

4th Grade

May Learning Activities

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 approximately 2 hours daily on engaged learning activities.

Please plan times for the following activities for your child.

READING:

- Read for 40 minutes twice a week.
- Respond to one reading prompt by discussing it with someone or by writing about it in your notebook.

WRITING:

- During the month of May, students have the opportunity to free write for 20 minutes on Tuesdays and Thursdays. Please see the writing workshop section of the packet for writing ideas.

MATH:

- Spend at least 30 minutes Monday -Thursday working on math activities listed on the math page.

OTHER: (MAPL--Music, Art, PE & LMC/Tech)

- The Enrichment Activities pages are for your child to explore. Choose at least one of these activities each day.

Each day, check off the items on the daily log 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.

*Note: If you or your child becomes frustrated or overwhelmed with any of these activities, please contact your child's teacher so we can be of assistance to you through this process. 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 › 4th Grade › May Learning Activities**

Daily Log

Student's Name _____ Grade _____ Teacher _____

Each day, check off the items on the daily log as they are completed. Initial each day when your student has completed the work.

May 4 Adult Initials _____ ☐ Math 30 min ☐ Read 40 min. ☐ Reading Response ☐ MAPL activity	May 5 Adult Initials _____ ☐ Math 30 min ☐ Free Write 20 min ☐ MAPL activity	May 6 Adult Initials _____ ☐ Math 30 min ☐ Read 40 min. ☐ Reading Response ☐ MAPL activity	May 7 Adult Initials _____ ☐ Math 30 min ☐ Free Write 20 min ☐ MAPL activity	May 8 Adult Initials _____ ☐ National Field Day activities (PE)
May 11 Adult Initials _____ ☐ Math 30 min ☐ Read 40 min. ☐ Reading Response ☐ MAPL activity	May 12 Adult Initials _____ ☐ Math 30 min ☐ Free Write 20 min ☐ MAPL activity	May 13 Adult Initials _____ ☐ Math 30 min ☐ Read 40 min. ☐ Reading Response ☐ MAPL activity	May 14 Adult Initials _____ ☐ Math 30 min ☐ Free Write 20 min ☐ MAPL activity	May 15 Adult Initials _____ ☐ MAPL activity
May 18 Adult Initials _____ ☐ Math 30 min ☐ Read 40 min. ☐ Reading Response ☐ MAPL activity	May 19 Adult Initials _____ ☐ Math 30 min ☐ Free Write 20 min ☐ MAPL activity	May 20 Adult Initials _____ ☐ Math 30 min ☐ Read 40 min. ☐ Reading Response ☐ MAPL activity	May 21 Adult Initials _____ ☐ Math 30 min ☐ Free Write 20 min ☐ MAPL activity	May 22 Adult Initials _____ ☐ MAPL activity
May 25 NO SCHOOL Enjoy your time with your family!	May 26 Adult Initials _____ ☐ Math 30 min ☐ Free Write 20 min ☐ MAPL activity	May 27 Adult Initials _____ ☐ Math 30 min ☐ Read 40 min. ☐ Reading Response ☐ MAPL activity	May 28 Adult Initials _____ ☐ Math 30 Min ☐ Free Write 20 min ☐ MAPL activity	May 29 Adult Initials _____ ☐ MAPL activity Submit a picture of this page to Google Classroom

READING AND WRITING WORKSHOP

- Please read for 40 minutes twice a week.
- You may choose to read a book that you have with you or use an online book using a resource like Epic! or Sora.
- 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 and your response in the daily log.

Reading Responses	Writing
Theme *See attached handout to learn more about theme • Can you identify a theme from a fiction book you have finished? Character • Describe the main character. ◦ Traits, Thoughts/Feelings, Actions • What does the character want? Do you think he/she will get it? If so, how? • Does the character change throughout the story? If so, explain how he/she changes. Setting • Describe the setting ◦ Think about where and when the story takes place. ◦ Why is the setting important in the story? Plot • Retell the most important events in the story • Was there a problem in this book? What was it? How was it solved? Fab 4 (Predict, Clarify, Question, Summarize) *See attached sheet for more information • <u>Predict:</u> What do you think will happen in each chapter? • <u>Clarify:</u> List any words/ideas in the story that you don't understand? Include page number. • <u>Question:</u> What questions do you have about the chapter/text? • <u>Summarize:</u> Summarize what you have read.	Free Writing Options - Journal about your day - Write a letter or card - Email your teacher - Write a fiction story - Write a report - Make a comic - Answer a Journal Prompt: - What is your favorite memory from elementary school? - What advice would you give to the 3rd graders coming into 4th grade? - What are you looking forward to in middle school? - Write about your favorite subject from 4th grade. - What is your favorite memory of your 4th grade teacher and your classmates? - What job might you want to have when you grow up?

MATH Activities

- Complete the 16 required math activities in the order they are listed. Check off once complete.
- Watch the video before completing the worksheet.
- If you still have time during your 30 minutes of daily math, choose skills to review from the optional math activities on the following page.

Required Math Activities

New Unit: Word Problems and Equations (in the following order)

_____ Properties and Algebraic Notation: **Practice 4.1**

- **Video:** <https://www.youtube.com/watch?v=vDqOol-4Z6M>

_____ Situation and Solution Equations for Addition & Subt.: **Practice 4.2**

- **Video:** <https://mathantics.com/lesson/solving-basic-equations-1>

_____ Situation and Solution Equations for Mult. & Division: **Practice 4.3**

- **Video:** <https://mathantics.com/lesson/solving-basic-equations-2>

_____ Multiplication Comparisons: **Practice 4.4**

- **Video:** https://www.youtube.com/watch?v=UKYjhM_c_7s

_____ Solve Two-Step Problems: **Practice 4.7**

- **Video:** <https://mathantics.com/lesson/solving-2step-equations>

_____ Solve Multi Step Problems: **Practice 4.8**

- **Video:** https://www.youtube.com/watch?v=-sSdb_wZqKQ

_____ Factors and Prime Numbers: **Practice 4.10**

- **Video:** <https://www.youtube.com/watch?v=3h4UK62Qrbo>

_____ Analyze Patterns: **Practice 4.11**

- **Video:** <https://www.youtube.com/watch?v=l-6uEtTBH7g>

Review Lessons (in the following order)

_____ **Multiplication Practice 2.18**

_____ **Multiplication Practice 2.19**

_____ **Division Practice 3.11**

_____ **Mixed Word Problems Practice 3.10**

_____ **Fractions Practice 6.5 (adding and subtracting mixed #'s)**

_____ **Fractions Practice 6.6 (practice with fractions and mixed #'s)**

_____ **"What's the Nearest _____?" (play 1-2 games)**

_____ **Multiplication Race/Who Has the Largest Quotient (play 1 or both)**

ONLINE RESOURCES

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
- Storyline online -- <https://www.storylineonline.net/>

Optional Math Activities

- **Timed tests to practice facts**
- **Flashcards to practice facts**
- **Math Minutes on iPad (Google Classroom)**
- **Splash Math**
- **Freckle**
- **Khan Academy**
- **Prodigy** Games for students to practice math: <https://www.prodigygame.com>
- **Math Before Bedtime**
Awesome resource with images, patterns, and puzzles that you can discuss
<http://mathbeforebed.com>
- **Cook Together**
Practice measuring by cooking a recipe together with a family member.
- **"Grocery Shopping"**
Choose several food items you have in your house and determine a price for each one. Let your child use a handful of coins to figure out all the different combinations of coins that could pay for that item. For example, if an apple cost 58 cents, how many different ways could you pay for it in coins?

MAPL (Music, Art, PE, LMC) Activities

Choose one or more activities from these two pages to complete as it fits into your schedule. Choose from a variety of different areas to get a variety of different experiences.

Music Activities from Mrs. Jones

- ___ Watch the LaCrosse Symphony: <https://www.lacrossesymphony.org/la-crosse-arts-online-symphony-online/>
- ___ Do a page or two in the **piano** packet posted in Google Classroom. Send Mrs. Jones a video if you would like!
- ___ Try the **Music Escape room** in Google Classroom:
https://drive.google.com/open?id=1UXpO7x9_v0ME8uZGS_6VZi2TCEWD_auvFsYQoVhchHg
- ___ Try Find a Family Member Who: https://drive.google.com/open?id=1Pw5AUhWuHLqjxy_1KVNtnWrgShq0RBme
- ___ Sing along to a favorite song!
- ___ Watch The Masked Singer or American Idol and talk about what you observe in the performance.

Art Ideas from Ms. Lotspaih

- ___ Make a sketchbook! Use a notebook or several stapled pieces of paper and decorate the cover. Your sketchbook cover should be all about you! Use what you have and be creative! Then use your sketchbook to draw your ideas!
- ___ Pick an artist we studied this year: Georgia O'Keeffe, Faith Ringgold, Frank Lloyd Wright, or Grant Wood. If you don't remember their artwork, use Google Images to search their name. Create a piece of artwork inspired by them or re-create one of their pieces of work.
- ___ Cut out the head of a person or animal from a magazine or newspaper and glue it down to a piece of paper. Finish the body however you'd like! (It can be goofy!)
- ___ Create a maze and have someone in your family solve it! (Can be drawn on paper, made with furniture, or sidewalk chalk outside)
- ___ Come up with your own invention. Try to make it from household supplies.

