

Summer is here!



Dear Families,

As you know, it is important to continue to review and practice the concepts and skills learned during the 2023-2024 school year.

The ELA summer work contains a reading list with discussion topics and activities. Students can choose a minimum of two books and complete the discussion and text activities.

The Religion summer work is a Mass Parts - Call and Response packet. Remember, we don't take a break from our Sunday obligations and Mass requires active participation. You can use the recorded live streams as a resource.

All work should be turned in during the first week of school.


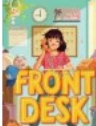


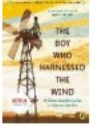

Have a safe and wonderful summer!

Best Wishes,

Mrs. Bachu



Grade 5

Text	Summary	Let's Talk about it	Text Activities
 <p><i>Home Court, STAT-Amar'e Stoudemire</i></p>	<p>Eleven-year-old Amar'e Stoudemire has a lot going on. He loves to go skateboarding in the park. He takes his schoolwork very seriously. When a group of older kids start disrespecting his boys on their neighborhood basketball court, there is only one solution.</p>	<ul style="list-style-type: none"> • <i>Why does his dad call him STAT? Describe their relationship.</i> • <i>Describe Amar'e using 5 character traits. Add examples from the text to support them</i> • <i>Why doesn't Amar'e want to do just 1 sport?</i> 	<ul style="list-style-type: none"> • Pick a chapter in the text and identify the figurative language used • The text is based on Stoudemire's life. Research his biography and compare the texts. Are they similar?
 <p><i>Front Desk (Kelly Yang)</i></p>	<p>Mia Tang has a lot of secrets. She lives in a motel, not a big house. Every day, ten-year-old Mia manages the front desk of the Calivista Motel and tends to its guests. It will take all of Mia's courage, kindness, and hard work to get through this year.</p>	<ul style="list-style-type: none"> • <i>The author uses foreshadowing in the beginning of the text. Provide an example.</i> • <i>What are some examples of unfair situations that Mia encounters? How would you handle these situations? Do you agree with how Mia handles them?</i> 	<ul style="list-style-type: none"> • Mia connects to music. Describe a song that you have a connection to. • Mia bonds with the weeklies playing Monopoly. Plan a family game night. • Describe holidays or celebrations that are unique to your family or culture.
 <p><i>Tiger Rising (Kate Dicamillo)</i></p>	<p>Walking in the woods one morning, Rob Horton is stunned to encounter a tiger pacing in a cage. On the same day, he meets Sistine, a girl who shows her feelings as readily as Rob hides his. Rob and Sistine prove that some things, like memories, heartache, and tigers, can't be locked up forever.</p>	<ul style="list-style-type: none"> • <i>Compare Rob and Sistine. How do you think their differences help their friendship?</i> • <i>Do you think the adults in Rob's life act responsibly toward him? Explain.</i> • <i>How does Willie May play an important role in Rob and Sistine's lives?</i> 	<ul style="list-style-type: none"> • Do you agree with the outcome for the tiger? Write a pro/ con argument. • Select quotes from the book that you feel best describe the theme. • View the Sistine Chapel, that Sistine was named for, using a virtual tour
 <p><i>Gabby Garcia's Ultimate Playbook (Iva Palmer)</i></p>	<p>If life were a baseball game, Gabby would be having her Best. Season. Until she's suddenly sent to another school and her winning streak is about to disappear both on and off the field. But Gabby never gives up! She has a PLAN to keep her champion status intact. How could it not work?</p>	<ul style="list-style-type: none"> • <i>How does the format of the book impact the reader's understanding of the story?</i> • <i>Describe Gabby's personality. How did it affect her experience at her new school?</i> • <i>How does Gabby work to solve the problems that she faces in the text?</i> 	<ul style="list-style-type: none"> • Use the same style as the text to create your own "play book" for a scenario in your life. • Describe a scenario where something changed significantly in your life. How did you react to this change?
 <p><i>The Boy Who Harnessed the Wind: Young Readers Edition</i></p>	<p>When a terrible drought struck William Kamkwamba's village, his family lost all of the season's crops, leaving them with nothing to eat and nothing to sell. William began to explore books in his village library, looking for a solution. There, he came up with the idea that would change everything: he could build a windmill.</p>	<ul style="list-style-type: none"> • <i>What obstacles does William face to access basic needs such as food, water, education? How does it affect the community?</i> • <i>Why does William want to be scientist?</i> • <i>How does the community react to William gathering materials for his invention?</i> • <i>How did this invention change William's life?</i> 	<ul style="list-style-type: none"> • Research the economy, health care, and education in Malawi. Describe how this impacts villages /families. • Consider the needs in your community. What would be built or invented that would make the community better?
 <p><i>The Last Day of Summer (Lamar Giles)</i></p>	<p>Otto and Sheed are masters of unraveling mischief. As the first day of school looms, the boys are craving more time for fun until a man appears with a camera that freezes time. With the help of some strange people and even stranger creatures, they will have to put aside their differences to save their town before time stops for good.</p>	<ul style="list-style-type: none"> • <i>What successes have the boys had in the past? Why is this important to the story?</i> • <i>How are the boys different? How does this make them a better team?</i> • <i>What events caused the occurrence of other events in the story? Make a chart to show.</i> 	<ul style="list-style-type: none"> • Write your own wacky adventure story for the last day of summer. • Even with a fun and fast-moving plot, the author communicated themes and lessons. What were they are how can they apply to your own life?

Name _____

Date _____

Mass Parts – Call and Response

Directions – For each response, please fill in the blanks.

GREETING

Congregation begins with the sign of the cross.

Priest: The Lord be with you.

Response: _____

PENITENTIAL ACT

Priest: Lord, have mercy.

Response: Lord, _____ .

Priest: Christ, have mercy.

Response: _____, **have mercy.**

Priest: Lord, have mercy.

Response: _____, _____ .

Priest: ...bring us to everlasting life.

Response: _____ .

OPENING PRAYER

Priest: Let us pray...one God forever and ever.

Response: _____ . (Congregation sits)

LITURGY OF THE WORD

FIRST READING

Lector/Reader: The Word of the Lord.

Response: _____ .

RESPONSORIAL PSALM

Cantor leads the congregation in song.

SECOND READING

Lector/Reader: The Word of the Lord.

Response: _____ .

ALLELUIA OR GOSPEL ACCLAMATION

Congregation sings Alleluia and stands.

GOSPEL

Priest: The Lord be with you.

Response: And _____ .

Priest: The Gospel according to

Response: _____ to you, _____ (make the sign of the cross to your head, lips, and heart)

Priest: This is the Gospel of the Lord.

Response: _____ to you, Lord _____ . (congregation sits)

HOMILY

Priest gives their analysis based on the gospel reading.

PRAYER OF THE FAITHFUL

Reader: We pray to the Lord.

Response: Lord, _____ .

LITURGY OF THE EUCHARIST

PREPARATION OF THE ALTAR AND THE GIFTS

Congregation sits, listens to the presentation song and preparation of gifts.

Priest: Pray, brothers and sisters, that my sacrifice and yours may be acceptable to God, the almighty father.

Response: May the _____ accept the _____ at your _____ for the _____ and _____ of his _____, for our _____ and the good of all his _____. (congregation stands)

EUCHARISTIC PRAYER

Priest: The Lord be with you.

Response: And _____ .

Priest: Lift up your hearts.

Response: We lift _____ .

Priest: Let us give thanks to the Lord our God.

Response: It is _____ and _____ .

RITE OF PEACE

Priest: Who live and reign forever and ever.

Response: _____

Priest: The peace of the Lord be with you always.

Response: _____ .

COMMUNION

Priest: ...Blessed are those who are called to the supper of the lamb.

Response: Lord, I am not _____ that you should enter _____ my _____, but only say the _____ and my _____ shall be _____.

