish weighs 6 ounces more. How much does the larger fish weigh?

Name _____

Choose the Appropriate Unit

VOCABULARY
mass
gram (g)
kilogram (kg)

Choose the unit you would use to measure the mass of each. Write *gram* or *kilogram*.

17. an elephant _____
18. a stamp _____
19. a crayon _____
20. a dog _____

Circle the better estimate.

21.	a pair of sunglasses	150 g	150 kg
22.	a horse	6 kg	600 kg
23.	a watermelon	40 g	4 kg
24.	a quarter	500 g	5 g

Use Drawings to Represent Problems

Use the drawing to represent and solve the problem.

25. Zach wants to buy 900 grams of pumpkin seed. The scale shows 400 grams. How many more grams does he need?

_____

26. Laura had 800 grams of fruit snacks. She put an equal amount into each of 4 containers. How many grams did she put in each container?

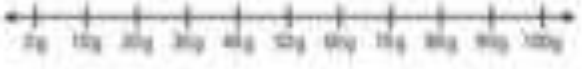
_____

Solve Word Problems

Use the drawing to represent and solve the problem.

27 Nancy used 30 grams of strawberries and 45 grams of apples in her salad. How many grams of fruit altogether did she put in her salad?

28 Three people each donated a 20-kilogram bag of dog food to the animal shelter. How many kilograms of dog food was donated altogether?



Solve. Use a drawing if you need to.

29 A male leopard has a mass of 40 kilograms and a female leopard has a mass of 25 kilograms. How much greater is the mass of the male?

30 Jolie made 3 necklaces that have a total mass of 180 grams. If each necklace has the same mass, what is the mass of each necklace?

31 Dan bought 6 small bags of treats for his dog. Each bag has a mass of 40 grams. What is the total mass of all the bags?

32 Carrie has a dog and a cat. Together they have a mass of 21 kilograms. If the cat has a mass of 9 kilograms, what is the mass of Carrie's dog?

Name _____

What's the Error?

Dear Math Students,

Today I had to solve this problem: Toby bought 3 bags of chips. Each bag of chips has a mass of 50 grams. What is the mass of all 3 bags of chips? Here is how I solved the problem.

50 + 3 = 53; 53 grams

Is my answer 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

Write an answer to the Puzzled Penguin.

_____

_____

_____

_____

Solve. Show your work on a separate sheet of paper.

A tennis ball has a mass of 60 grams. A golf ball has a mass of 45 grams. What is the total mass of the two ball?

_____

How many more grams is the mass of the tennis ball than the mass of the golf ball?

_____

Gary bought 10 slices of ham at the deli. Each slice weighed 2 ounces. How many ounces of ham did Gary buy?

_____

Sadie had 40 grams of sunflower seeds. She divided the seeds evenly among her 5 friends. How many grams did each friend get?

_____

Choose the Better Estimate

Circle the better estimate.

38 

90 grams

90 kilograms

39 

100 pounds

10 ounces

40 

3 ounces

3 pounds

41 

10 kilograms

10 grams

42 

100 kilograms

1,000 kilograms

43 

1 pound

10 pounds

Solve.

44 Suzie explained that smaller objects weigh the least and larger objects weigh the most. Do you agree with Suzie?

_____

_____

Check Understanding

45 Explain the strategies you used to estimate mass in Problem 38.

Name _____

Make Sense of Problems About Liquid Volume

Solve. Use drawings if you need to.

Show your work.

1. Fran works in a science lab. She poured 80 milliliters of liquid into each of 4 test tubes. How many milliliters of liquid did Fran pour into the test tubes altogether?

2. Nicholas wants to buy a bottle of shampoo. A large bottle has 375 milliliters of shampoo and a small bottle has 250 milliliters of shampoo. How many more milliliters of shampoo is in the larger bottle?

3. Allison used two containers of water to fill her aquarium. She used a container filled with 18 liters of water and another with 12 liters of water. What is the total liquid volume of the aquarium?

4. The coffee shop made 28 liters of hot chocolate. If the same amount is poured into 4 different containers, how many liters of hot chocolate are in each container?

5. A recipe calls for 50 milliliters of milk. Eva has a spoon that holds 10 milliliters. How many times will Eva need to fill the spoon to follow the recipe?

Make Sense of Problems About Masses

Solve. Use drawings if you need to.

Show your work.

6. A bag of green beans has a mass of 335 grams. A bag of peas has a mass of 424 grams. What is the total mass of both bags?

7. An average sized chicken egg has a mass of 60 grams. What would be the total mass of a half dozen eggs?

8. A kangaroo and her joey together have a mass of 75 kilograms. If the mother kangaroo has a mass of 69 kilograms, what is the mass of the joey?

9. Liam and 2 of his friends have backpacks. The backpacks have masses of 6 kilograms, 4 kilograms, and 5 kilograms. What is the total mass of the 3 backpacks?

10. Graham bought 4 bags of sunflower seeds. Each bag has 60 grams of seeds. Luke bought 3 bags of pumpkin seeds. Each bag has 80 grams of seeds. Who bought more grams of seeds, Graham or Luke? Explain.

Check Understanding

Write and solve an equation for Problem 8.