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

- *Click on this link for our **MAY PE CHOICE BOARD** which offers a variety of ways to be active. Have fun!
https://drive.google.com/file/d/1N3-fC3yOqQirPTFWvH7JGqa1NyNpr_xp/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/1HERczq4o7zBQracLurfuT1scpuNKDMIJ/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.

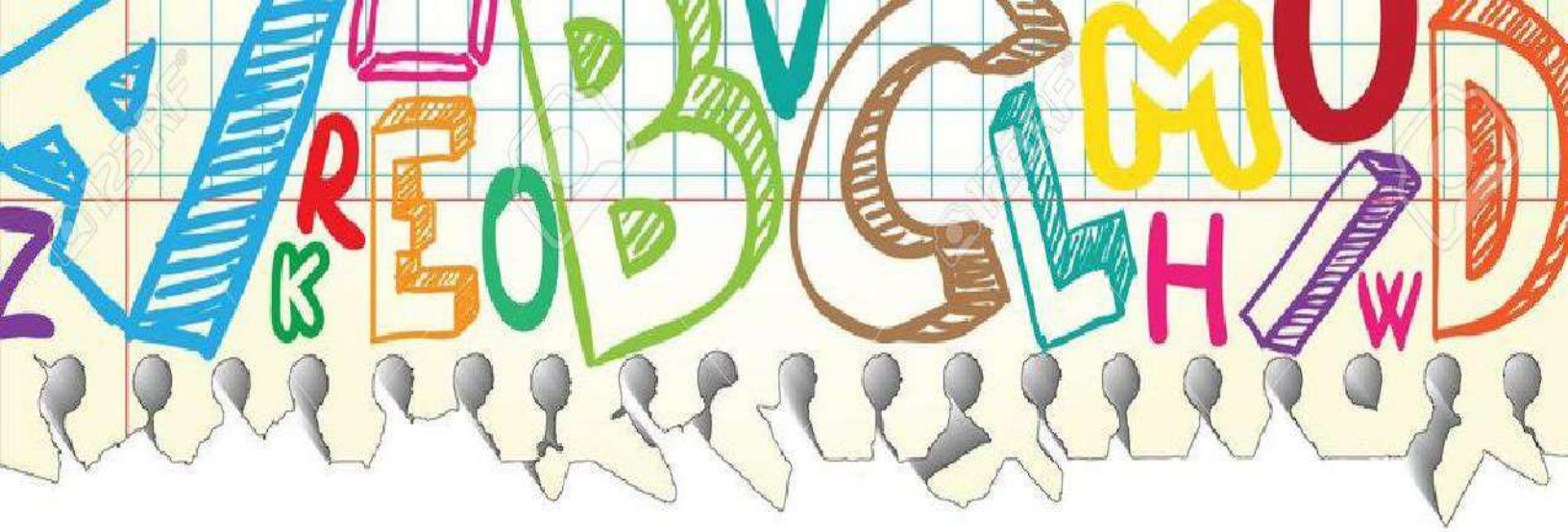
Check out the new coding sites bookmarked on "Mrs. Mead's Technology Links"

"Google Quick Draw"

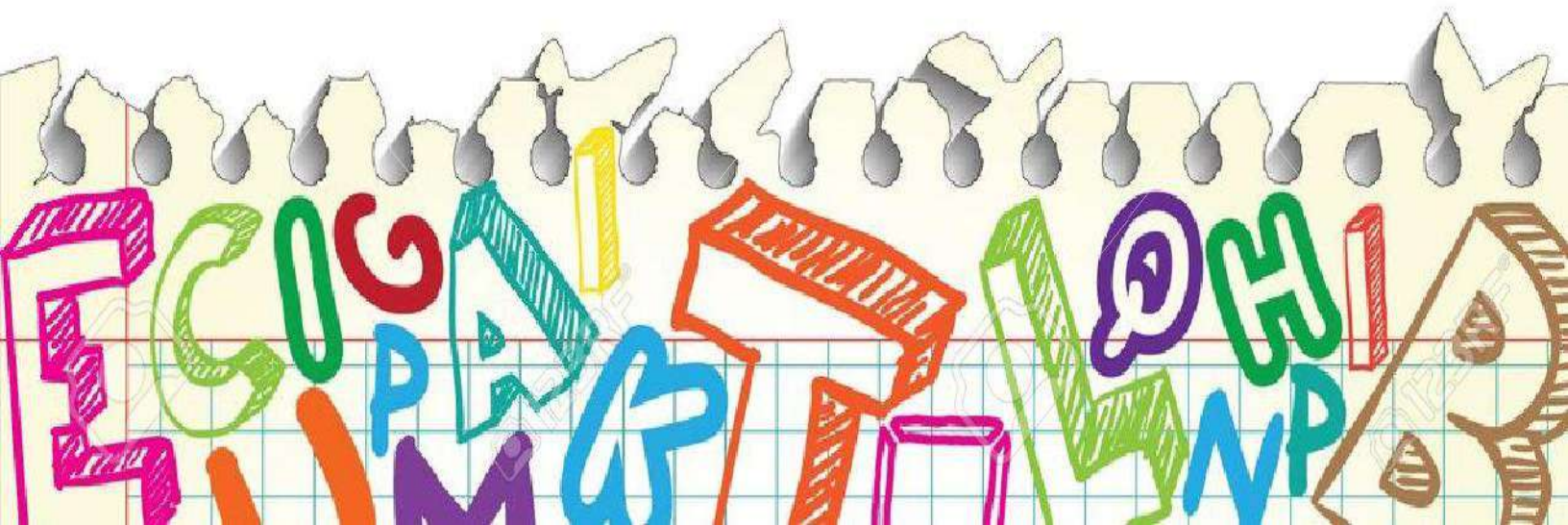
Check out this website! A game where your computer/iPad tries to guess what you're drawing.

"Mystery Picture"

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



Reading & Writing



Theme

The theme is the big idea or lesson the author wants you to take away after reading the story.

The author doesn't tell you the theme, instead you have to *infer* the theme using clues from the characters, plot, and setting! Ask yourself these questions after reading the story:

- > What was the problem or issue in the story?
- > What did the characters learn?
- > How did the characters feelings or actions change in the story? Why did their feelings or actions change? (Action/Feeling + Response = Theme)

Theme is the heart of the story  ... and a complete sentence

Common Theme Topics:

- Friendship
- Being yourself
- Kindness
- Importance of Family
- Teamwork
- Helping Others



So WHAT about the topic?

- Both old and new friends are important in your life.
- Being yourself is better than changing to fit in.
- Treat others with kindness because you never know what they are going through.

Character Traits: Synonyms

Nice

helpful
friendly
kindhearted
compassionate
pleasant
thoughtful
agreeable
courteous

Mean

wicked
rude
thoughtless
impolite
cruel
hateful
unfriendly
unkind

Happy

cheerful
joyful
excited
satisfied
content
delighted
pleased
glad

Sad

depressed
serious
gloomy
miserable
unhappy
discouraged
sorrowful
mournful

Smart

intelligent
brilliant
clever
bright
skillful
wise
brainy

Brave

daring
courageous
adventurous
fearless
heroic

Tricky

dishonest
deceitful
sneaky
secretive
sly
untrustworthy

Funny

amusing
hysterical
humorous
comical
hilarious
silly

Mad

exasperated
annoyed
outraged
furious
frustrated
angry
displeased
irritated

Scared

terrified
panicked
nervous
afraid
alarmed
frightened
fearful
petrified

Thankful

appreciative
grateful

Clumsy

awkward
uncoordinated

Active

athletic
energetic

Shy

bashful
quiet

Talkative

chatty
communicative

Character Traits

How is my character as a person?

nice	mean	Sad
bright	angry	antisocial
cheerful	bossy	comfortless
caring	cruel	depressed
charming	dark	down
considerate	disrespectful	friendless
delightful	evil	gloomy
encouraging	harsh	glum
friendly	hateful	heartbroken
kind	impolite	heavy-hearted
likable	insensitive	hopeless
loving	raging	isolated
peaceful	rude	lonely
pleasant	selfish	lonesome
polite	spoiled	miserable
respectful	thoughtless	moody
sensitive	uncaring	sorrowful
sweet	unfriendly	unhappy
thoughtful	unpleasant	withdrawn

Does a lot	Does very little
active	bored/boring
adventurous	dull
ambitious	indifferent
bold	lazy
busy	neglectful
energetic	sluggish
hard-working	uninterested

positive	negative
cooperative	uncooperative
calm	reactive
dependable	undependable
fair	unfair
honest	dishonest
humble	conceited
mature	immature
patient	impatient
responsible	irresponsible
trustworthy	untrustworthy

confident	nervous
assertive	anxious
brave	concerned
certain	fearful
courageous	hesitant
fearless	uncertain
independent	uneasy
sure	unsure

Opposites	
calm	hyperactive
funny	serious
gentle	rough
glamorous	simple
shy	loud
quiet	noisy

FAB 4

Reading Comprehension Strategies

Predicting

Preview the text to anticipate what may happen next.
Readers use text evidence, along with their prior knowledge to make predictions, before and during reading.

Predicting with Fiction

- Preview cover art, title, author, and illustrations
- Flip through the text to preview visuals
- Preview to consider setting, characters, problem, characters' feelings and motives, events, and theme.
- Consider whether the author's purpose is to entertain, inform, or persuade.
- Return to predictions both during and after reading to confirm or revise them.