COMMUNION SONG

When taking communion, remember to not speak in line. After receiving the host (bread), be sure to give the sign of the cross and say '**Amen**'. Receiving the blood (wine) is optional. You **must** remain standing when returning to your seat. This is a reflective time between you and God. Take those precious moments 😊

PRAYER AFTER COMMUNION

Priest: Let us pray (small prayer).

Response: _____.

CONCLUDING RITE

Priest: The Lord be with you.

Response: _____ with your _____.

BLESSING

Priest: May almighty God bless you...

Response: Make the sign of the cross and say Amen

DISMISSAL

Priest: Go in peace to love and serve the Lord.

Response: _____ be to _____.

Hooray! You have made it through Mass. Use this as guide for future liturgies.

This Summer Math Packet is for all students who will be entering 5th grade in the Fall of 2024. It is our hope that the summer packet will be a great place to start practicing routines and implementing expectations for Fifth Grade. This packet contains review of Fourth Grade concepts and readiness for Grade 5. The attached work should be completed over the course of the summer. It is not to be done in one sitting. Some of the problems in the packet will be easy, and others more challenging. It should be returned to your child's teacher upon the first day of returning to school. Looking forward to a productive and enjoyable school year. Thank you in advance for entrusting us with one of your most precious gifts. **HAVE A WONDERFUL SUMMER!**

Este paquete de matemáticas de verano es para todos los estudiantes que estarán ingresando a 5to grado en el otoño de 2024. Esperamos que el paquete de verano será un excelente lugar para comenzar a practicar rutinas e implementar expectativas para quinto grado, este paquete contiene una revisión de los conceptos de cuarto grado y la preparación para Grado 5. El trabajo adjunto deberá completarse en el transcurso del verano. No debe hacerse de una sola vez. Algunos de los problemas en el paquete serán fáciles, y otros más desafiantes. Debe devolverse al maestro de su hijo el primer día de regreso a la escuela. Esperamos tener un año escolar productivo y agradable. Gracias de antemano por confiarnos uno de sus más regalos preciosos.
¡TENGA UN VERANO MARAVILLOSO!

Name: _____

SURFING YOUR WAY TO
FIFTH GRADE

2024



Multiplication Drill

1) $5 \times 3 =$ 2) $3 \times 12 =$

3) $11 \times 6 =$ 4) $1 \times 9 =$

5) $6 \times 7 =$ 6) $8 \times 4 =$

7) $7 \times 10 =$ 8) $10 \times 6 =$

9) $12 \times 11 =$ 10) $4 \times 7 =$

11) $2 \times 9 =$ 12) $11 \times 7 =$

13) $8 \times 7 =$ 14) $7 \times 9 =$

15) $6 \times 3 =$ 16) $5 \times 8 =$

17) $3 \times 4 =$ 18) $1 \times 3 =$

19) $12 \times 5 =$ 20) $8 \times 8 =$

21) $9 \times 11 =$ 22) $5 \times 4 =$

23) $4 \times 9 =$ 24) $7 \times 7 =$

25) $6 \times 8 =$

Digit Values

What is the value of the underlined digit?

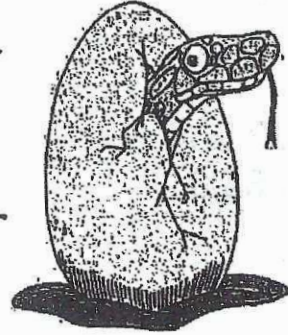
32,814 - The value of the digit 3 is **3 ten-thousands**, or **30,000**.

32,814 - The value of the digit 2 is **2 thousands**, or **2,000**.

32,814 - The value of the digit 8 is **8 hundreds**, or **800**.

32,814 - The value of the digit 1 is **1 tens**, or **10**.

32,814 - The value of the digit 4 is **4 ones**, or **4**.



Write the value of the underlined digit.

a. 53,759 - _____

b. 26,726 - _____

c. 2,561 - _____

d. 84,509 - _____

e. 90,014 - _____

f. 61,099 - _____

g. 54,530 - _____

h. 92,302 - _____

i. In the number 21,354, which digit has the greatest value?

j. In the number 76,129, which digit has the least value?

k. What is the value of the digit in the thousands place of the number 76,129?

Adding 5 & 6 digit numbers in columns

Grade 4 Addition Worksheet

Find the sum.

$$\begin{array}{r} 1. \quad 27,234 \\ + 95,201 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 640,291 \\ + 878,141 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 952,575 \\ + 83,392 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 528,593 \\ + 96,177 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 620,996 \\ + 812,712 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 888,435 \\ + 102,850 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 581,354 \\ + 158,414 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 191,191 \\ + 607,475 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 487,693 \\ + 180,034 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 273,119 \\ + 205,411 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 964,562 \\ + 974,966 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 838,095 \\ + 30,477 \\ \hline \\ \hline \end{array}$$

Subtracting 5 & 6 digit numbers

Grade 4 Subtraction Worksheet

Find the difference.

$$\begin{array}{r} 1. \quad 74,765 \\ - 26,591 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 822,450 \\ - 80,124 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 71,224 \\ - 24,433 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 899,394 \\ - 17,954 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 964,978 \\ - 961,233 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 993,563 \\ - 796,376 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 221,162 \\ - 36,018 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 843,281 \\ - 44,189 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 48,446 \\ - 42,029 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 586,369 \\ - 41,860 \\ \hline \\ \hline \end{array}$$

Subtracting - borrowing across three zeros

Grade 4 Subtraction Worksheet

Find the difference.

$$\begin{array}{r} 1. \quad 26,000 \\ - \quad 1,845 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 26,000 \\ - \quad 6,062 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 29,000 \\ - \quad 5,626 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 78,000 \\ - \quad 4,452 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 91,000 \\ - \quad 7,685 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 12,000 \\ - \quad 9,074 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 66,000 \\ - \quad 8,741 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 46,000 \\ - \quad 2,798 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 40,000 \\ - \quad 6,348 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 83,000 \\ - \quad 7,703 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 26,000 \\ - \quad 1,986 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 93,000 \\ - \quad 9,521 \\ \hline \\ \hline \end{array}$$

A Rounding Exercise

Round to the nearest ten.

a. 308 _____

b. 4,172 _____

c. 3,995 _____

d. 31,236 _____

Round to the nearest hundred.

e. 3,451 _____

f. 6,009 _____

g. 17,127 _____

h. 9,999 _____

Round to the nearest thousand.

i. 609 _____

j. 8,500 _____

k. 150 _____

l. 21,544 _____

- m. Kendra ran around the school track three times. The track is 405 meters around. Find the total number of meters she ran. Then round the answer to the nearest hundred.

total distance: _____ meters

rounded to nearest hundred: _____ meters

- n. Martin lifted dumbbells in the gym, on Monday through Friday, for twenty weeks. Each day he did 25 repetitions. How many repetitions did he do over the course of twenty weeks? Then round the answer to the nearest thousand.

total repetitions: _____

rounded to nearest thousand: _____



Rounding Whole Numbers

Name: _____

Round each number to the nearest ten.

1 72

2 172

3 2,572

4 101,372

Round each number to the nearest hundred.

5 180

6 1,180

7 56,180

8 980

9 1,980

10 56,980

Round each number to the nearest thousand.

11 7,750

12 17,750

13 25,750

14 70,750

Round each number to the nearest ten thousand.

15 65,321

16 165,321

17 185,321

18 205,321

19 Round 307,451 to each place value given below.

to the nearest thousand: _____

to the nearest hundred: _____

to the nearest ten: _____

Comparing Six-Digit Numbers

Part 1: Write $<$, $>$, or $=$ on each line.

- a. 254,789 _____ 254,879 b. 545,454 _____ 454,545 c. 134,312 _____ 134,312
d. 778,003 _____ 778,030 e. 32,999 _____ 102,033 f. 676,777 _____ 667,798
g. 898,820 _____ 99,929 h. 344,280 _____ 340,289 i. 34,559 _____ 304,559
j. 817,300 _____ 817,300 k. 690,609 _____ 609,690 l. \$100,020 _____ \$100,200

Part 2: On each line, write out the words, "is greater than," "is less than," or "is equal to."