Describe Triangles by Types of Angles

VOCABULARY
triangle

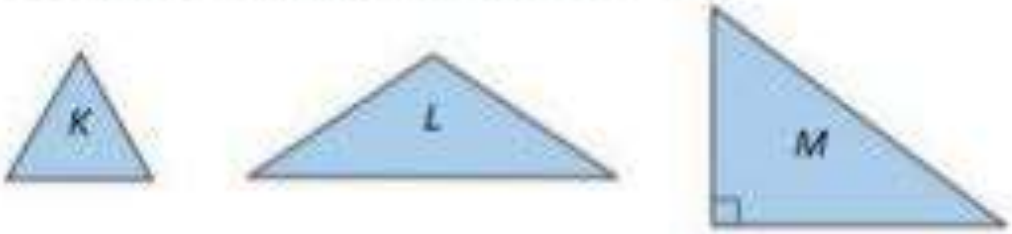
Triangles can be described by the types of angles they have.

In these triangles, one angle is a right angle.

In these triangles, three angles are smaller than a right angle.

In these triangles, one angle is larger than a right angle.

Use Triangles *K*, *L*, and *M* for Exercises 4–6.



4. Which triangle has one right angle?

5. Which triangle has three angles smaller than a right angle?

6. Which triangle has one angle larger than a right angle?

Name _____

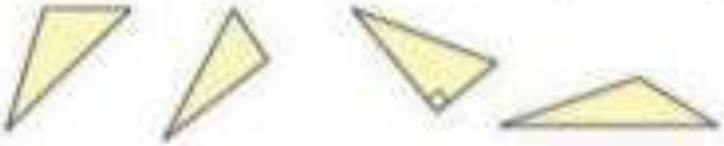
Describe Triangles by the Number of Sides of Equal Length

You can also describe triangles by the number of sides that are of equal length.

In these triangles, three sides are equal in length.

In these triangles, two sides are equal in length.

In these triangles, no sides are equal in length.



Use Triangles *B*, *C*, and *D* for Exercises 7–9.

7. Which triangle has 3 sides of equal length?

_____

8. Which triangle has 2 sides of equal length?

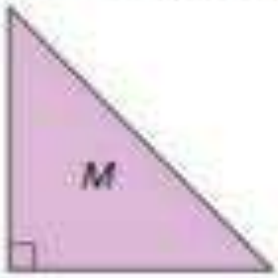
_____

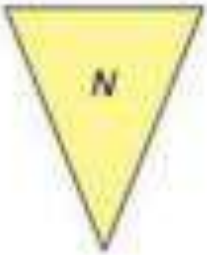
9. Which triangle has 0 sides of equal length?

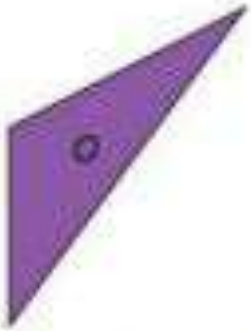
_____

Describe Triangles by Types of Angles and Number of Sides of Equal Length

Use Triangles *M*, *N*, and *O* for 10–12. Write *M*, *N*, or *O*. Then complete the sentences.





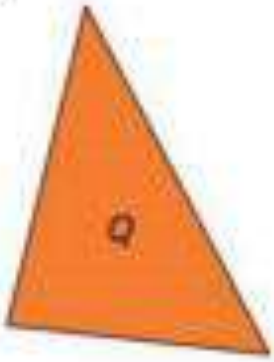


10. Triangle _____ has 1 angle larger than a right angle and has _____ sides of equal length.

11. Triangle _____ has 1 right angle and has _____ sides of equal length.

12. Triangle _____ has 3 angles smaller than a right angle and has _____ sides of equal length.

Use Triangles *P*, *Q*, and *R* for 13–15. Write *P*, *Q*, or *R*. Then complete the sentences.



13. Triangle _____ has 3 angles smaller than a right angle and has _____ sides of equal length.

14. Triangle _____ has 3 angles smaller than a right angle and has _____ sides of equal length.

15. Triangle _____ has 1 angle larger than a right angle and has _____ sides of equal length.

Name _____

Build Quadrilaterals from Triangles

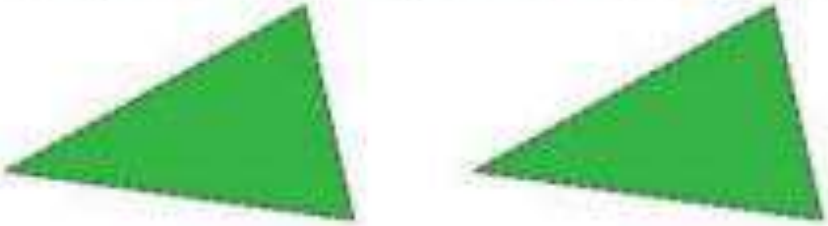
VOCABULARY
quadrilateral

A **quadrilateral** is a figure with 4 sides.

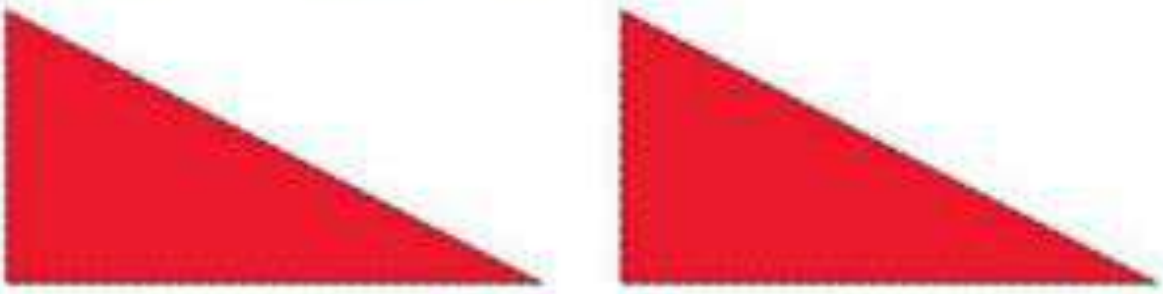
Cut out each pair of triangles. Use each pair to make as many different quadrilaterals as you can. You may flip a triangle and use the back. On a separate piece of paper, trace each quadrilateral that you make.