Clarifying

-helps readers keep track of their comprehension and use fix-up strategies when needed

When you need to clarify:

I didn't get...(word, part, chapter, paragraph...)
I didn't understand this part...

Fix up Strategies:

- Reread
- Read on
- Look for context clues

When I clarify I:

Explain Reread Solve

Questioning

Good readers ask questions throughout the reading process. Some questions are answered in the book, while others are inferred.

Preview the chapter title and ask a question:

Watch for answers to your questions while you read!

Questioning with Fiction

- I wonder...
- Who? What? When? Where? Why? How?
- Why do you think?

Summarizing

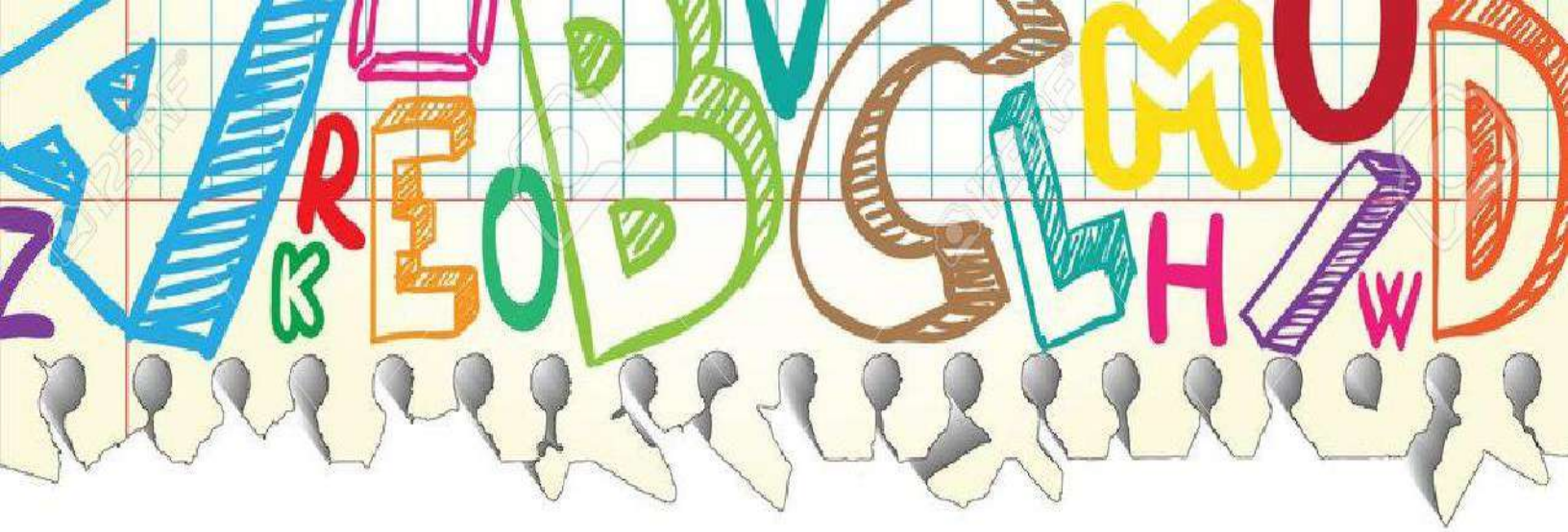
Readers write about the most important parts of the story in a sequential order.

The summary will include the setting, characters, problem, events and solution.

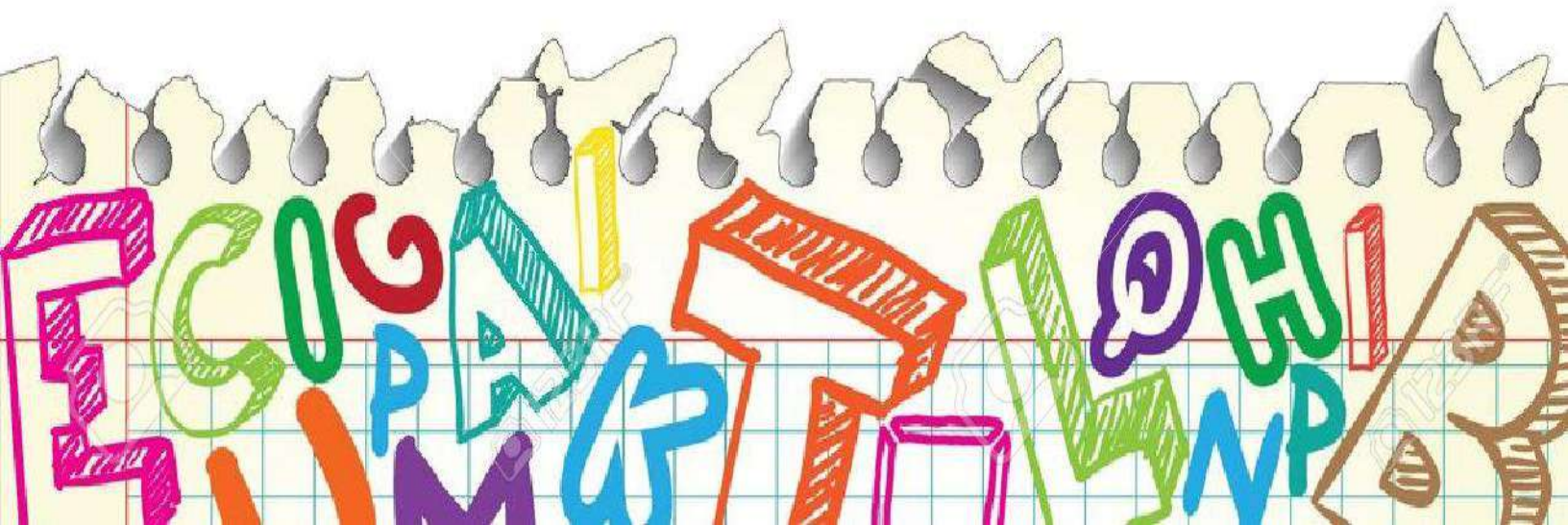
- Setting**—The story takes place...
- Character**—The main characters are...
- Problem**—The problem in the story is...

Summarizing Fiction

- This part was mostly about...
- Use chapter heading
- Think about beginning, middle, end—explain the most important parts
- First, next, then, finally...



Math Assignments



Times Table Square

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

4-1 Practice

Name _____

Date _____

Simplify each expression.

1 $13x - 9x = \underline{\hspace{2cm}}$

2 $5p + p = \underline{\hspace{2cm}}$

3 $17t - t = \underline{\hspace{2cm}}$

4 $c + 6c + c = \underline{\hspace{2cm}}$

5 $(6y - 2y) - y = \underline{\hspace{2cm}}$

6 $q + 99q = \underline{\hspace{2cm}}$

7 $17 - (8 - 3) = \underline{\hspace{2cm}}$

8 $(800 - 300) - 300 = \underline{\hspace{2cm}}$

9 $50 - (30 - 1) = \underline{\hspace{2cm}}$

10 $35 \div (21 \div 3) = \underline{\hspace{2cm}}$

11 $(48 \div 6) \div 4 = \underline{\hspace{2cm}}$

12 $64 \div (56 \div 7) = \underline{\hspace{2cm}}$

13 $(24 \div 8) \cdot (16 - 7) = \underline{\hspace{2cm}}$

14 $(25 - 7) \div (15 - 9) = \underline{\hspace{2cm}}$

15 $(16 + 20) - (42 \div 7) = \underline{\hspace{2cm}}$

16 $(18 + 27) \div (15 - 6) = \underline{\hspace{2cm}}$

Evaluate.

17 $m = 5$

$3 \cdot (12 - m)$

18 $c = 3$

$(72 \div 9) \cdot (c + 2)$

19 $b = 9$

$(21 \div 3) \cdot b$

20 $v = 5$

$(30 \div 53) \cdot (v - 5)$

21 $d = 12$

$54 \div (d - 6)$

22 $r = 15$

$(r + 5) \div (6 - 2)$

23 $w = 7$

$(3 + w) + (26 - 8)$

24 $h = 2$

$(6 \cdot 3) \div h$

25 $r = 1$

$(99 + r) \div (24 - 19)$

Solve for $\square$ or n .

26 $5 \cdot (10 - 4) = 5 \cdot \square$

$\square = \underline{\hspace{2cm}}$

27 $(6 + 4) \cdot 3 = \square \cdot 3$

$\square = \underline{\hspace{2cm}}$

28 $8 \cdot (3 + 3) = \square \cdot 6$

$\square = \underline{\hspace{2cm}}$

29 $(4 - 4) \cdot 11 = n$

$n = \underline{\hspace{2cm}}$

30 $(25 - 4) \div 7 = n$

$n = \underline{\hspace{2cm}}$

31 $(27 \div 9) \cdot (11 - 2) = n$

$n = \underline{\hspace{2cm}}$

4-2 Practice

Name _____

Date _____

Write = or $\neq$ to make each statement true.

1 $4 + 7 + 6$ $8 + 9$

2 90 $130 - 50$

3 90 $45 + 55$

4 50 $72 - 22$

5 $11 + 7 + 2$ 30

6 $29 - 12$ $14 + 3$

7 $98 + 22$ 120

8 55 $100 - 35$

9 50 $10 + 10 + 20$

- 10 Write the eight related addition and subtraction equations for the break-apart drawing.