- m. 789,224 _____ 789,224
n. 154,000 _____ 145,000
o. 456,929 _____ 456,992
p. \$515,013 _____ \$59,013
q. 815,789 _____ 851,709



Part 3: Circle the greater amount in each pair.

- r. 245,611 254,600 s. 470,009 48,090 t. 344,002 340,009

Part 4: Read and answer the questions.

- u. There are 686,923 people living in Alaska.
There are 873,092 people living in Delaware.
Which state has the greater population?

- v. The size of Texas is 268,581 square miles.
Minnesota is 86,939 square miles.
Which state has a smaller area?

- w. The distance around the Earth's equator is 24,901 miles.
The distance around Saturn's equator is 236,672 miles.
Which planet has the shorter distance around its equator?

Multiplication Drill

$$\begin{array}{r} 1) \quad 52 \\ \times 19 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 73 \\ \times 47 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 28 \\ \times 82 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 85 \\ \times 26 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 91 \\ \times 74 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 63 \\ \times 51 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad 47 \\ \times 38 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad 15 \\ \times 93 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \quad 39 \\ \times 66 \\ \hline \end{array}$$

$$\begin{array}{r} 10) \quad 75 \\ \times 60 \\ \hline \end{array}$$

$$\begin{array}{r} 11) \quad 22 \\ \times 87 \\ \hline \end{array}$$

$$\begin{array}{r} 12) \quad 58 \\ \times 74 \\ \hline \end{array}$$

$$\begin{array}{r} 13) \quad 67 \\ \times 49 \\ \hline \end{array}$$

$$\begin{array}{r} 14) \quad 98 \\ \times 31 \\ \hline \end{array}$$

$$\begin{array}{r} 15) \quad 43 \\ \times 28 \\ \hline \end{array}$$

Multiplication

Find the products.

$$\begin{array}{r} \text{a.} \quad 452 \\ \times \quad 36 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b.} \quad 986 \\ \times \quad 24 \\ \hline \end{array}$$



$$\begin{array}{r} \text{c.} \quad 745 \\ \times \quad 19 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d.} \quad 367 \\ \times \quad 58 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e.} \quad 892 \\ \times \quad 47 \\ \hline \end{array}$$

$$\begin{array}{r} \text{f.} \quad 603 \\ \times \quad 95 \\ \hline \end{array}$$

$$\begin{array}{r} \text{g.} \quad 286 \\ \times \quad 73 \\ \hline \end{array}$$

$$\begin{array}{r} \text{h.} \quad 847 \\ \times \quad 62 \\ \hline \end{array}$$

$$\begin{array}{r} \text{i.} \quad 594 \\ \times \quad 86 \\ \hline \end{array}$$

$$\begin{array}{r} \text{j.} \quad 978 \\ \times \quad 69 \\ \hline \end{array}$$

- k. Charlie is training to run a marathon. Every day he puts on his sneakers and runs 12 miles. Charlie never misses a day. How many miles does Charlie run in one full year, or 365 days?

answer: _____

Multiplication in Word Problems

Name: _____

Use a strategy of your choice to solve each problem.

- 1 The library has 5 mystery books on a shelf. It has 4 times as many fiction books on another shelf. How many fiction books are on the shelf?

There are _____ fiction books on the shelf.

- 3 Violet has 3 markers. She has 6 times as many colored pencils as markers. How many colored pencils does she have?

Violet has _____ colored pencils.

- 5 Tasha used 8 tomatoes to make salsa. She used 4 times as many tomatoes to make sauce. How many tomatoes did Tasha use to make sauce?

Tasha used _____ tomatoes to make sauce.

- 7 There are 9 school buses in the parking lot. There are 6 times as many cars as school buses in the parking lot. How many cars are in the parking lot?

There are _____ cars in the parking lot.

- 2 Paul runs 2 laps around the gym. Carrie runs 6 times as many laps as Paul. How many laps does Carrie run?

Carrie runs _____ laps.

- 4 Owen draws 7 comics in April. He draws 3 times as many comics in May. How many comics does Owen draw in May?

Owen draws _____ comics in May.

- 6 There are 7 pear trees on a farm. There are 7 times as many apple trees as pear trees. How many apple trees are on the farm?

There are _____ apple trees.

- 8 There are 8 vases at an art show. There are 9 times as many paintings as vases at the art show. How many paintings are at the art show?

There are _____ paintings at the art show.

Solving Multi-Step Problems

Name: _____

Write and solve an equation for each problem. Show your work.

- 1 Tasha spends 25 minutes reading on Wednesday night. She spends 17 more minutes reading on Thursday than she did on Wednesday. Write and solve an equation to find how many minutes Tasha spent reading on Wednesday and Thursday nights.

Tasha spent _____ minutes reading.

- 2 Erik has 2 bags of bird seed. One bag has 10 pounds of seed, and the other bag has 8 pounds of seed. He fills 7 bird feeders with 2 pounds each. Write and solve an equation to find how many pounds of bird seed are left.

There are _____ pounds left.

- 3 There are 15 boys and 19 girls in math club. The tables in Mrs. Miller's classroom seat 4 students each. Write and solve an equation to find how many tables Mrs. Miller will need.

Mrs. Miller will need _____ tables.

- 4 Frankie earns \$5 each time he babysits his little sister. He has saved \$30. Frankie wants to save \$52 to buy a new skateboard. Write and solve an equation to find how many more times Frankie will need to babysit.

Frankie will need to babysit _____ more times.

Long Division with remainders within 1-10,000

Grade 4 Division Worksheet

Find the quotient with remainder.

1.

$$9 \overline{) 8,838}$$

2.

$$6 \overline{) 9,149}$$

3.

$$5 \overline{) 4,069}$$

4.

$$7 \overline{) 2,267}$$

5.

$$4 \overline{) 5,881}$$

6.

$$5 \overline{) 7,319}$$

7.

$$8 \overline{) 6,699}$$

8.

$$6 \overline{) 5,715}$$

9.

$$4 \overline{) 5,096}$$

Long Division with remainders within 1-10,000

Grade 4 Division Worksheet

Find the quotient with remainder.

1.

$$3 \overline{)4,780}$$

2.

$$3 \overline{)5,170}$$

3.

$$8 \overline{)6,972}$$

4.

$$7 \overline{)5,925}$$

5.

$$8 \overline{)9,405}$$

6.

$$7 \overline{)3,122}$$

7.

$$5 \overline{)6,383}$$

8.

$$5 \overline{)5,291}$$

9.

$$4 \overline{)8,515}$$

Division in Word Problems

Name: _____

Use a strategy of your choice to solve each problem.

- 1 There are 5 times as many tulips as rose bushes in a garden. There are 15 tulips. How many rose bushes are in the garden?

There are _____ rose bushes in the garden.

- 3 There are 18 blueberries in a bowl. There are 3 times as many blueberries as strawberries in the bowl. How many strawberries are in the bowl?

There are _____ strawberries in the bowl.

- 5 A tile pattern has 6 times as many white squares as gray squares. There are 48 white tiles in the pattern. How many gray tiles are there?

There are _____ gray tiles in the pattern.

- 7 Erik sees 42 stars in the sky on Tuesday night. This is 7 times as many stars as he sees on Monday night. How many stars does Erik see on Monday night?

Erik sees _____ stars on Monday night.

- 2 Kelly has 2 times as many quarters as dimes. She has 18 quarters. How many dimes does she have?

Kelly has _____ dimes.

- 4 Amanda swims for 16 minutes. This is 4 times as many minutes as Julio swims. How many minutes does Julio swim?

Julio swims _____ minutes.

- 6 Leah has 3 times as many country songs as she has pop songs on her MP3 player. She has 27 country songs. How many pop songs does Leah have?