Triangles with One Angle Larger Than a Right Angle

Triangles with Three Angles Smaller Than a Right Angle



Triangles with One Right Angle



Name _____

Polygons

VOCABULARY
polygon
concave
convex

A **polygon** is a flat, closed figure made up of line segments that do not cross each other.

Circle the figures that are polygons.

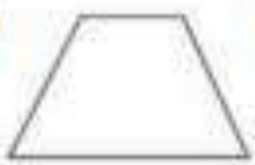
10 

12 

14 

16 

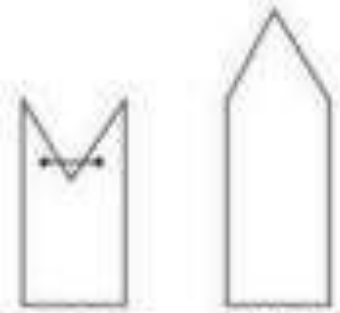
20 

21 

22 

23 

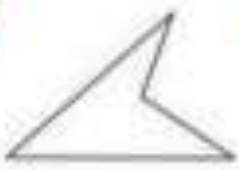
A figure can be **concave** or **convex**. In concave polygons, there exists a line segment with endpoints inside the polygon and a point on the line segment that is outside the polygon. A convex figure has no such line segment.



Which figures are convex and which are concave?

24 

25 

26 

27 

_____ _____ _____ _____

Name Polygons

VOCABULARY

pentagon	hexagon
octagon	decagon

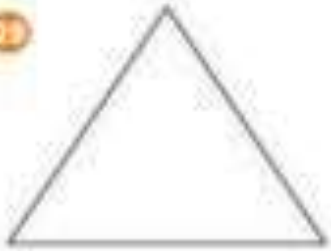
Polygons are named according to how many sides they have.

3 sides—triangle 4 sides—quadrilateral 5 sides—pentagon

6 sides—hexagon 8 sides—octagon 10 sides—decagon

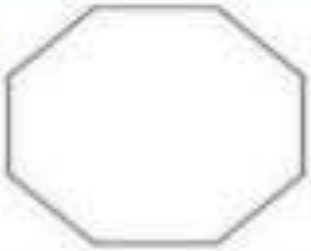
Name each figure.

29. 

30. 

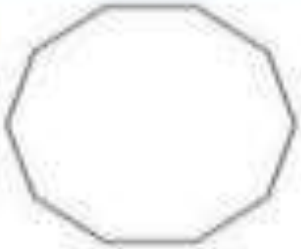
31. 

32. 

33. 

34. 

35. 

36. 

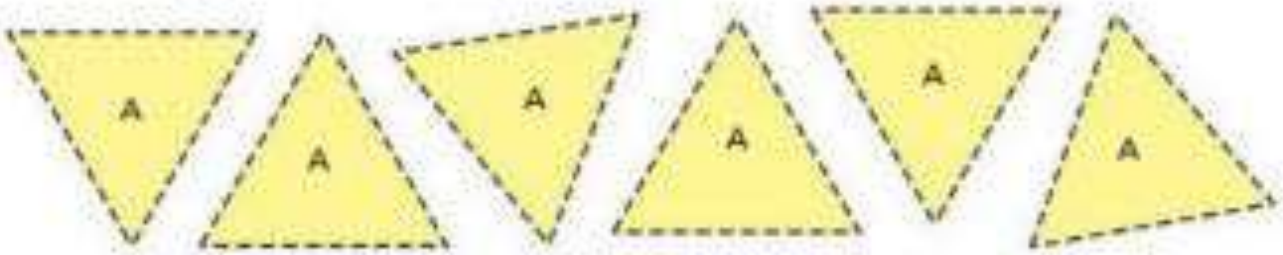
37. 