Write an equation to solve the problem. Draw a model if you need to.

Show your work.

- 11 There were some people at the softball game. Then 185 people went home. Now 368 people are left at the game. How many people were at the game to start?

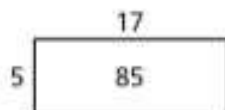
- 12 In two weeks, a new song has been downloaded 7,700 times. The first week, it was downloaded 2,177 times. How many times was it downloaded the second week?

4-3 Practice

Name _____

Date _____

- 1 Write the eight related multiplication and division equations for the rectangle model below.



_____	_____
_____	_____
_____	_____
_____	_____

Solve each equation.

2 $r = 300 \div 5$

$r =$ _____

3 $9 \times d = 63$

$d =$ _____

4 $60 \div 10 = n$

$n =$ _____

5 $190 = 10 \times m$

$m =$ _____

6 $112 = 8 \times c$

$c =$ _____

7 $450 \div q = 9$

$q =$ _____

Write an equation to solve the problem. Draw a model if you need to.

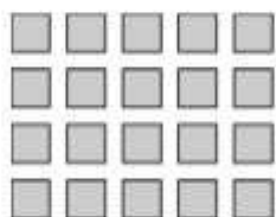
Show your work.

- 8 Dawn bought some tomato plants to plant in her garden. Each plant costs \$7. If Dawn spent \$126 in all, how many tomato plants did she buy?

- 9 Lucas has 315 soccer cards in stacks of 9 cards each. How many stacks of cards did Lucas make?

- 10 Each painting class at a city art center can have 24 students. If all 15 classes are full, how many people are taking painting classes?

Use the shapes to answer Exercises 1–4.



- 1 How many squares? How many triangles?

- 2 Because $5 \times \underline{\hspace{2cm}} = 20$, there are $\underline{\hspace{2cm}}$ times as many squares as triangles.

- 3 Write a multiplication equation that compares the number of squares s to the number of triangles t .

- 4 Write a division equation that compares the number of triangles t to the number of squares s .

Solve each comparison problem.

- 5 Summerville Community College has 5,600 students. This is 7 times as many students as Summerville High School has. How many students attend Summerville High School?

- 6 Art club has 27 students. Astronomy club has 9 students. How many times as many students are in art club than astronomy club?

Use an equation to solve.

Show your work.

- 1 A.J. took 74 pictures during the school year and 130 pictures on his summer vacation. He wants to make a photo album with 6 pictures on each page. How many pages will he need?

- 2 The auditorium at Coleman Elementary School has 24 rows of seats with 36 seats in each row. When all the students in the school are seated in the auditorium, there are 55 empty seats. How many students go to the school?

- 3 Of the 156 girls who signed up for volleyball camp, 24 did not show up. The remaining girls were divided into teams of 6. How many teams were there?

- 4 A family of 5 people went to an amusement park. Admission tickets cost \$29 each. The family also spent \$78 on food, drinks, and souvenirs. What total amount did the family spend for their day at the amusement park?

- 5 A bike store pays \$4,860 for 36 bikes. Then the store sells the bikes for \$187 each. How much profit does the store make from selling the bikes?

Use an equation to solve.

Show your work.

- 1** Emilia and Jake collect stamps. Emilia has 78 U.S. stamps and 36 stamps from other countries. Jake has 32 U.S. stamps and 53 stamps from other countries. How many more stamps does Emilia have than Jake?

- 2** Students traveled to the natural history museum in 4 buses. There were 54 students on each bus. When they arrived at the museum, 32 students went directly to the dinosaur exhibit. The other students were divided into 8 equal groups for guided tours. How many students were in each tour group?

- 3** A store buys 36 small hats for \$5 each and 48 large hats for \$7 each. The store will sell the hats for \$15 each, no matter what size they are. If the store sells all the hats, how much profit will it make?

- 4** Wendy makes stuffed animals to sell at craft fairs. She can make 2 bears from each yard of brown fabric, and 3 rabbits from each yard of gray fabric. She uses 2 plastic eyes for each animal. She has 16 yards of brown fabric and 12 yards of gray fabric. If she makes all the animals she can from this fabric, how many plastic eyes will she need?

- 5** There are 288 children at camp. There are 2 counselors for every 9 children. There are 12 additional counselors to help with canoeing classes and swimming lessons. How many counselors are there in all?

List all the factor pairs for each number.

1 28

2 25

3 31

4 32

Write whether each number is *prime* or *composite*.

5 70

6 43

7 33

8 49

9 19

10 51

Tell whether 8 is a factor of each number. Write *yes* or *no*.

11 8

12 60

13 32

14 56

Tell whether each number is a multiple of 6. Write *yes* or *no*.

15 24

16 30

17 48

18 16

Use the rule to complete the pattern.

19 Rule: skip count by 7

7, 14, _____, _____, 35, _____, _____, 56, 63

20 Rule: skip count by 12

12, _____, 36, _____, 60, _____, 84, _____, 108, _____

21 Rule: skip count by 6

6, 12, 18, _____, _____, _____, _____, 48, 54, 60

Use the rule to find the next three terms in the pattern.

- ❶ 1, 4, 16, 64, ...

Rule: multiply by 4

- ❷ 65, 90, 115, 140, 165, ...

Rule: add 25

Use the rule to find the first ten terms in the pattern.

- ❸ First term: 184

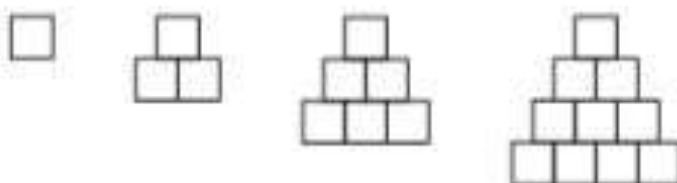
Rule: subtract 11

Make a table to solve.

- ❹ Marshall earned \$9 per hour the first year he worked at ACME, Inc. He earned \$10 per hour the second year, \$12 the third year, \$15 the fourth year, and \$19 the fifth year. If this pattern continues, how much will he earn the tenth year?

Describe the next term of each pattern.

- ❺ 

- ❻ 

2-18
Practice

Name _____

Date _____

Solve using any method and show your work. Check your work with estimation.

1 4×67

2 39×58

3 $6 \times 5,826$

4
$$\begin{array}{r} 59 \\ \times 7 \\ \hline \end{array}$$

5
$$\begin{array}{r} 418 \\ \times 9 \\ \hline \end{array}$$

6
$$\begin{array}{r} 84 \\ \times 78 \\ \hline \end{array}$$

7
$$\begin{array}{r} 26 \\ \times 63 \\ \hline \end{array}$$

8
$$\begin{array}{r} 5,595 \\ \times 5 \\ \hline \end{array}$$

9
$$\begin{array}{r} 922 \\ \times 4 \\ \hline \end{array}$$

Solve.

- 10** Ms. Chandler leaves her dog Daisy in a fancy pet hotel when she goes on vacation. The hotel costs \$42 each night. If she leaves Daisy at the hotel for 14 nights, how much will it cost?
- _____

- 11** At a movie premier, stars walk on a red carpet that is 9 feet wide and 298 feet long. What is the area of the red carpet?
- _____

2-19
Practice

Name _____

Date _____

Solve using any method and show your work. Check your work with estimation.

1 7×62

2 43×73

3 $8 \times 4,668$

4
$$\begin{array}{r} 97 \\ \times 5 \\ \hline \end{array}$$

5
$$\begin{array}{r} 324 \\ \times 8 \\ \hline \end{array}$$

6
$$\begin{array}{r} 57 \\ \times 43 \\ \hline \end{array}$$

7
$$\begin{array}{r} 23 \\ \times 94 \\ \hline \end{array}$$

8
$$\begin{array}{r} 7,391 \\ \times 6 \\ \hline \end{array}$$

9
$$\begin{array}{r} 834 \\ \times 6 \\ \hline \end{array}$$

Solve.

- 10** A university marching band marches in 18 rows with 14 band members in each row. How many band members are there in all?
- _____

- 11** A gardener plants tulip bulbs in rows. He plants 28 rows of tulip bulbs with 24 bulbs in each row. How many tulip bulbs did the gardener plant?
- _____

Divide.

1 $3 \overline{)244}$

2 $5 \overline{)3,558}$

3 $8 \overline{)974}$

4 $4 \overline{)2,938}$

5 $6 \overline{)966}$

6 $7 \overline{)451}$

7 $3 \overline{)1,977}$

8 $5 \overline{)4,117}$

9 $2 \overline{)955}$

Solve.

Show your work.

- 10 Tyesha makes mosaics from colored tiles. She has 1,152 tiles in 8 colors. She has the same number of tiles of each color. How many tiles of each color does she have?
- _____

- 11 Jeff is packing boxes of supplies for hurricane victims. He puts 5 bottles of water in each box. If he has 878 bottles of water, how many boxes can he fill? How many bottles will be left over?
- _____

The town of Oakville has a summer day camp for elementary school students.

Use the correct operation or combination of operations to solve each problem.

Show your work.

- 1 Campers are divided into groups by age. There are 4 groups of 9-year-olds with 16 students in each group. There are 5 groups of 10-year-olds with 15 students in each group. How many campers are 9 or 10 years old?

- 2 There were 55 girls and 41 boys who wanted to play kickball. They divided into teams of 8 for a kickball tournament. How many teams did they make?