Leah has _____ pop songs.

- 8 Lucas spends 72 minutes cleaning his room. This is 8 times as long as it takes him to wash the dishes. How long does it take Lucas to wash the dishes?

It takes Lucas _____ minutes to wash the dishes.

- 9 Write and solve a word problem for this equation: $6 \times n = 54$

Multiplication Drill

1) $10 \times 8 =$

2) $5 \times 12 =$

3) $7 \times 2 =$

4) $8 \times 1 =$

5) $11 \times 9 =$

6) $6 \times 4 =$

7) $9 \times 4 =$

8) $4 \times 10 =$

9) $1 \times 5 =$

10) $12 \times 7 =$

11) $3 \times 3 =$

12) $2 \times 11 =$

13) $5 \times 10 =$

14) $8 \times 12 =$

15) $9 \times 5 =$

16) $11 \times 1 =$

17) $12 \times 12 =$

18) $5 \times 6 =$

19) $4 \times 2 =$

20) $7 \times 7 =$

21) $8 \times 11 =$

22) $1 \times 2 =$

23) $2 \times 8 =$

24) $6 \times 3 =$

25) $3 \times 1 =$

Convert mixed numbers to improper fractions

Grade 4 Fractions Worksheet

Convert.

1. $3\frac{4}{10} =$ _____

2. $3\frac{1}{3} =$ _____

3. $2\frac{5}{8} =$ _____

4. $2\frac{2}{4} =$ _____

5. $3\frac{5}{6} =$ _____

6. $2\frac{2}{8} =$ _____

7. $3\frac{2}{3} =$ _____

8. $1\frac{3}{6} =$ _____

9. $1\frac{7}{8} =$ _____

10. $1\frac{1}{4} =$ _____

11. $1\frac{1}{6} =$ _____

12. $2\frac{4}{5} =$ _____

13. $2\frac{11}{12} =$ _____

14. $2\frac{1}{2} =$ _____

15. $1\frac{1}{2} =$ _____

16. $1\frac{5}{10} =$ _____

17. $2\frac{1}{3} =$ _____

18. $1\frac{3}{4} =$ _____

19. $3\frac{8}{10} =$ _____

20. $3\frac{2}{5} =$ _____

21. $2\frac{2}{3} =$ _____

Convert improper fractions to mixed numbers

Grade 4 Fractions Worksheet

Convert.

1. $\frac{5}{2} =$ _____

2. $\frac{10}{4} =$ _____

3. $\frac{25}{10} =$ _____

4. $\frac{19}{5} =$ _____

5. $\frac{21}{6} =$ _____

6. $\frac{8}{3} =$ _____

7. $\frac{13}{4} =$ _____

8. $\frac{11}{4} =$ _____

9. $\frac{26}{10} =$ _____

10. $\frac{38}{12} =$ _____

11. $\frac{19}{8} =$ _____

12. $\frac{14}{10} =$ _____

13. $\frac{23}{6} =$ _____

14. $\frac{19}{6} =$ _____

15. $\frac{18}{5} =$ _____

16. $\frac{11}{3} =$ _____

17. $\frac{14}{4} =$ _____

18. $\frac{3}{2} =$ _____

19. $\frac{12}{5} =$ _____

20. $\frac{17}{6} =$ _____

21. $\frac{22}{8} =$ _____

Equivalent Fractions

Grade 4 Fractions Worksheet

Complete the equivalent fractions.

1. $\frac{1}{3} = \frac{\quad}{27}$

2. $\frac{1}{2} = \frac{\quad}{12}$

3. $\frac{\quad}{9} = \frac{12}{18}$

4. $\frac{5}{\quad} = \frac{10}{18}$

5. $\frac{9}{10} = \frac{\quad}{80}$

6. $\frac{\quad}{6} = \frac{40}{60}$

7. $\frac{1}{4} = \frac{\quad}{36}$

8. $\frac{\quad}{25} = \frac{36}{50}$

9. $\frac{1}{\quad} = \frac{4}{8}$

10. $\frac{2}{7} = \frac{\quad}{42}$

11. $\frac{3}{5} = \frac{27}{\quad}$

12. $\frac{5}{\quad} = \frac{45}{108}$

13. $\frac{5}{\quad} = \frac{50}{80}$

14. $\frac{\quad}{10} = \frac{54}{60}$

15. $\frac{4}{5} = \frac{\quad}{35}$

16. $\frac{2}{7} = \frac{\quad}{49}$

17. $\frac{11}{12} = \frac{\quad}{48}$

18. $\frac{3}{4} = \frac{\quad}{36}$

Adding Mixed Numbers

with like Denominator, Requires Simplifying

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

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

same

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

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

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

Add the fractions and simplify the answers.

a. $\begin{array}{r} 5\frac{2}{6} \\ + 4\frac{2}{6} \\ \hline \end{array}$

b. $\begin{array}{r} 6\frac{1}{4} \\ + 1\frac{1}{4} \\ \hline \end{array}$

c. $\begin{array}{r} 3\frac{2}{10} \\ + 5\frac{3}{10} \\ \hline \end{array}$

d. $\begin{array}{r} 3\frac{2}{8} \\ + 6\frac{4}{8} \\ \hline \end{array}$

e. $\begin{array}{r} 3\frac{2}{9} \\ + 1\frac{1}{9} \\ \hline \end{array}$

f. $\begin{array}{r} 2\frac{3}{12} \\ + \frac{1}{12} \\ \hline \end{array}$

g. $\begin{array}{r} 1\frac{3}{10} \\ + 5\frac{5}{10} \\ \hline \end{array}$

h. $\begin{array}{r} 2\frac{3}{14} \\ + 1\frac{3}{14} \\ \hline \end{array}$

i. $\begin{array}{r} \frac{1}{6} \\ + 4\frac{2}{6} \\ \hline \end{array}$

j. $\begin{array}{r} 2\frac{1}{8} \\ + 4\frac{1}{8} \\ \hline \end{array}$

k. $\begin{array}{r} 2\frac{2}{9} \\ + 3\frac{4}{9} \\ \hline \end{array}$

l. $\begin{array}{r} 1\frac{3}{12} \\ + 1\frac{3}{12} \\ \hline \end{array}$

m. $\begin{array}{r} 6\frac{4}{10} \\ + 2\frac{2}{10} \\ \hline \end{array}$

n. $\begin{array}{r} 5\frac{6}{14} \\ + \frac{4}{14} \\ \hline \end{array}$

o. $\begin{array}{r} 1\frac{2}{12} \\ + 7\frac{4}{12} \\ \hline \end{array}$

p. Tom's family ate $1\frac{2}{8}$ apple pies.

Susie's family ate $1\frac{4}{8}$ cherry pies.

How much pie did both families eat?

Subtracting Mixed Numbers

with Like Denominators, Requires Simplifying

$$\begin{array}{r}
 3\frac{3}{8} \\
 - 2\frac{1}{8} \\
 \hline
 \end{array}
 \qquad
 \begin{array}{r}
 3\frac{3}{8} \\
 - 2\frac{1}{8} \\
 \hline
 \frac{8}{8}
 \end{array}
 \qquad
 \begin{array}{r}
 3\frac{3}{8} \\
 - 2\frac{1}{8} \\
 \hline
 2\frac{2}{8}
 \end{array}
 \qquad
 \begin{array}{r}
 3\frac{3}{8} \\
 - 2\frac{1}{8} \\
 \hline
 1\frac{2}{8}
 \end{array}
 \qquad
 \begin{array}{r}
 3\frac{3}{8} \\
 - 2\frac{1}{8} \\
 \hline
 1\frac{2}{8} = 1\frac{1}{4}
 \end{array}$$

Subtract the fractions and simplify the answers.