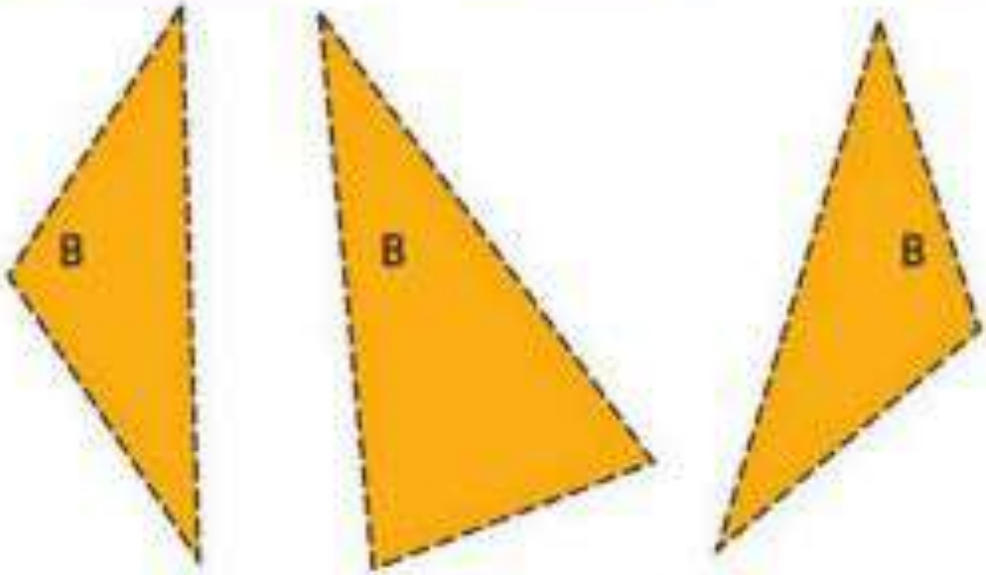
Check Understanding

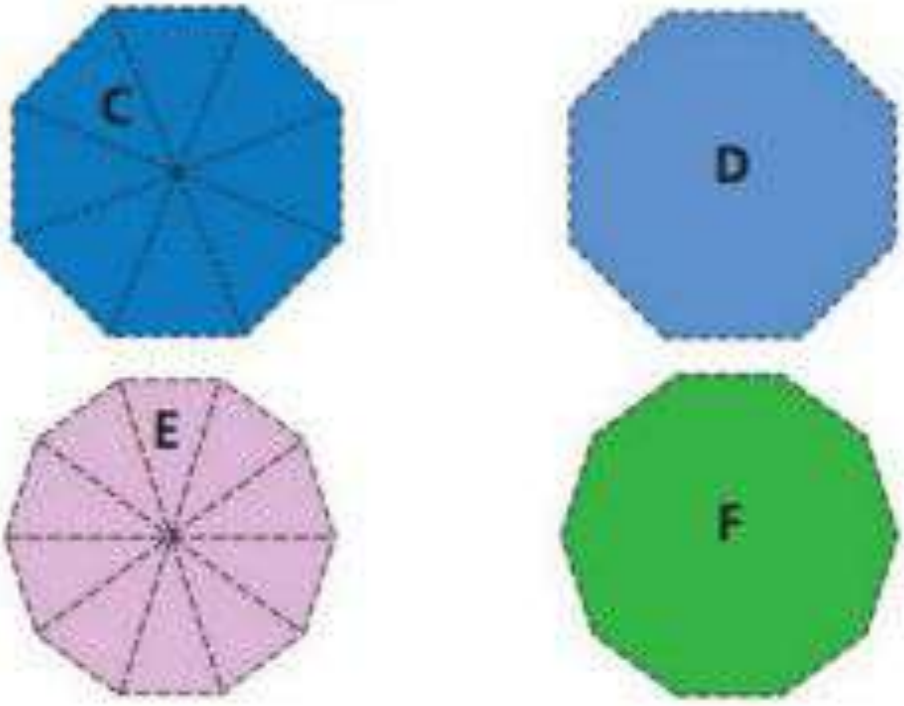
Draw and describe three different triangles.

Name _____

Build Polygons from Triangles





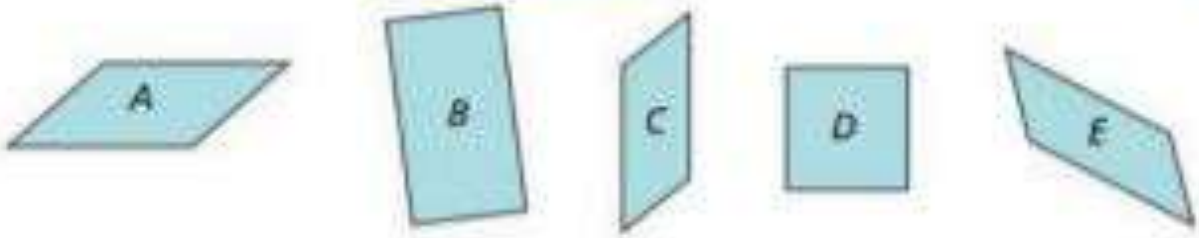


Name _____

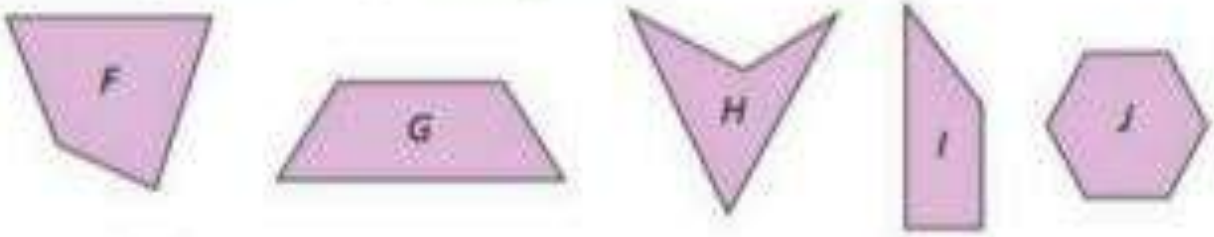
VOCABULARY
parallelogram

Describe Parallelograms

All of these figures are **parallelograms**.



These figures are not parallelograms.



Complete the sentence.

1. A parallelogram is a quadrilateral with _____

_____

Measure Sides of Parallelograms

For each parallelogram, measure the sides to the nearest centimeter and label them with their lengths.

2.

3.

4.

5. Look at the lengths of the sides. What patterns do you notice? _____

Describe Rectangles

VOCABULARY
rectangle
square
rhombus

All of these figures are **rectangles**.

Adel said, "Rectangles are special kinds of parallelograms."

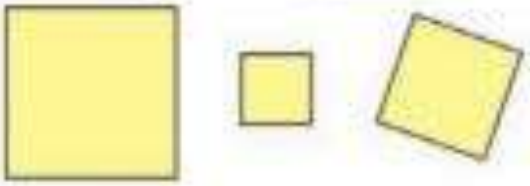
Complete the sentence.