- 3 Each camper who took ceramics classes made 6 bowls. Unfortunately, 16 of the bowls broke. If there were 308 unbroken bowls, how many campers took ceramics classes?

- 4 Campers who took drama classes put on a performance at the end of the summer. In the audience there were 12 rows with 16 seats in each row. Every seat was full, plus there were 19 people standing. How many people came to the performance?

6-5 Practice

Name _____

Date _____

Add.

$$\begin{array}{r} 1 \quad 1\frac{3}{8} \\ + 2\frac{2}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 3\frac{4}{5} \\ + 2\frac{3}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 4\frac{1}{2} \\ + 4\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 4\frac{6}{10} \\ + 3\frac{7}{10} \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 6\frac{5}{6} \\ + 9\frac{5}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 2\frac{1}{4} \\ + 5\frac{3}{4} \\ \hline \end{array}$$

Subtract.

$$\begin{array}{r} 7 \quad 5\frac{4}{5} \\ - 1\frac{1}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 6\frac{3}{8} \\ - 3\frac{5}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 4\frac{1}{6} \\ - 3\frac{5}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 4\frac{3}{10} \\ - 1\frac{7}{10} \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 10\frac{5}{12} \\ - 2\frac{3}{12} \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 7\frac{1}{3} \\ - 1\frac{2}{3} \\ \hline \end{array}$$

Add or subtract.

$$13 \quad \frac{3}{5} + \frac{8}{5} = \underline{\hspace{2cm}}$$

$$14 \quad \frac{7}{10} + \frac{9}{10} = \underline{\hspace{2cm}}$$

$$15 \quad \frac{12}{5} - \frac{3}{5} = \underline{\hspace{2cm}}$$

$$16 \quad \frac{5}{8} + \frac{7}{8} = \underline{\hspace{2cm}}$$

$$17 \quad \frac{7}{4} + \frac{5}{4} = \underline{\hspace{2cm}}$$

$$18 \quad \frac{7}{2} - \frac{3}{2} = \underline{\hspace{2cm}}$$

$$19 \quad \frac{3}{4} + \frac{3}{4} = \underline{\hspace{2cm}}$$

$$20 \quad \frac{13}{8} - \frac{3}{8} = \underline{\hspace{2cm}}$$

$$21 \quad \frac{7}{6} - \frac{2}{6} = \underline{\hspace{2cm}}$$

Write each mixed number as a fraction.

1 $4\frac{4}{5} =$ _____

2 $10\frac{2}{3} =$ _____

3 $3\frac{2}{5} =$ _____

4 $3\frac{5}{8} =$ _____

Write each fraction as a mixed number.

5 $\frac{21}{5} =$ _____

6 $\frac{35}{6} =$ _____

7 $\frac{70}{8} =$ _____

8 $\frac{93}{10} =$ _____

Add or subtract.

9 $\frac{4}{5} + \frac{4}{5} =$ _____

10 $\frac{7}{8} - \frac{2}{8} =$ _____

11 $1\frac{4}{5} + \frac{3}{5} =$ _____

12 $\frac{2}{3} + 7\frac{2}{3} =$ _____

13 $4\frac{5}{12} - 1\frac{11}{12} =$ _____

14 $\frac{7}{10} - \frac{4}{10} =$ _____

15 $5\frac{5}{9} - 4\frac{8}{9} =$ _____

16 $2\frac{1}{6} + 3\frac{5}{6} =$ _____

17 $9\frac{3}{4} - 5\frac{1}{4} =$ _____

Solve.

Show your work.

- 18 Matt ran $8\frac{1}{4}$ miles this weekend. He ran $3\frac{2}{4}$ miles on Saturday. How far did he run on Sunday?

- 19 Ellie mixed $1\frac{2}{3}$ cups of apple juice with $\frac{2}{3}$ cup of cranberry juice. How many cups of apple-cranberry juice did she make?

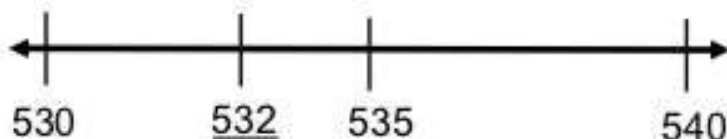
What's the Nearest Ten?

Materials: set of numeral cards (0-9) or 3 number cubes

5	3	2
---	---	---

1. Turn over 3 numeral cards (or roll 3 number cubes) to make a 3-digit number.
2. Identify the multiples of ten that your number falls between. Record the multiples of ten and the midpoint between them on a number line.
3. Plot your 3-digit number on the number line.
4. Which multiple of ten is your number closer to? Justify your reasoning.
5. Repeat five times.
6. Describe any patterns you find to determine when to round to the lesser multiple of ten or round to the next multiple of ten.

Example:



532 is between 530 and 540. It is 2 away from 530 and 8 away from 540. It is closer to 530. Therefore, 532 rounded to the nearest ten is 530.

Numeral Cards (Cut and save for
Multiple Activities)

0	1	2	3	4
5	6	7	8	9

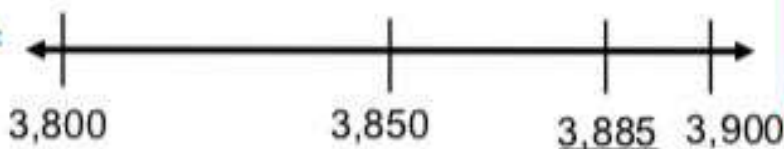
What's the Nearest Hundred?

Materials: set of numeral cards (0-9) or 4 number cubes

3	8	8	5
---	---	---	---

1. Turn over 4 numeral cards (or roll 4 number cubes) to make a 4-digit number.
2. Identify the hundreds that your number falls between. Record the hundreds and the midpoint between them on a number line.
3. Plot your 4-digit number on the number line.^{Text}
4. Which hundred is your number closer to? Justify your reasoning.
5. Repeat five times.
6. Describe any patterns you find to determine when to round to the lesser hundred or round to the next hundred.

Example:



3,885 is between 3,800 and 3,900. It is 85 away from 3,800 and 15 away from 3,900. It is closer to 3,900. Therefore, 3,885 rounded to the nearest hundred is 3,900.

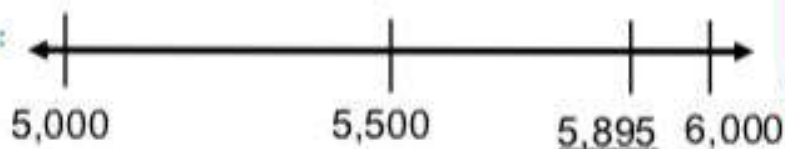
What's the Nearest Thousand?

Materials: set of numeral cards (0-9) or 4 number cubes

5 8 9 5

1. Turn over 4 numeral cards (or roll 4 number cubes) to make a 4-digit number.
2. Identify the thousands that your number falls between. Record the thousands and the midpoint between them on a number line.
3. Plot your 4-digit number on the number line.
4. Which thousand is your number closer to? Justify your reasoning.
5. Repeat five times.
6. Describe any patterns you find to determine when to round to the lesser thousand or round to the next thousand.

Example:



5,895 is between 5,000 and 6,000. It is 895 away from 5,000 and 105 away from 6,000. It is closer to 6,000. Therefore, 5,895 rounded to the nearest thousand is 6,000.

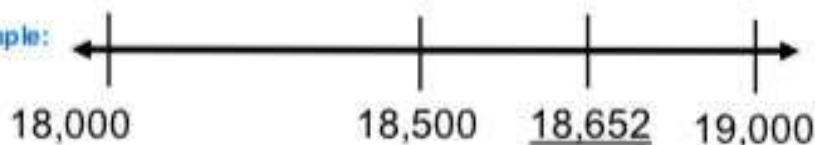
What's the Nearest Ten Thousand?

Materials: set of numeral cards (0-9) or 4 number cubes

1 8 6 5 2

1. Turn over 5 numeral cards (or roll 5 number cubes) to make a 5-digit number.
2. Identify the ten thousands that your number falls between. Record the ten thousands and the midpoint between them on a number line.
3. Plot your 5-digit number on the number line.
4. Which ten thousand is your number closer to? Justify your reasoning.
5. Repeat five times.
6. Describe any patterns you find to determine when to round to the lesser ten thousand or round to the next ten thousand.

Example:



18,652 is between 18,000 and 19,000. It is 652 away from 18,000 and 348 away from 19,000. It is closer to 19,000. Therefore, 18,652 rounded to the nearest ten thousand is 19,000.

Multiplication Race

Materials: gameboard, number cube, one counter per player, calculator

No. of Players: 2-3

1. Each player places a counter on the box marked 'Start'.
2. Take turns to roll a number cube and move forward that number of spaces along the path. Solve the multiplication problem you land on or follow the instruction given.
3. Partners use a calculator to check each other's work. A player who gives an incorrect product must miss a turn.
4. Continue until one player reaches the box marked 'End'.

[illegible]

Multiplication Race

Go back 5	83 x 76	94 x 65	Roll again		End		Start
72 x 65			25 x 34		25 x 29		13 x 12
69 x 76		Miss a turn	36 x 89		Go back 8		21 x 24
58 x 98		47 x 35			94 x 69		34 x 65
47 x 88		58 x 31			83 x 77		45 x 67
35 x 65		Go back 5	69 x 46	72 x 56	Roll again		56 x 51
Go back 4							Go back 3
24 x 57	13 x 70	Roll again	92 x 77	89 x 34	Miss a turn	78 x 52	67 x 49

Who Has the Largest Quotient?