a.
$$\begin{array}{r} 5\frac{4}{6} \\ - 4\frac{2}{6} \\ \hline \end{array}$$

b.
$$\begin{array}{r} 6\frac{3}{4} \\ - 1\frac{1}{4} \\ \hline \end{array}$$

c.
$$\begin{array}{r} 9\frac{5}{10} \\ - 5\frac{3}{10} \\ \hline \end{array}$$

d.
$$\begin{array}{r} 8\frac{6}{8} \\ - 6\frac{4}{8} \\ \hline \end{array}$$

e.
$$\begin{array}{r} 3\frac{4}{9} \\ - 1\frac{1}{9} \\ \hline \end{array}$$

f.
$$\begin{array}{r} 2\frac{3}{12} \\ - 1\frac{1}{12} \\ \hline \end{array}$$

g.
$$\begin{array}{r} 7\frac{9}{10} \\ - 5\frac{5}{10} \\ \hline \end{array}$$

h.
$$\begin{array}{r} 2\frac{7}{14} \\ - 2\frac{3}{14} \\ \hline \end{array}$$

i.
$$\begin{array}{r} 5\frac{4}{6} \\ - 4\frac{2}{6} \\ \hline \end{array}$$

j.
$$\begin{array}{r} 6\frac{5}{8} \\ - 4\frac{1}{8} \\ \hline \end{array}$$

k.
$$\begin{array}{r} 4\frac{8}{9} \\ - 3\frac{2}{9} \\ \hline \end{array}$$

l.
$$\begin{array}{r} 1\frac{6}{12} \\ - 1\frac{3}{12} \\ \hline \end{array}$$

m.
$$\begin{array}{r} 6\frac{6}{10} \\ - 3\frac{2}{10} \\ \hline \end{array}$$

n.
$$\begin{array}{r} 5\frac{6}{14} \\ - 4\frac{4}{14} \\ \hline \end{array}$$

o.
$$\begin{array}{r} 7\frac{6}{12} \\ - 1\frac{4}{12} \\ \hline \end{array}$$

p. Tom walked $2\frac{5}{6}$ miles on Wednesday.

He walked $1\frac{1}{6}$ miles on Thursday.

How many more miles did he walk on Wednesday?

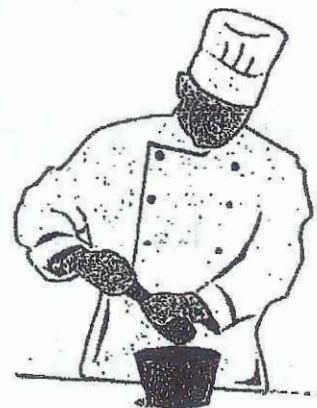
Adding and subtracting fractions

Grade 4 Word Problems Worksheets

Read and answer each question:

At the kitchen of a popular restaurant, the assistant chefs are preparing the ingredients for a busy Friday night.

1. There were $3\frac{1}{2}$ of bags of flour in the kitchen. $4\frac{1}{2}$ bags of flour were delivered. How many bags of flour are there in total?
2. 9 cartons of milk were delivered to the kitchen, but an assistant spilled $2\frac{5}{8}$ cartons of milk. Together with the $4\frac{1}{8}$ cartons of milk that were in the fridge, how many cartons of milk are there in total?
3. There were $5\frac{3}{4}$ crates of eggs but $\frac{1}{4}$ of a crate of eggs was broken. 3 assistants then checked the rest of the eggs and found that $2\frac{1}{4}$ crates of the eggs were rotten. How many crates of good eggs were left?
4. There is $\frac{9}{10}$ of a kilogram of ground beef and $\frac{7}{10}$ of a kilogram of ground pork in the freezer and an assistant is defrosting $2\frac{3}{10}$ kilograms of ground beef. How much ground beef is there in total?
5. There are two identical fridges for desserts. One of the fridge has $\frac{5}{8}$ of its room left and the other fridge is only $\frac{1}{8}$ full. How much room is left?
6. The chef was supposed to arrive at the restaurant $2\frac{5}{12}$ hours before the restaurant opens. However, he was $1\frac{1}{12}$ hour late. How many hours did the chef have to prepare before the restaurant opens?



Multiplication Drill

1) $1 \times 10 =$

2) $9 \times 7 =$

3) $8 \times 3 =$

4) $4 \times 1 =$

5) $11 \times 11 =$

6) $6 \times 2 =$

7) $7 \times 12 =$

8) $12 \times 4 =$

9) $5 \times 1 =$

10) $3 \times 2 =$

11) $2 \times 4 =$

12) $10 \times 12 =$

13) $1 \times 6 =$

14) $9 \times 8 =$

15) $4 \times 11 =$

16) $8 \times 5 =$

17) $7 \times 3 =$

18) $12 \times 9 =$

19) $10 \times 9 =$

20) $1 \times 1 =$

21) $3 \times 5 =$

22) $11 \times 8 =$

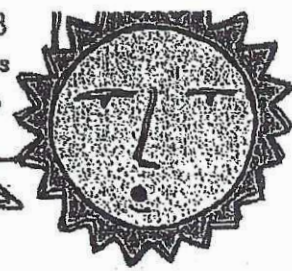
23) $5 \times 2 =$

24) $9 \times 2 =$

25) $4 \times 8 =$

Tenths and Hundredths

I am 92.93 million miles away from Earth.



	decimal number	word name	fraction or mixed number
a.	1.4	one and four tenths	
b.		five and fifteen hundredths	$5 \frac{15}{100}$
c.	0.9		
d.		nine hundredths	
e.			$3 \frac{74}{100}$
f.	6.4		
g.		eight and eight hundredths	
h.			$\frac{2}{10}$
i.	11.19		
j.		one and six tenths	

Comparing Decimals

Hundredths and Tenths

Write $<$, $>$, or $=$ to compare each pair of decimal numbers.

a. $.45$ ____ $.66$

b. $.11$ ____ $.80$

c. $.21$ ____ $.23$

d. $.5$ ____ $.6$

e. $.1$ ____ $.8$

f. $.2$ ____ $.4$

g. 1.3 ____ 2.1

h. 3.4 ____ 3.6

i. 1.7 ____ 1.7

j. 5.11 ____ 3.10

k. 9.00 ____ 7.99

l. 8.01 ____ 8.10

m. 1.11 ____ 1.01

n. 5.50 ____ 5.49

o. 9.31 ____ 9.31

p. 2.13 ____ 3.89

q. 2.00 ____ 0.99

r. 1.46 ____ 1.64

s. $.02$ ____ $.20$

t. 8.99 ____ 7.23

u. 6.10 ____ 5.85

v. $\$1.25$ ____ $\$1.52$

w. $\$3.00$ ____ $\$2.76$

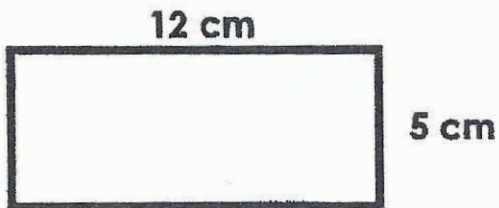
x. $\$0.87$ ____ $\$0.63$

y. $\$1,451.02$ ____ $\$1,541.02$

z. $\$3,561.62$ ____ $\$3,461.99$

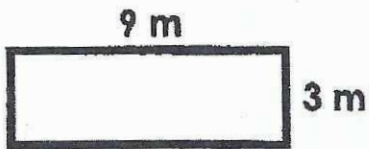
Area and Perimeter of Rectangles

Find the area and perimeter of each rectangle.