6 A rectangle is a parallelogram with _____

_____

Explore Squares and Rhombuses

These figures are **squares**.



These figures are **rhombuses**.

Takeshi said, "Squares are special kinds of rectangles."

Cora said, "Rhombuses are special kinds of parallelograms."

Complete the sentence.

7 A square is a rectangle with _____

_____

8 A rhombus is a parallelogram with _____

_____

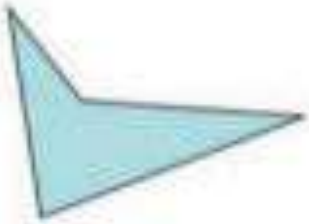
Name _____

Describe Quadrilaterals

Use as many words below as possible to describe each figure.

quadrilateral	parallelogram	rectangle	square

9. 

10. 

11. 

12. 

Describe Trapezoids

VOCABULARY
trapezoid
opposite sides

The quadrilaterals below are **trapezoid**.

Write what you know about the **opposite sides** of a trapezoid.

_____

_____

Circle the quadrilaterals that are trapezoids.

Explain why the figures you did not circle are not trapezoids.

_____

_____

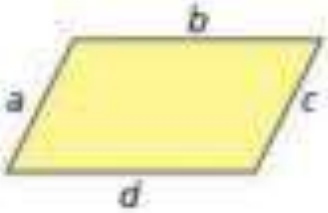
_____

Check Understanding

Draw a quadrilateral and describe it.

Name _____

Draw Parallelograms



1. Write what you know about the opposite sides of a parallelogram.

_____

_____

2. Draw three different parallelograms.

Draw Rectangles

VOCABULARY
adjacent sides

3 Write everything you know about the opposite sides of a rectangle.

4 What do you know about the **adjacent sides** of a rectangle?

5 Draw three different rectangles.

Name _____

Draw Squares and Rhombuses

6 Write everything you know about squares.

_____

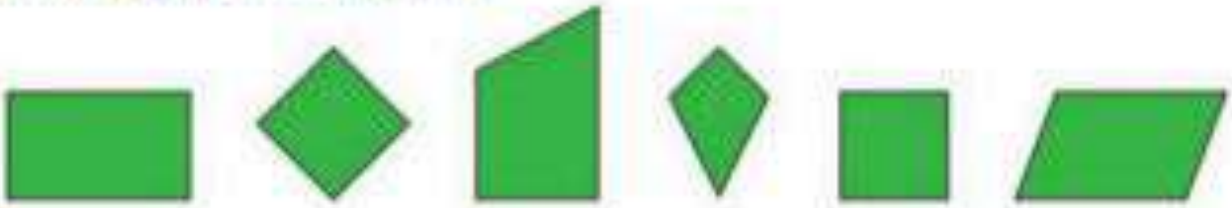
7 Write all you know about rhombuses.

_____

_____

8 Draw two different squares and two different rhombuses.

Draw Quadrilaterals That Are Not Squares, Rectangles, or Rhombuses



9 What is a quadrilateral?

10 Name all the quadrilaterals that have at least one pair of parallel sides.

11 Draw three different quadrilaterals that are not squares, rectangles, or rhombuses.

Check Understanding

Draw a quadrilateral that is not a parallelogram.

Name _____

Name Quadrilaterals

Place a check mark beside every name that describes the figure.

1. 

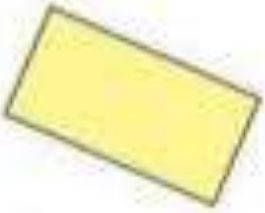
- ☐ quadrilateral
- ☐ parallelogram
- ☐ rhombus
- ☐ rectangle
- ☐ square

2. 

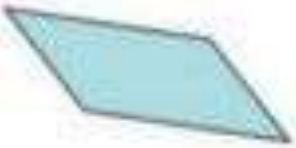
- ☐ quadrilateral
- ☐ parallelogram
- ☐ rhombus
- ☐ rectangle
- ☐ trapezoid

3. 

- ☐ quadrilateral
- ☐ parallelogram
- ☐ rhombus
- ☐ rectangle
- ☐ square

4. 

- ☐ quadrilateral
- ☐ parallelogram
- ☐ rhombus
- ☐ rectangle
- ☐ square

5. 

- ☐ quadrilateral
- ☐ parallelogram
- ☐ rhombus
- ☐ rectangle
- ☐ square

6. 

- ☐ quadrilateral
- ☐ parallelogram
- ☐ rhombus
- ☐ rectangle
- ☐ square

7. 

- ☐ quadrilateral
- ☐ parallelogram
- ☐ rhombus
- ☐ rectangle
- ☐ square

8. 

- ☐ quadrilateral
- ☐ parallelogram
- ☐ rhombus
- ☐ rectangle
- ☐ square

9. 

- ☐ quadrilateral
- ☐ parallelogram
- ☐ rhombus
- ☐ rectangle
- ☐ square

Content Standards 3.G.A.1
Mathematical Practices MP2, MP5, MP6, MP7

Analyze Quadrilaterals

10 For each figure, put Xs under the descriptions that are always true.

	Four sides	Both pairs of opposite sides parallel	Both pairs of opposite sides the same length	Four right angles	All sides the same length
Quadrilateral					
Trapezoid					
Parallelogram					
Rhombus					
Rectangle					
Square					

Use the finished chart above to complete each statement.