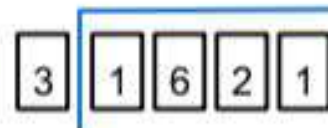


Materials: pack of numeral cards, calculator

Number of Players: 2-3

1. Shuffle the numeral cards. Deal four cards to each player.
2. Each player arranges **three** cards as the dividend and **one** card as the divisor. The goal is to make the largest quotient possible.
3. Write and solve your division problem. Use a calculator to check each other's work.
4. The player with the largest quotient scores one point.
5. Continue play. The first player to score five points wins the game.

Who Has the Largest Quotient?



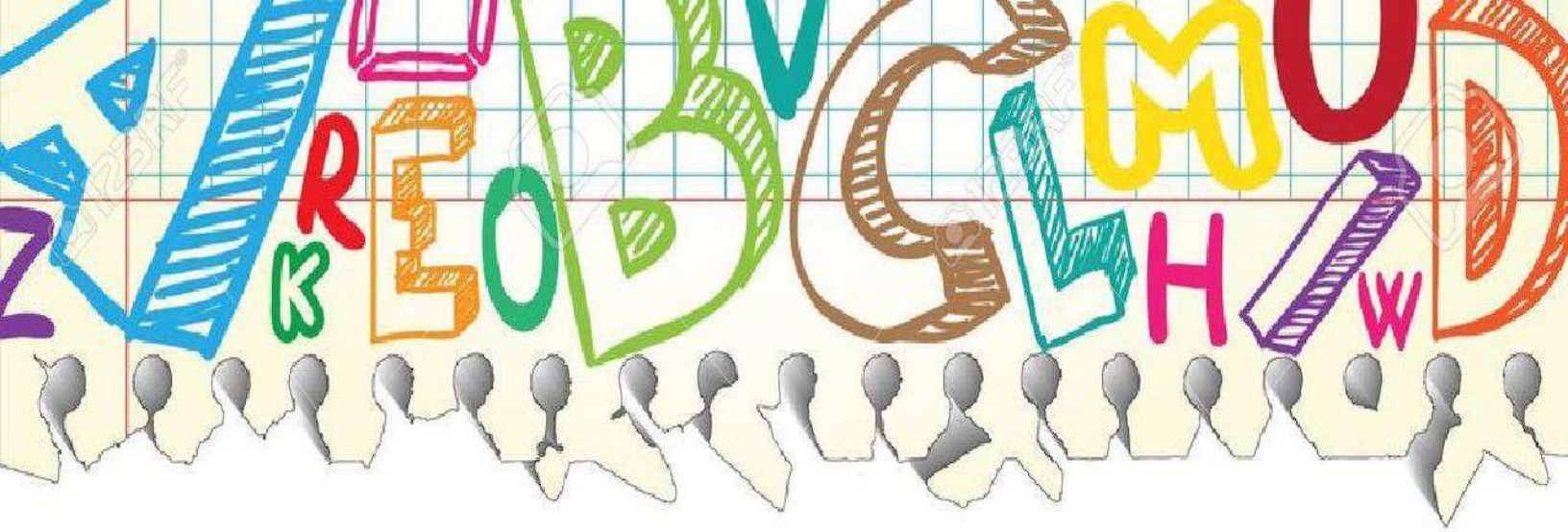
Materials: pack of numeral cards, calculator

Number of Players: 2-3

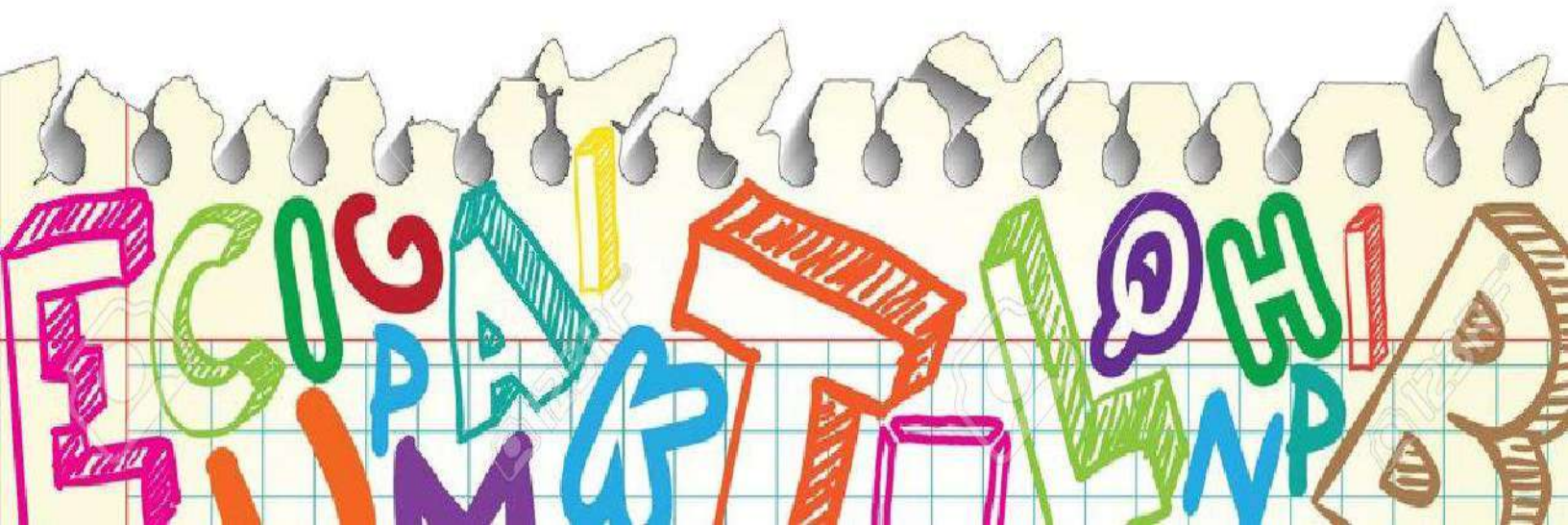
1. Shuffle the numeral cards. Deal four cards to each player.
2. Each player arranges **four** cards as the dividend and **one** card as the divisor. The goal is to make the largest quotient possible.
3. Write and solve your division problem. Use a calculator to check each other's work.
4. The player with the largest quotient scores one point.
5. The first player to score five points wins the game.

EXTRA Numeral Cards (Cut and save
for Multiple Activities)

0	1	2	3	4
5	6	7	8	9



Math Answer Key



4-1 Practice

Name _____

Date _____

Simplify each expression.

1 $13x - 9x = \underline{4x}$

2 $5p + p = \underline{6p}$

3 $17t - t = \underline{16t}$

4 $c + 6c + c = \underline{8c}$

5 $(6y - 2y) - y = \underline{3y}$

6 $q + 99q = \underline{100q}$

7 $17 - (8 - 3) = \underline{12}$

8 $(800 - 300) - 300 = \underline{200}$

9 $50 - (30 - 1) = \underline{21}$

10 $35 \div (21 \div 3) = \underline{5}$

11 $(48 \div 6) \div 4 = \underline{2}$

12 $64 \div (56 \div 7) = \underline{8}$

13 $(24 \div 8) \cdot (16 - 7) = \underline{27}$

14 $(25 - 7) \div (15 - 9) = \underline{3}$

15 $(16 + 20) - (42 \div 7) = \underline{30}$

16 $(18 + 27) \div (15 - 6) = \underline{5}$

Evaluate.

17 $m = 5$

$3 \cdot (12 - m)$

21

18 $c = 3$

$(72 \div 9) \cdot (c + 2)$

40

19 $b = 9$

$(21 \div 3) \cdot b$

63

20 $v = 5$

$(30 \div 53) \cdot (v - 5)$

0

21 $d = 12$

$54 \div (d - 6)$

9

22 $r = 15$

$(r + 5) \div (6 - 2)$

5

23 $w = 7$

$(3 + w) + (26 - 8)$

28

24 $h = 2$

$(6 \cdot 3) \div h$

9

25 $r = 1$

$(99 + r) \div (24 - 19)$

20

Solve for $\square$ or n .

26 $5 \cdot (10 - 4) = 5 \cdot \square$

$\square = \underline{6}$

27 $(6 + 4) \cdot 3 = \square \cdot 3$

$\square = \underline{10}$

28 $8 \cdot (3 + 3) = \square \cdot 6$

$\square = \underline{8}$

29 $(4 - 4) \cdot 11 = n$

$n = \underline{0}$

30 $(25 - 4) \div 7 = n$

$n = \underline{3}$

31 $(27 \div 9) \cdot (11 - 2) = n$

$n = \underline{27}$

4-2 Practice

Name _____

Date _____

Write = or $\neq$ to make each statement true.

1 $4 + 7 + 6$ $\neq$ $8 + 9$

2 90 $\neq$ $130 - 50$

3 90 $\neq$ $45 + 55$

4 50 $\neq$ $72 - 22$

5 $11 + 7 + 2$ $\neq$ 30

6 $29 - 12$ $\neq$ $14 + 3$

7 $98 + 22$ $\neq$ 120

8 55 $\neq$ $100 - 35$

9 50 $\neq$ $10 + 10 + 20$

- 10 Write the eight related addition and subtraction equations for the break-apart drawing.



$$37 = 13 + 24$$

$$37 = 24 + 13$$

$$13 = 37 - 24$$

$$24 = 37 - 13$$

$$13 + 24 = 37$$

$$24 + 13 = 37$$

$$37 - 24 = 13$$

$$37 - 13 = 24$$

Write an equation to solve the problem. Draw a model if you need to. *Show your work.*
Equations may vary. Check students' models.