perimeter = _____

area = _____



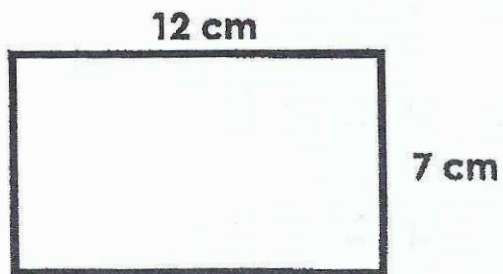
perimeter = _____

area = _____



perimeter = _____

area = _____



perimeter = _____

area = _____



perimeter = _____

area = _____

Multiplication Drill

1) $2 \times 4 =$

2) $5 \times 9 =$

3) $9 \times 6 =$

4) $6 \times 3 =$

5) $7 \times 3 =$

6) $8 \times 2 =$

7) $6 \times 10 =$

8) $3 \times 4 =$

9) $5 \times 2 =$

10) $9 \times 10 =$

11) $3 \times 9 =$

12) $4 \times 7 =$

13) $1 \times 6 =$

14) $7 \times 7 =$

15) $10 \times 3 =$

16) $6 \times 4 =$

17) $5 \times 4 =$

18) $3 \times 5 =$

19) $8 \times 8 =$

20) $2 \times 9 =$

21) $7 \times 9 =$

22) $4 \times 9 =$

23) $2 \times 7 =$

24) $5 \times 1 =$

25) $3 \times 2 =$

Multiplication Drill

1) $8 \times 6 =$

2) $7 \times 3 =$

3) $6 \times 10 =$

4) $1 \times 11 =$

5) $3 \times 9 =$

6) $10 \times 4 =$

7) $12 \times 8 =$

8) $4 \times 6 =$

9) $6 \times 5 =$

10) $9 \times 8 =$

11) $11 \times 10 =$

12) $5 \times 9 =$

13) $8 \times 2 =$

14) $6 \times 1 =$

15) $3 \times 11 =$

16) $4 \times 8 =$

17) $9 \times 9 =$

18) $11 \times 4 =$

19) $12 \times 6 =$

20) $2 \times 3 =$

21) $1 \times 7 =$

22) $3 \times 6 =$

23) $10 \times 5 =$

24) $7 \times 8 =$

25) $4 \times 12 =$

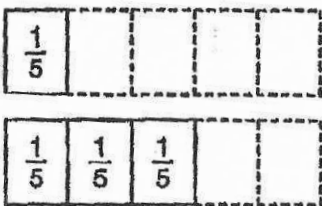
In 2008, the population of Denham Springs, Louisiana, was ten thousand, three hundred eight. What is the population written in standard form?

- A. 10,038
- B. 10,308
- C. 10,318
- D. 13,008

2. Natalie ate $\frac{3}{8}$ of an apple. Later, she ate another $\frac{3}{8}$ of the apple. What fraction of the apple did she eat in all?

- A. $\frac{2}{8}$
- B. $\frac{6}{8}$
- C. $\frac{6}{16}$
- D. $\frac{8}{8}$

3. Whitney drank $\frac{1}{5}$ cup of milk before lunch. She drank $\frac{3}{5}$ cup of milk with her lunch. Which number sentence could be used to find how much milk she drank?



- A. $\frac{2}{5} = \frac{3}{5} - \frac{1}{5}$
- B. $\frac{3}{5} = \frac{1}{5} + \frac{2}{5}$
- C. $\frac{4}{5} = \frac{1}{5} + \frac{3}{5}$
- D. $\frac{4}{5} = \frac{2}{5} + \frac{2}{5}$

4. Maple Avenue is 0.6 kilometer long.



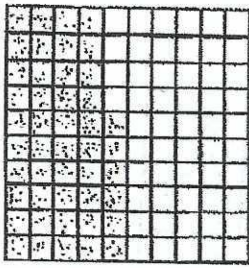
Which point on the number line represents 0.6 kilometers?

- A. point E
- B. point F
- C. point G
- D. point H

5. Which shape has parallel sides?

- A.
- B.
- C.
- D.

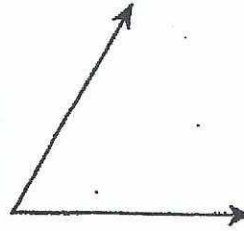
6. The grid has 0.46 shaded.



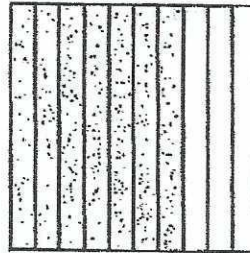
Which sum of fractions shows 0.46?

- A. $\frac{4}{10} + \frac{6}{100}$
B. $\frac{4}{10} + \frac{6}{10}$
C. $\frac{4}{100} + \frac{6}{100}$
D. $\frac{4}{100} + \frac{6}{10}$
7. Deon earned \$2,416 each week for 8 weeks. How much money did he earn in all?
- A. \$11,294
B. \$19,288
C. \$19,328
D. \$40,328
8. Carol pitched $\frac{3}{6}$ of the softball game. Josie pitched $\frac{2}{6}$ of the game. What fraction of the softball game did Carol and Josie pitch combined?
- A. $\frac{1}{12}$
B. $\frac{5}{12}$
C. $\frac{2}{3}$
D. $\frac{5}{6}$

9. What is the measure of the angle below? Use a protractor.



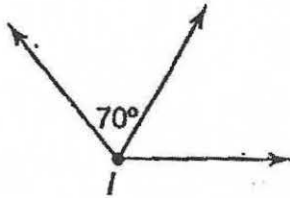
- A. 45°
B. 60°
C. 120°
D. 135°
10. Which fraction is equal to 0.7?



- A. $\frac{1}{7}$
B. $\frac{7}{10}$
C. $\frac{7}{100}$
D. $\frac{70}{10}$
11. Los Angeles is 2,108 miles from Louisville. Boston is 941 miles from Louisville. How many miles closer to Louisville is Boston than Los Angeles?
- A. 1,157 miles
B. 1,167 miles
C. 1,257 miles
D. 3,049 miles

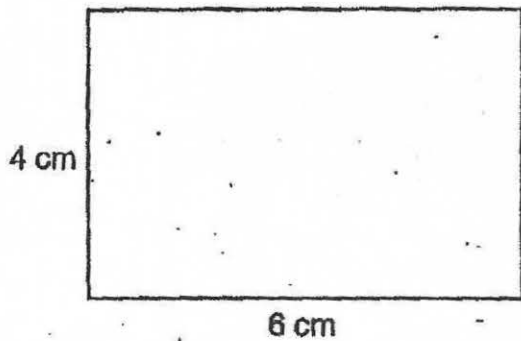
2. If 7 people each eat $\frac{3}{8}$ pound of potato salad, how much potato salad will be eaten in all?
-

13. The measure of angle I is 130° . A part of angle I measures 70° .



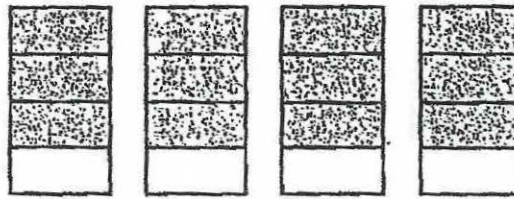
What is the measure of the other part of angle I ?

- A. 130°
 B. 90°
 C. 70°
 D. 60°
14. What is the area of this rectangle?



- A. 10 square centimeters
 B. 20 square centimeters
 C. 24 square centimeters
 D. 48 square centimeters

15. Which will have the same product as $4 \times \frac{3}{4}$?

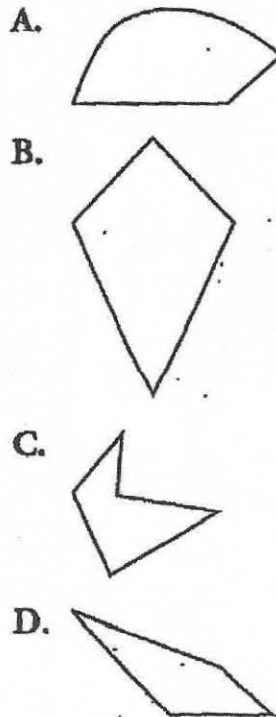


- A. $12 \times \frac{1}{3}$
 B. $12 \times \frac{1}{2}$
 C. $12 \times \frac{1}{4}$
 D. $12 \times \frac{1}{5}$

16. Which number has 6 and 7 as factors?

- A. 14 C. 35
 B. 24 D. 42

17. Which figure has line symmetry?



blue
w

.29.
ch
a

ig
he
s.
c

31. What is $5\frac{3}{8} - 2\frac{1}{8}$?

A. 3

B. $3\frac{1}{8}$

C. $3\frac{2}{8}$

D. $3\frac{3}{8}$

32. Yesterday, Nikki bought $\frac{3}{8}$ pound of cheddar cheese and $\frac{5}{8}$ pound of swiss cheese. How much cheese did she buy?