11 Parallelograms have all the features of quadrilaterals *plus*

_____

_____

12 Rectangles have all the features of parallelograms *plus*

_____

13 Squares have all the features of quadrilaterals *plus*

_____

_____

14 Rhombuses have all the features of quadrilaterals *plus*

_____

_____

Name _____

Draw Quadrilaterals from a Description

Draw each figure.

15 Draw a quadrilateral that is *not* a parallelogram.

16 Draw a parallelogram that is *not* a rectangle.

17 Draw a rectangle that is *not* a square.

What's the Error?

Dear Math Students,

Today I had to draw a quadrilateral with parallel sides that is not a rectangle, square, or rhombus.

This is my drawing.

Is my drawing correct?
If not, please help me understand why it is wrong.

Your friend,
Puzzled Penguin

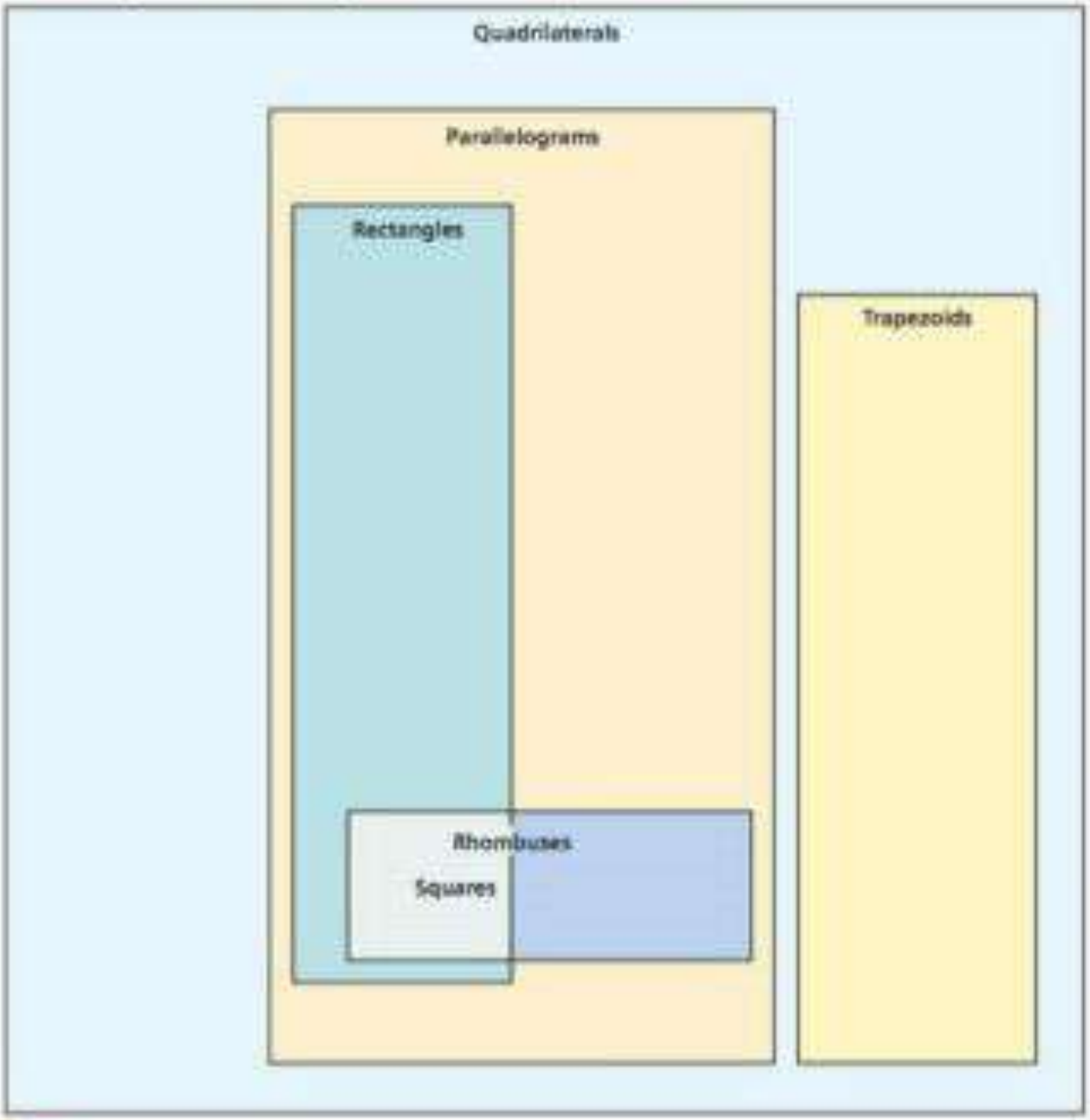
18 Write an answer to Puzzled Penguin.

_____

_____

Sort and Classify Quadrilaterals

Use the category diagram to sort the figures you cut out from Student Activity Book page 439A. Write the letter of the figure in the diagram to record your work.