- 11 There were some people at the softball game. Then 185 people went home. Now 368 people are left at the game. How many people were at the game to start?

$$p - 185 = 368; p = 368 + 185;$$

$$p = 553; 553 \text{ people}$$

- 12 In two weeks, a new song has been downloaded 7,700 times. The first week, it was downloaded 2,177 times. How many times was it downloaded the second week?

$$2,177 + d = 7,700; d = 7,700 - 2,177;$$

$$d = 5,523; 5,523 \text{ times}$$

4-3 Practice

Name _____

Date _____

- 1 Write the eight related multiplication and division equations for the rectangle model below.



$$85 = 17 \times 5$$

$$17 \times 5 = 85$$

$$85 = 5 \times 17$$

$$5 \times 17 = 85$$

$$17 = 85 \div 5$$

$$85 \div 5 = 17$$

$$5 = 85 \div 17$$

$$85 \div 17 = 5$$

Solve each equation.

2 $r = 300 \div 5$

$r = 60$

3 $9 \times d = 63$

$d = 7$

4 $60 \div 10 = n$

$n = 6$

5 $190 = 10 \times m$

$m = 19$

6 $112 = 8 \times c$

$c = 14$

7 $450 \div q = 9$

$q = 50$

Write an equation to solve the problem. Draw a model if you need to. Equations may vary. Check students' models.

Show your work.

- 8 Dawn bought some tomato plants to plant in her garden. Each plant costs \$7. If Dawn spent \$126 in all, how many tomato plants did she buy?

$p \times 7 = 126; p = 126 \div 7;$

$p = 18; 18 \text{ tomato plants}$

- 9 Lucas has 315 soccer cards in stacks of 9 cards each. How many stacks of cards did Lucas make?

$s = 315 \div 9; s = 35; 35 \text{ stacks}$

- 10 Each painting class at a city art center can have 24 students. If all 15 classes are full, how many people are taking painting classes?

$15 \times 24 = p; 15 \times 24 = 360$

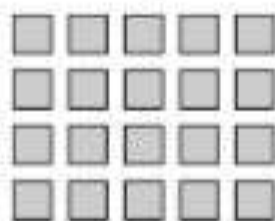
$p = 360; 360 \text{ people}$

4-4
Practice

Name _____

Date _____

Use the shapes to answer Exercises 1–4.



- 1 How many squares? How many triangles?

20 squares; 5 triangles

- 2 Because $5 \times \underline{4} = 20$, there are 4 times as many squares as triangles.

- 3 Write a multiplication equation that compares the number of squares s to the number of triangles t .

$s = 4t$

- 4 Write a division equation that compares the number of triangles t to the number of squares s .

$t = s \div 4$

Solve each comparison problem.

- 5 Summerville Community College has 5,600 students. This is 7 times as many students as Summerville High School has. How many students attend Summerville High School?

$7s = 5,600$, or $5,600 \div 7 = s$; $s = 800$; 800 students

- 6 Art club has 27 students. Astronomy club has 9 students. How many times as many students are in art club than astronomy club?

$s \times 9 = 27$, or $27 \div 9 = s$; $s = 3$; 3 times as many students

Use an equation to solve.

Show your work.

- 1 A.J. took 74 pictures during the school year and 130 pictures on his summer vacation. He wants to make a photo album with 6 pictures on each page. How many pages will he need?

$(74 + 130) \div 6 = p; p = 34; 34 \text{ pages}$

- 2 The auditorium at Coleman Elementary School has 24 rows of seats with 36 seats in each row. When all the students in the school are seated in the auditorium, there are 55 empty seats. How many students go to the school?

$24 \times 36 - 55 = s; s = 809; 809 \text{ students}$

- 3 Of the 156 girls who signed up for volleyball camp, 24 did not show up. The remaining girls were divided into teams of 6. How many teams were there?

$(156 - 24) \div 6 = t; t = 22; 22 \text{ teams}$

- 4 A family of 5 people went to an amusement park. Admission tickets cost \$29 each. The family also spent \$78 on food, drinks, and souvenirs. What total amount did the family spend for their day at the amusement park?

$5 \times 29 + 78 = t; t = 223; \223

- 5 A bike store pays \$4,860 for 36 bikes. Then the store sells the bikes for \$187 each. How much profit does the store make from selling the bikes?

$36 \cdot 187 - 4,860 = p; p = 1,872; \$1,872$

4-8
Practice

Name _____

Date _____

Use an equation to solve.

Show your work.

- 1 Emilia and Jake collect stamps. Emilia has 78 U.S. stamps and 36 stamps from other countries. Jake has 32 U.S. stamps and 53 stamps from other countries. How many more stamps does Emilia have than Jake?

$$(78 + 36) - (32 + 53) = s; s = 29; 29 \text{ more stamps}$$

- 2 Students traveled to the natural history museum in 4 buses. There were 54 students on each bus. When they arrived at the museum, 32 students went directly to the dinosaur exhibit. The other students were divided into 8 equal groups for guided tours. How many students were in each tour group?

$$(4 \times 54 - 32) \div 8 = s; s = 23; 23 \text{ students}$$

- 3 A store buys 36 small hats for \$5 each and 48 large hats for \$7 each. The store will sell the hats for \$15 each, no matter what size they are. If the store sells all the hats, how much profit will it make?

$$(36 + 48) \times 15 - (36 \times 5 + 48 \times 7) = p; p = 744; \$744$$

- 4 Wendy makes stuffed animals to sell at craft fairs. She can make 2 bears from each yard of brown fabric, and 3 rabbits from each yard of gray fabric. She uses 2 plastic eyes for each animal. She has 16 yards of brown fabric and 12 yards of gray fabric. If she makes all the animals she can from this fabric, how many plastic eyes will she need?

$$(16 \times 2 + 12 \times 3) \times 2; 136 \text{ plastic eyes}$$

- 5 There are 288 children at camp. There are 2 counselors for every 9 children. There are 12 additional counselors to help with canoeing classes and swimming lessons. How many counselors are there in all?

$$288 \div 9 \times 2 + 12 = c; c = 76; 76 \text{ counselors}$$

**4-10
Practice**

Name _____

Date _____

List all the factor pairs for each number.

1 28

1 and 28; 2 and 14; 4 and 7

2 25

1 and 25; 5 and 5

3 31

1 and 31

4 32

1 and 32; 2 and 16; 4 and 8Write whether each number is *prime* or *composite*.

5 70

composite

6 43

prime

7 33

composite

8 49

composite

9 19

prime

10 51

compositeTell whether 8 is a factor of each number. Write *yes* or *no*.

11 8

yes

12 60

no

13 32

yes

14 56

yesTell whether each number is a multiple of 6. Write *yes* or *no*.

15 24

yes

16 30

yes

17 48

yes

18 16

no

Use the rule to complete the pattern.

19 Rule: skip count by 7

7, 14, 21, 28, 35, 42, 49, 56, 63

20 Rule: skip count by 12

12, 24, 36, 48, 60, 72, 84, 96, 108, 120

21 Rule: skip count by 6

6, 12, 18, 24, 30, 36, 42, 48, 54, 60

4-11 Practice

Name _____

Date _____

Use the rule to find the next three terms in the pattern.

- ① 1, 4, 16, 64, ...

Rule: multiply by 4

256, 1,024, 4,096

- ② 65, 90, 115, 140, 165, ...

Rule: add 25

190, 215, 240

Use the rule to find the first ten terms in the pattern.

- ③ First term: 184 Rule: subtract 11

184, 173, 162, 151, 140, 129, 118, 107, 96, 85

Make a table to solve.

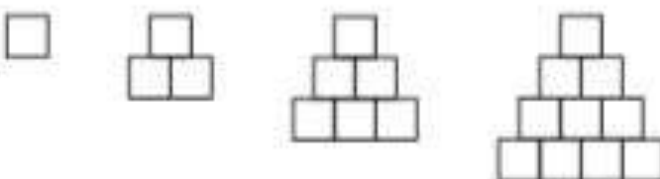
- ④ Marshall earned \$9 per hour the first year he worked at ACME, Inc. He earned \$10 per hour the second year, \$12 the third year, \$15 the fourth year, and \$19 the fifth year. If this pattern continues, how much will he earn the tenth year?

\$54 per hour

Describe the next term of each pattern.

- ⑤ 

The next term is a lower-case b.

- ⑥ 

The next term looks like the fourth term with a row of 5 squares on the bottom.

2-18
Practice

Name _____

Date _____

Solve using any method and show your work. Check your work with estimation.

① 4×67

268

② 39×58

2,262

③ $6 \times 5,826$

34,956

④ 59

$\times 7$

413

⑤ 418

$\times 9$

3,762

⑥ 84

$\times 78$

6,552

⑦ 26

$\times 63$

1,638

⑧ $5,595$

$\times 5$

27,975

⑨ 922

$\times 4$

3,688

Solve.