A. $\frac{2}{8}$ pound

B. $\frac{8}{16}$ pound

C. $\frac{15}{8}$ pound

D. 1 pound

33. Which number sentence is true?

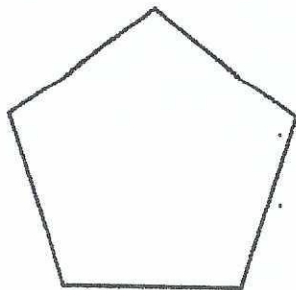
A. $36,427 > 36,274$

B. $42,394 = 42,934$

C. $51,792 > 52,630$

D. $57,531 < 57,315$

34. Draw a line of symmetry on the figure below.



35. Which table shows the relationship between years and months?

A.

Year	Months
1	7
2	14
3	21
4	28

B.

Year	Months
1	6
2	12
3	18
4	24

C.

Year	Months
1	12
2	24
3	36
4	48

D.

Year	Months
1	60
2	120
3	180
4	240

36. Which measure is equal to 1 meter?

A. 10 millimeters

B. 100 millimeters

C. 10 centimeters

D. 100 centimeters

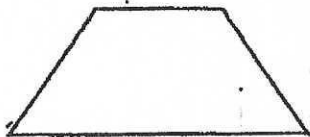
7. Which number sentence is true?

- A. $2.83 > 2.8$
- B. $3.1 < 3.07$
- C. $4.05 > 4.2$
- D. $5.3 < 5.24$

8. A wooden board is 56 inches long before it is cut into short equal pieces. That is 7 times as long as each short piece. How long is each short piece?

- A. 6 inches
- B. 7 inches
- C. 8 inches
- D. 9 inches

9. What is true about this shape?



- A. It has one pair of parallel sides.
- B. It has two pairs of parallel sides.
- C. It has one pair of perpendicular sides.
- D. It has parallel and perpendicular sides.

40. Nancy measured the length of a paper clip as $\frac{7}{8}$ inch. Fred measured the paper clip as $\frac{5}{8}$ inch. What is the difference in the measurements?

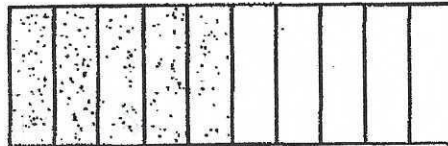
- A. $\frac{1}{8}$ inch
- B. $\frac{2}{8}$ inch
- C. $\frac{3}{8}$ inch
- D. $1\frac{4}{8}$ inches

41. Which symbol makes this sentence true?

$$\frac{1}{4} \bigcirc \frac{1}{5}$$

- A. $>$
- B. $<$
- C. $=$
- D. $+$

42. The rectangle below is $\frac{5}{10}$ shaded.



Which is an equivalent fraction to $\frac{5}{10}$?

- A. $\frac{1}{10}$
- B. $\frac{1}{5}$
- C. $\frac{1}{2}$
- D. $\frac{15}{100}$

Multiplication Drill

1) $12 \times 10 =$

2) $3 \times 8 =$

3) $7 \times 5 =$

4) $6 \times 6 =$

5) $8 \times 9 =$

6) $1 \times 4 =$

7) $10 \times 7 =$

8) $11 \times 5 =$

9) $4 \times 3 =$

10) $5 \times 7 =$

11) $8 \times 1 =$

12) $9 \times 3 =$

13) $10 \times 2 =$

14) $12 \times 2 =$

15) $6 \times 9 =$

16) $5 \times 5 =$

17) $1 \times 1 =$

18) $3 \times 7 =$

19) $2 \times 7 =$

20) $11 \times 3 =$

21) $1 \times 11 =$

22) $4 \times 5 =$

23) $2 \times 6 =$

24) $3 \times 10 =$

25) $7 \times 4 =$

Changes of States: Liquids

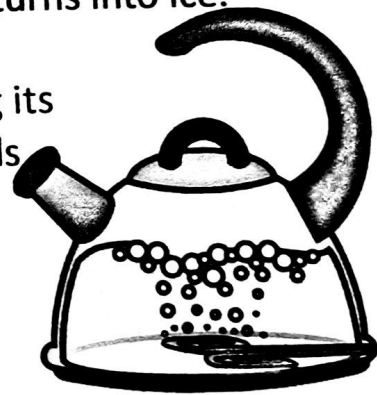
A liquid is a type of matter that has a definite volume, but not a definite shape. This means that a liquid can take on the shape of its container, but it always takes up the same amount of space. For example, if you pour water into a glass, the water takes on the shape of the glass, but it still takes up the same amount of space as it did before.

One of the unique properties of liquids is that they can change their state or phase from a liquid to a solid or a gas, and vice versa. This process is called a phase change, and it occurs when the temperature or pressure of the liquid is changed.

The most common phase change for liquids is when they are heated and they change into a gas. This process is called evaporation, and it occurs when the molecules of the liquid gain enough energy to break their bonds and escape into the air as a gas. You can see this happen when you boil water on a stove, and steam rises from the pot.

Another phase change for liquids is when they are cooled and they change into a solid. This process is called freezing, and it occurs when the molecules of the liquid lose enough energy to slow down and become locked in place in a rigid structure. You can see this happen when you put water in a freezer, and it turns into ice.

Overall, the state or phase of a liquid can be changed by altering its temperature or pressure. Understanding the properties of liquids and how they can change state is very important in day to day living in our lives.



QUESTIONS:

1. What is the process called when a liquid changes its state and becomes a gas?
2. What happens to the particles of a liquid when it changes its state and becomes a solid?
3. How does the temperature affect the state of a liquid?
4. What is the name of the point at which a liquid turns into a gas?
5. Can a liquid change its state directly from a solid to a gas? Why or why not?

Changes of States: Gases

Gas is one of the three common states of matter, the others being solids and liquids. Gases can be found all around us in the form of air, steam, and smoke. A gas can change its state or phase under certain conditions.

When a gas is heated, its molecules absorb energy and start moving faster. As the molecules move faster, they collide with each other more often, which causes the gas to expand and become less dense. This expansion can cause the gas to change into a different state of matter, such as a liquid or a solid.

On the other hand, when a gas is cooled, its molecules lose energy and start moving slower. As the molecules move slower, they collide with each other less often, which causes the gas to contract and become more dense. If the temperature continues to drop, the gas may change into a liquid or solid state.

Another way a gas can change its state is through changes in pressure. When a gas is compressed, its molecules are forced closer together, which causes the gas to become denser. This can cause the gas to change into a different state of matter, such as a liquid or a solid.

Similarly, when a gas is allowed to expand, its molecules move further apart, which causes the gas to become less dense. This can cause the gas to change into a different state of matter, such as a liquid or a solid.

Overall, gases can change their state or phase depending on the conditions they are exposed to, such as changes in temperature or pressure. Understanding these changes is important in many scientific fields, including chemistry and physics.

QUESTIONS:

1. What is the process called when a gas changes its state to a liquid or solid?
2. What happens to the temperature of a gas when it is compressed?
3. Can a gas change its state without changing its temperature?
4. Why does a gas take the shape of the container it is in?
5. What is the name of the process when a gas changes directly to a solid without becoming a liquid first?

Changes of States: Solids

A solid is a type of matter that has a definite shape and volume. It is made up of tiny particles called molecules that are closely packed together and vibrate in place.