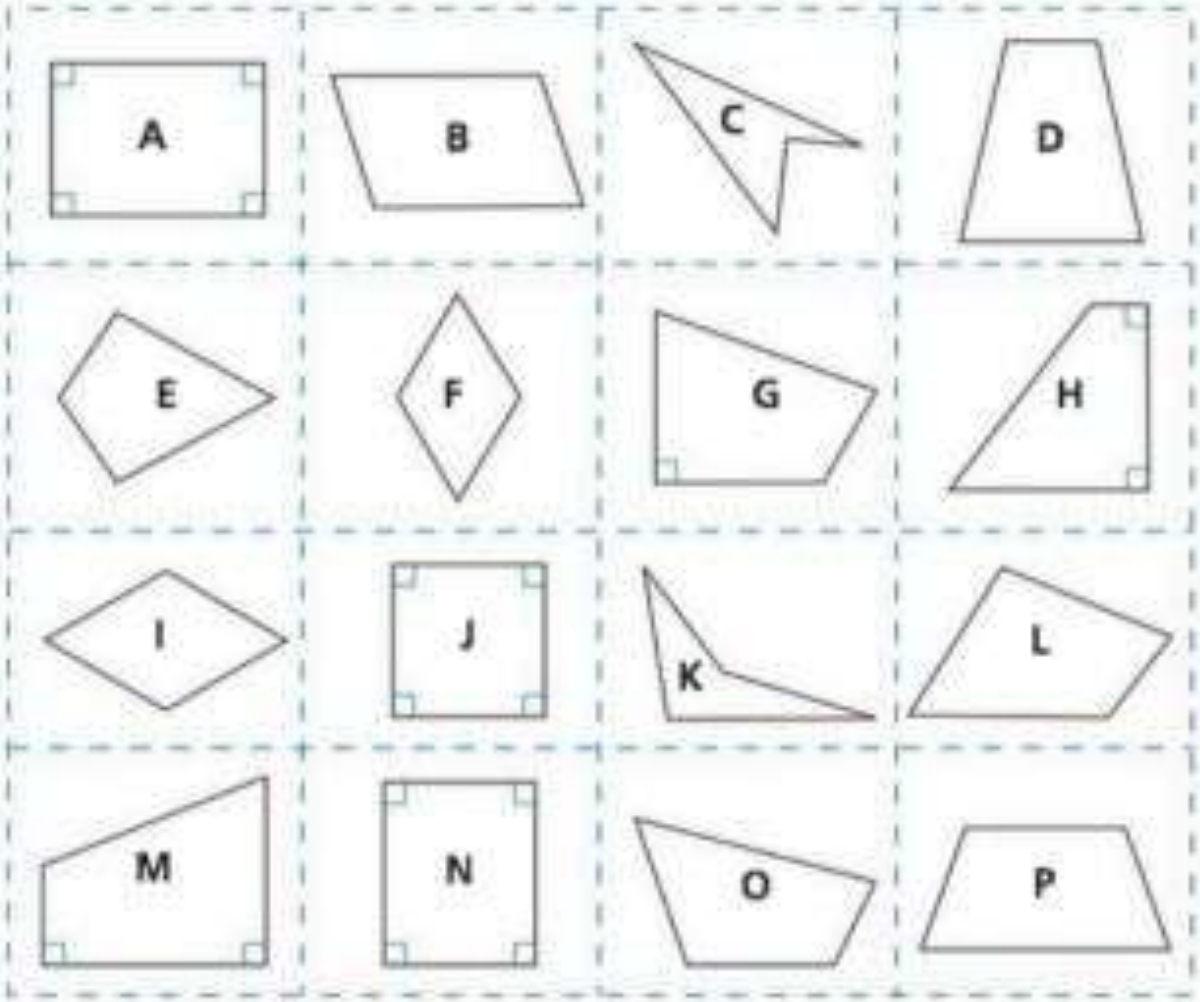
Check Understanding

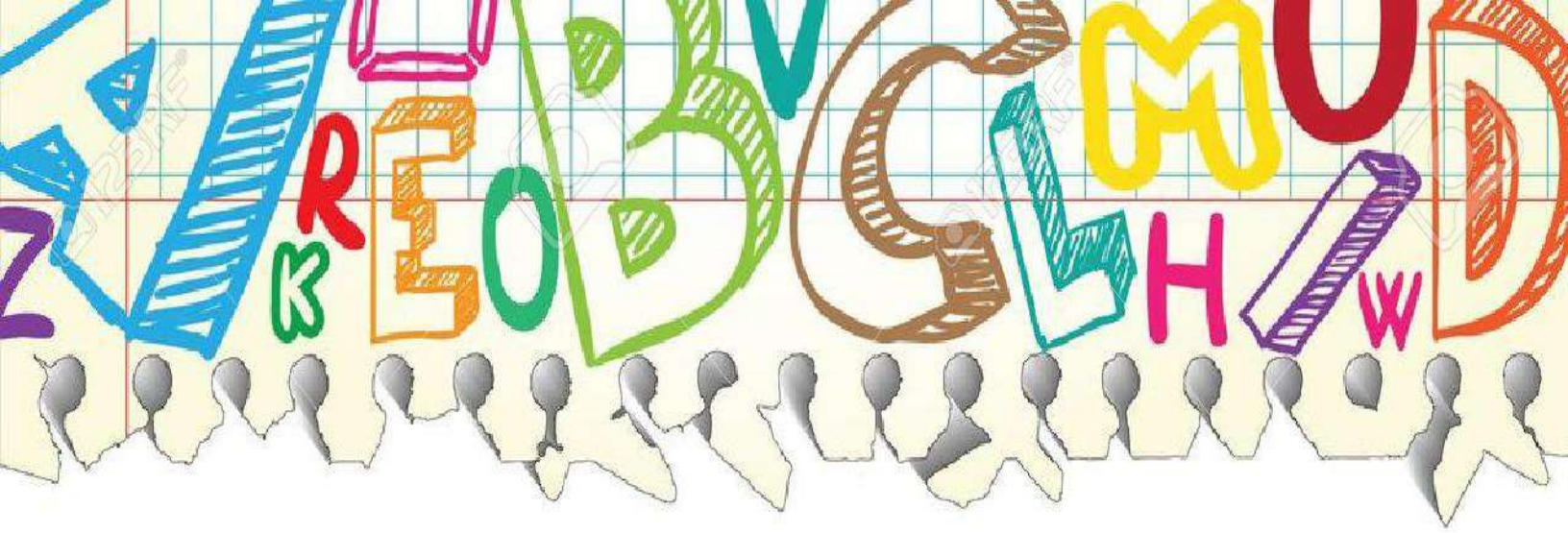
Complete the sentence. A rhombus is always a _____ and a _____.