- ⑩ Ms. Chandler leaves her dog Daisy in a fancy pet hotel when she goes on vacation. The hotel costs \$42 each night. If she leaves Daisy at the hotel for 14 nights, how much will it cost?

\$588

- ⑪ At a movie premier, stars walk on a red carpet that is 9 feet wide and 298 feet long. What is the area of the red carpet?

2,682 square feet

2-19
Practice

Name _____

Date _____

Solve using any method and show your work. Check your work with estimation.

$$\begin{array}{r} 1 \quad 7 \times 62 \\ \hline 434 \end{array}$$

$$\begin{array}{r} 2 \quad 43 \times 73 \\ \hline 3,193 \end{array}$$

$$\begin{array}{r} 3 \quad 8 \times 4,668 \\ \hline 37,344 \end{array}$$

$$\begin{array}{r} 4 \quad 97 \\ \times 5 \\ \hline 485 \end{array}$$

$$\begin{array}{r} 5 \quad 324 \\ \times 8 \\ \hline 2,592 \end{array}$$

$$\begin{array}{r} 6 \quad 57 \\ \times 43 \\ \hline 2,451 \end{array}$$

$$\begin{array}{r} 7 \quad 23 \\ \times 94 \\ \hline 2,162 \end{array}$$

$$\begin{array}{r} 8 \quad 7,391 \\ \times 6 \\ \hline 44,346 \end{array}$$

$$\begin{array}{r} 9 \quad 834 \\ \times 6 \\ \hline 5,004 \end{array}$$

Solve.

- 10 A university marching band marches in 18 rows with 14 band members in each row. How many band members are there in all?

252 band members

- 11 A gardener plants tulip bulbs in rows. He plants 28 rows of tulip bulbs with 24 bulbs in each row. How many tulip bulbs did the gardener plant?

672 tulip bulbs

3-11
Practice

Name _____

Date _____

Divide.

$$\textcircled{1} \quad \overset{81 \text{ R1}}{3 \overline{)244}}$$

$$\textcircled{2} \quad \overset{711 \text{ R3}}{5 \overline{)3,558}}$$

$$\textcircled{3} \quad \overset{121 \text{ R6}}{8 \overline{)974}}$$

$$\textcircled{4} \quad \overset{734 \text{ R2}}{4 \overline{)2,938}}$$

$$\textcircled{5} \quad \overset{161}{6 \overline{)966}}$$

$$\textcircled{6} \quad \overset{64 \text{ R3}}{7 \overline{)451}}$$

$$\textcircled{7} \quad \overset{659}{3 \overline{)1,977}}$$

$$\textcircled{8} \quad \overset{823 \text{ R2}}{5 \overline{)4,117}}$$

$$\textcircled{9} \quad \overset{477 \text{ R1}}{2 \overline{)955}}$$

Solve.

Show your work.

- $\textcircled{10}$ Tyesha makes mosaics from colored tiles. She has 1,152 tiles in 8 colors. She has the same number of tiles of each color. How many tiles of each color does she have?

144 tiles

- $\textcircled{11}$ Jeff is packing boxes of supplies for hurricane victims. He puts 5 bottles of water in each box. If he has 878 bottles of water, how many boxes can he fill? How many bottles will be left over?

175 boxes; 3 bottles left over

The town of Oakville has a summer day camp for elementary school students.

Use the correct operation or combination of operations to solve each problem.

Show your work.

- 1 Campers are divided into groups by age. There are 4 groups of 9-year-olds with 16 students in each group. There are 5 groups of 10-year-olds with 15 students in each group. How many campers are 9 or 10 years old?

$$4 \times 16 = 64; 5 \times 15 = 75;$$

$$64 + 75 = 139; 139 \text{ campers}$$

- 2 There were 55 girls and 41 boys who wanted to play kickball. They divided into teams of 8 for a kickball tournament. How many teams did they make?

$$55 + 41 = 96; 96 \div 8 = 12; 12 \text{ teams}$$

- 3 Each camper who took ceramics classes made 6 bowls. Unfortunately, 16 of the bowls broke. If there were 308 unbroken bowls, how many campers took ceramics classes?

$$308 + 16 = 324; 324 \div 6 = 54; 54 \text{ campers}$$

- 4 Campers who took drama classes put on a performance at the end of the summer. In the audience there were 12 rows with 16 seats in each row. Every seat was full, plus there were 19 people standing. How many people came to the performance?

$$12 \times 16 = 192; 192 + 19 = 211; 211 \text{ people}$$

6-5 Practice

Name _____

Date _____

Add.

$$\begin{array}{r} 1\frac{3}{8} \\ + 2\frac{2}{8} \\ \hline 3\frac{5}{8} \end{array}$$

$$\begin{array}{r} 3\frac{4}{5} \\ + 2\frac{3}{5} \\ \hline 6\frac{7}{5} \end{array}$$

$$\begin{array}{r} 4\frac{1}{2} \\ + 4\frac{1}{2} \\ \hline 9 \end{array}$$

$$\begin{array}{r} 4\frac{6}{10} \\ + 3\frac{7}{10} \\ \hline 8\frac{3}{10} \end{array}$$

$$\begin{array}{r} 6\frac{5}{6} \\ + 9\frac{5}{6} \\ \hline 16\frac{4}{6} \end{array}$$

$$\begin{array}{r} 2\frac{1}{4} \\ + 5\frac{3}{4} \\ \hline 8 \end{array}$$

Subtract.

$$\begin{array}{r} 5\frac{4}{5} \\ - 1\frac{1}{5} \\ \hline 4\frac{3}{5} \end{array}$$

$$\begin{array}{r} 6\frac{3}{8} \\ - 3\frac{5}{8} \\ \hline 2\frac{6}{8} \end{array}$$

$$\begin{array}{r} 4\frac{1}{6} \\ - 3\frac{5}{6} \\ \hline 2\frac{6}{6} \end{array}$$

$$\begin{array}{r} 4\frac{3}{10} \\ - 1\frac{7}{10} \\ \hline 2\frac{6}{10} \end{array}$$

$$\begin{array}{r} 10\frac{5}{12} \\ - 2\frac{3}{12} \\ \hline 8\frac{2}{12} \end{array}$$

$$\begin{array}{r} 7\frac{1}{3} \\ - 1\frac{2}{3} \\ \hline 5\frac{2}{3} \end{array}$$

Add or subtract.

$$13 \quad \frac{3}{5} + \frac{8}{5} = \underline{1\frac{11}{5}}$$

$$14 \quad \frac{7}{10} + \frac{9}{10} = \underline{1\frac{16}{10}}$$

$$15 \quad \frac{12}{5} - \frac{3}{5} = \underline{2\frac{9}{5}}$$

$$16 \quad \frac{5}{8} + \frac{7}{8} = \underline{1\frac{12}{8}}$$

$$17 \quad \frac{7}{4} + \frac{5}{4} = \underline{2\frac{12}{4}}$$

$$18 \quad \frac{7}{2} - \frac{3}{2} = \underline{2\frac{4}{2}}$$

$$19 \quad \frac{3}{4} + \frac{3}{4} = \underline{1\frac{6}{4}}$$

$$20 \quad \frac{13}{8} - \frac{3}{8} = \underline{1\frac{10}{8}}$$

$$21 \quad \frac{7}{6} - \frac{2}{6} = \underline{1\frac{5}{6}}$$

6-6 Practice

Name _____

Date _____

Write each mixed number as a fraction.

1 $4\frac{4}{5} = \underline{\frac{24}{5}}$

2 $10\frac{2}{3} = \underline{\frac{32}{3}}$

3 $3\frac{2}{5} = \underline{\frac{17}{5}}$

4 $3\frac{5}{8} = \underline{\frac{29}{8}}$

Write each fraction as a mixed number.

5 $\frac{21}{5} = \underline{4\frac{1}{5}}$

6 $\frac{35}{6} = \underline{5\frac{5}{6}}$

7 $\frac{70}{8} = \underline{8\frac{6}{8}}$

8 $\frac{93}{10} = \underline{9\frac{3}{10}}$

Add or subtract.

9 $\frac{4}{5} + \frac{4}{5} = \underline{\frac{8}{5}}$

10 $\frac{7}{8} - \frac{2}{8} = \underline{\frac{5}{8}}$

11 $1\frac{4}{5} + \frac{3}{5} = \underline{2\frac{2}{5}}$

12 $\frac{2}{3} + 7\frac{2}{3} = \underline{8\frac{1}{3}}$

13 $4\frac{5}{12} - 1\frac{11}{12} = \underline{2\frac{6}{12}}$

14 $\frac{7}{10} - \frac{4}{10} = \underline{\frac{3}{10}}$

15 $5\frac{5}{9} - 4\frac{8}{9} = \underline{\frac{6}{9}}$

16 $2\frac{1}{6} + 3\frac{5}{6} = \underline{6}$

17 $9\frac{3}{4} - 5\frac{1}{4} = \underline{4\frac{2}{4}}$

Solve.

Show your work.

- 18 Matt ran $8\frac{1}{4}$ miles this weekend. He ran $3\frac{2}{4}$ miles on Saturday. How far did he run on Sunday?

$4\frac{3}{4}$ miles

- 19 Ellie mixed $1\frac{2}{3}$ cups of apple juice with $\frac{2}{3}$ cup of cranberry juice. How many cups of apple-cranberry juice did she make?

$2\frac{1}{3}$ cups