However, when heat is added to a solid, the molecules begin to move faster and can eventually change their arrangement, causing the solid to change its state.

The process of changing from a solid to a liquid is called melting. When a solid is heated, its molecules gain energy and start to move faster. As the molecules move around more, they overcome the attractive forces holding them in a fixed position and start to slide past each other. This causes the solid to become less rigid and eventually turn into a liquid.

The opposite process, changing from a liquid to a solid, is called freezing. When a liquid is cooled, its molecules lose energy and slow down. As the molecules slow down, the attractive forces between them become stronger, and they start to lock into a fixed position. This causes the liquid to become more rigid and eventually turn into a solid.

Another way that a solid can change its state is by a process called sublimation. Sublimation occurs when a solid goes directly to a gas without passing through the liquid state. This can happen when the solid is heated or exposed to a low pressure environment. An example of this is dry ice, which is solid carbon dioxide. When it is exposed to room temperature, it sublimates and turns into a gas.

In conclusion, a solid can change its state by melting, freezing, or sublimation. These changes happen when the solid is heated or cooled, and they are caused by the movements of the tiny particles that make up the solid.

QUESTIONS:

1. What is the process called when a solid changes into a liquid and what happens to the particles during this process?
2. Can a solid change directly into a gas? If so, what is this process called and how does it happen?
3. What factors can cause a solid to change its state and become a liquid or gas? Can you give an example?
4. What happens to the shape and volume of a solid when it changes into a liquid or gas?

States of Matter: Liquids

Liquids are one of the three main states of matter, the other two being solid and gas. They are a type of substance that flows and can take on the shape of their container. Some examples of liquids that you might be familiar with include water, milk, juice, and oil.

One of the characteristics of liquids is that they have a definite volume, but not a definite shape. This means that they take on the shape of their container, so if you pour water into a cup, the water will take on the shape of the cup. However, the volume of the water will remain the same.

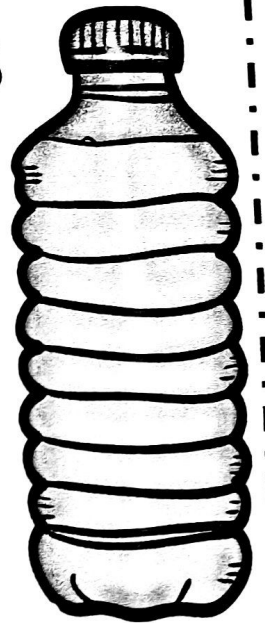
Another characteristic of liquids is that they can flow. This means that they can move from one place to another. For example, if you pour juice from a pitcher into a glass, the juice will flow from the pitcher to the glass.

Liquids are made up of tiny particles called molecules. These molecules are able to move around and slide past one another, which is why liquids can flow. However, the molecules are still close enough together to give the liquid a definite volume.

One of the things that can affect the behavior of liquids is temperature. When you heat up a liquid, the molecules move faster and farther apart, causing the liquid to expand. This is why water in a pot on the stove will start to boil and turn into steam if you heat it up enough.

Another thing that can affect the behavior of liquids is pressure. When you increase the pressure on a liquid, the molecules are forced closer together, which can cause the liquid to become denser. For example, if you squeeze a plastic bottle filled with water, the water will become more dense and harder to move around.

Overall, liquids are a fascinating state of matter with unique properties that make them different from solids and gases. They are essential to many aspects of our daily lives, from drinking water to cooking and cleaning, and they play an important role in many scientific fields, from chemistry to physics.



States of Matter: Liquids

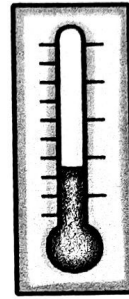
1. What is a liquid?
2. How does the shape of a liquid differ from a solid?
3. What are the common examples of liquids?
4. How do the particles in a liquid move?
5. What is the process of changing a liquid into a gas called?
6. What is the process of changing a liquid into a solid called?
7. Can liquids change their shape?
8. What are the properties of liquids?
9. How do the properties of liquids differ from those of gases and solids?
10. What is the effect of temperature on the properties of liquids?
11. How do liquids behave under different pressures?
12. How does the density of liquids affect their behavior?
13. What are some practical applications of liquids in our daily lives?

Physical or Chemical Change Lab

Physical and Chemical Changes are Different:

What's needed:

Baking soda
Vinegar
Two clear cups
Spoon
Thermometer
Stopwatch or timer
Safety goggles



What to do:

1. Put on your safety goggles.
2. Place a spoonful of baking soda into one of the clear cups.
3. Pour an equal amount of vinegar into the other clear cup.
4. Measure the temperature of both cups using the thermometer and record it in a table.
5. Observe the two cups and record your observations in a table.
6. Slowly pour the vinegar into the cup with baking soda and immediately start the stopwatch or timer.
7. Observe the mixture and record your observations in a table.
8. Measure the temperature of the mixture using the thermometer and record it in a table.
9. Repeat steps 4-8, but this time, place the vinegar in the cup with baking soda.

Compare the results of both trials and answer the following questions:

- What happened to the baking soda and vinegar when they were combined?
- Was there a change in temperature? If so, what happened?
- Did the mixture change in color or texture? If so, how?
- Was this a physical or chemical change? Explain your answer

Conclusion:

Physical and Chemical Changes Worksheet

Look at the following scenarios and decide whether these changes are physical or chemical. Provide evidence for your choices.

Scenario	Type of Change	Evidence
A cook cuts a slice from a loaf of bread fresh from the oven and spreads butter on it		
A piece of bread is left in the toaster for too long and ends up being burnt black		
Food color added to water changes its coloring		
Fireworks exploding during a show		
Silver spoons turning dull with black spots forming on them		
A piece of copper wire is coiled into a spring		

Summer Reading Social Studies Assignment

Task: Exploring Current Events in Our Changing World

As global citizens, it is important for us to stay informed about the events and issues shaping our world today. This summer, your assignment is to dive into the world of current events by selecting and analyzing a recent article that highlights an important event or issue from around the globe. Through this assignment, you will not only expand your understanding of our world but also develop critical thinking skills and learn to express your thoughts effectively.

Research:

1. Find a current event article: (An online or newspaper article that was published within the last six months) that focuses on a significant event, trend, or issue happening in our world today. The article should relate to a topic within the field of social studies, such as politics, culture, economics, or global issues. Ensure that the article is from a trustworthy source, such as a trusted news organization or a true online publication. Keep in mind that your article should provide enough details and material to create a complete analysis.

Summary:

2. After reading the article carefully, write a summary of the main points and arguments presented. Your summary should highlight the key ideas of the event or issue discussed and provide a clear understanding of why this event is important. Try to capture the essence of the article in your own words, avoiding direct quotations.

Analysis:

3. In this section, share your thoughts and feelings on the event or issue presented in the article. Consider the following points as you craft your analysis:

Importance - Explain why this event or issue is important in our world. How does it impact different communities, nations, or global relationships? Why should people pay attention to it?

Personal Connection: Share your personal thoughts and feelings about the event or issue. How does it relate to your own experiences, values, or beliefs? Discuss any emotional or intellectual reactions you had while reading the article.

Potential Consequences: Analyze the potential short-term and long-term consequences of the event or issue. Consider its impact on local communities, nations, and the global community as a whole.

When Writing Your Response:

Length and Formatting:

- Your assignment should be written in essay format.
- The response should be two pages in length, double-spaced, with standard margins (1 inch) and a font size of 12.
- Include a title that accurately reflects the content of your assignment.
- Use proper grammar, punctuation, and sentence structure to ensure clarity and coherence in your writing.

Submission:

- Submit your assignment as a printed copy to your social studies teacher on the first week of school.

Note: Remember to choose an article that genuinely interests you, as this will help keep you engaged and enrich your learning experience. If you have any questions or need assistance in finding a suitable article, feel free to reach out to me via email or Google Classroom.

Enjoy your summer reading and exploration of our ever-changing world!