Name _____

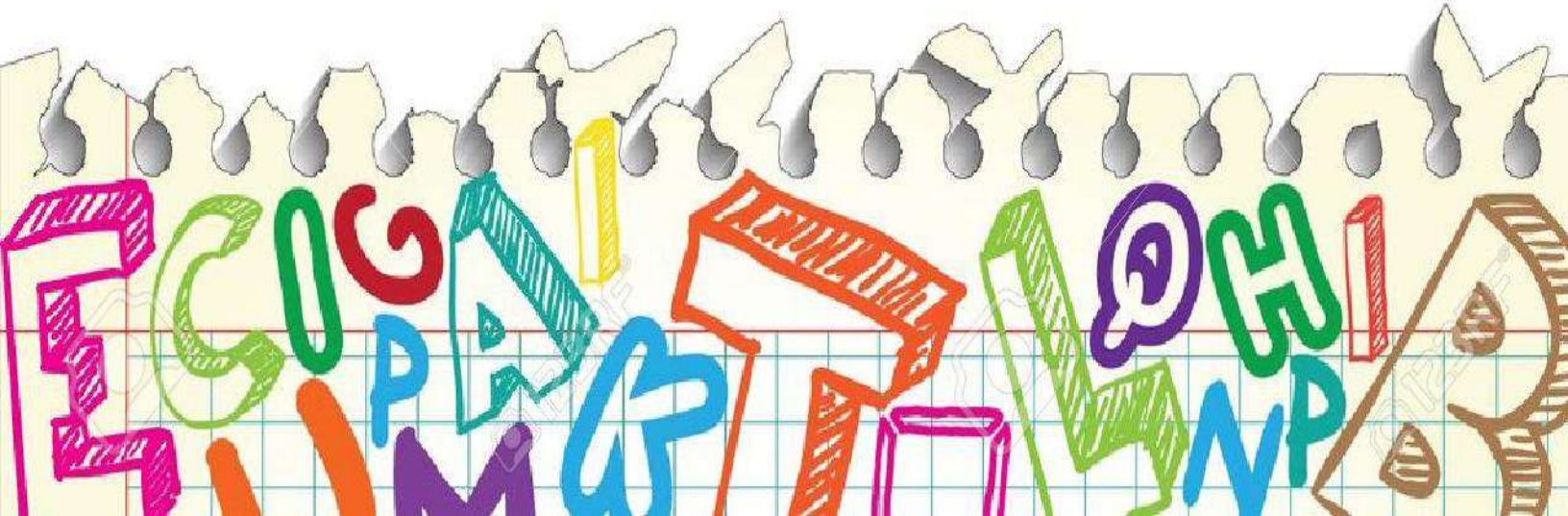
Quadrilaterals for Sorting

Cut along the dashed lines.



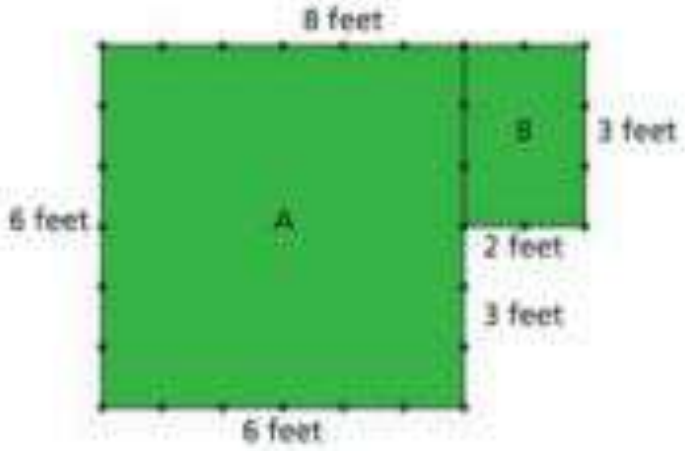


Optional Math Activities



Name _____

Area and Gardening



Look at the drawing of Yoakim's garden.
It is divided into two quadrilaterals.

1. What is the perimeter of part A? _____

   What is the perimeter of part B? _____

2. What is the perimeter of the combined garden? _____

3. Will Yoakim need more fencing to enclose the two parts of his garden separately or to enclose the combined garden? _____

   _____

4. What is the area of part A? _____

   What is the area of part B? _____

5. What is the area of the combined garden?

   _____

6. How does the total area of the two parts of the garden compare with the area of the combined garden?

   _____

Design a Garden

Use the dot paper below to draw a different garden that has the same perimeter as Yoakim's combined garden. Beside it, draw a different garden that has the same area as Yoakim's garden.

1 in.

7 What is the area of your garden that has the same perimeter as Yoakim's garden?

_____

8 What is the perimeter of your garden that has the same area as Yoakim's garden?

_____

9 Use the centimeter dot paper at the right to draw separate areas within a garden where you would plant corn, beans, and tomatoes.

The area for corn is 12 square feet.

The area for beans is 25 square feet.

The area for tomatoes is 20 square feet.