Summer Math Review Packet



Entering 5th Grade

Name:_____



Schools of the Sacred Heart San Francisco Summer Math Review Packet

Keeping math skills sharp: Summer should be a time for fun, relaxation and family time. However, intentional practice of math skills has been shown to be helpful for student retention of topics learned during the school year. This packet is designed to review some essential skills/concepts and to ensure a smooth transition back to school. *Students DO NOT need to complete the full packet*. It is essential for students to be fluent with their basic multiplication and division facts through 0-12 (12 x12). All students should practice these facts over the summer!

Student Accountability: Students are expected to complete **20 one-sided pages (but ideally more)**. Our goal is for students to spend **30 minutes a week** over the summer engaging with mathematics. At the end of some packets, there is an optional challenge section. Your child may choose to replace pages covering basic facts with the challenge options if he/she has truly mastered the skipped content. Please have your child return their packet to their new homeroom teacher at the beginning of the school year.

What parents can do to support their child:

- Make a practice plan and help your child set goals in order to complete the
 required work by the start of the school year. Your child's packet may have
 more pages than needed so feel free to choose! Spacing the practice
 throughout the summer will be more effective in terms of keeping skill sets
 in place.
- Establish a place where your child can work without distractions and encourage independence when appropriate.

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If you are interested in additional enrichment, games, etc. for your child this summer, take a look at the ideas below:

Math Board Games, Apps, Books and Summer Camps

Qwirkle

Big Brain Academy

Bendomino

Mastermind

Flip 4

Make 7

Rush Hour

Equate

MadMath

Ken-Ken/Sudoku/Inkies

Double Shutter

YamSlam

Pentago

Bump (The Sneaky Number Game)

Blokus

Set/Set Cubed

Chocolate Fix

Q Bitz

Chess

Ticket To Ride

Battleship

Puzzles!!

Prime Climb

SMATH (like Scrabble but with equations)

Dominoes

Catan

Catan Jr.

PayDay

Monopoly

Exact Change

Sorry

Legos

Connect Four

Uno

Fishing for 10

Spot it

Chutes and Ladders

Guess Who

Math Websites

Math Stories -- www.mathstories.com

NRICH -- https://nrich.maths.org/9086

A Plus Math -- www.aplusmath.com

Math Playground -- www.mathplayground.com

Fun Brain -- www.funbrain.com

AAA Math -- www.aaamath.com

Cool Math -- www.coolmath4kids.com

Mensa --- www.mensaforkids.com

Fun --- www.fun4thebrain.com

Cyber Games - http://pbskids.org/cyberchase

Youcubed - http://youcubed.org

Beast Academy - https://beastacademy.com/books

Bridges Program Family Math Games -

https://sites.google.com/mathlearningcenter.org/math-at-home/family-games

IXL (Students have used this app in class to practice various skills and have their own personalized log in.)

DragonBox - https://dragonbox.com/

Links to math workbooks (some to purchase) and websites

https://www.amazon.com/Challenging-Problems-Grade-Primary-Mathematics/dp/9812855335/ref=sr 1_3?dchild=1&keywords=challenging+word+problems+grade+5&qid=1619836744&s=books&sr=1-3 (Link is to the fifth grade book but this publisher has books for grades 1-6)

https://www.aimsedu.org/current-projects/puzzle-corner/ (AIMS has very high-quality books/activities)

http://www.kenkenpuzzle.com/store/books (kids love Ken Ken puzzles and you can purchase books or play for free online)

https://nrich.maths.org/primary (Educator website with incredible activities that parents can use too)

http://teacher.scholastic.com/mayen/index.htm (math mysteries to solve - lots of reading involved)

https://www.voucubed.org/ (incredible math programming from Youcubed at Stanford)

https://beastacademy.com/books (enrichment math)

http://www.puzzlechoice.com/pc/Number Puzzlex.html

https://mathpickle.com/puzzles-and-games/

https://edshelf.com/tool/connect-sums/

https://www.commonsensemedia.org/lists/best-math-games-and-apps-for-kids

36 Math Apps For Elementary School Students - (math apps for ipads)

https://www.brookline.k12.ma.us/site/Default.aspx?PageID=2222

https://www.prufrock.com/At-Home-Student-Activities.aspx (this just in from Prufrock Press - great publisher for challenging activities) (FREE)

https://www.noetic-learning.com/pow.isp (problem of the week)

https://wideopenschool.org/?i=7723549&sfmc_sub=170772299&l=2048712_HTML&u=144169164&mid=6409703&ib=1089&utm_source=WOS_announcement_20200331&utm_medium=email

Math < PreK-5 < Educator

https://www.eaieducation.com/category/599 1/The STEM Den.aspx?utm source=EAI+Education+Ne wsletter&utm campaign=84ec9a92dc-EMAIL CAMPAIGN 2020 04 21 09 01&utm medium=email &utm term=0 2057022af5-84ec9a92dc-54362033&mc cid=84ec9a92dc&mc eid=9198f11156 STEM Projects

Math at Home - Family Games

https://www.mindware.orientaltrading.com/web/search/searchMain?keyword=books+math

https://mashupmath.com/shop/101c (algebra puzzles - favorite)

https://mathathome.mathlearningcenter.org/activities-of-the-day Bridges Math - games, daily activities, practice pages from Bridges workbook

https://www.amazon.com/s?k=summer+bridge+activities+4-5&crid=560BMDVOTYO1&sprefix=summer+bridge%2Caps%2C264&ref=nb_sb_ss_i_5_13

https://www.amazon.com/Summer-Blast-Getting-Ready-Fifth/dp/1425815553/ref=sr 1 3?dchild=1&keywords=summer+blast&qid=1591643536&sr=8-3

https://virtual.aopsacademy.org/?utm_source=nagc&utm_medium=email&utm_campaign=Virtual_Aca_demy_Summer_Camps (virtual_math/language arts camps)

Summer Math/Enrichment Camps (check if virtual or in-person)

https://www.sacredsf.org/the-experience/summer-program

https://atdp.berkeley.edu/

https://www.nuevaschool.org/enrichment/nueva-summer

https://spcs.stanford.edu/programs

https://astrocampsummer.org/

http://www.tinkeringschool.com/day-camp

https://epsiloncamp.org/

https://www.sfmathcircle.org/

https://artofproblemsolving.com/wiki/index.php/Mathematics summer progr

<u>am</u>

https://ctv.ihu.edu/summer/grades2-6/

Summer Math Review Packet

Entering 5th Grade

| Name: | |
|-------|------|
| | |

Fractions of an Hour

Complete the table.

| Fractions of an Hour | Picture on a Clock | How Many Minutes? |
|-----------------------|--------------------|-------------------|
| example $\frac{1}{4}$ | 8 2 5 3 | 15 minutes |
| $\frac{1}{3}$ | 9 · 3 8 4 | |
| 3 4 | 9 · 9 8 4 | |
| 3 2 3 | 9 · 3 8 4 | |
| 4 1/6 | 9 · 3 8 4 | |

3

Decimal & Fraction Relationships

For each fraction below, use base ten pieces to find another fraction name and a decimal name that mean the same amount. Then sketch on the grid to prove you are correct. Be sure to label your sketches with numbers and/or words.

| Fraction | Another Fraction Name | Decimal Name | Use the grid to show the fractions and decimals you named are equal. | | | |
|------------------------|--------------------------|-----------------|--|--|--|--|
| example $\frac{1}{10}$ | 10 100 | O.1 | This is 10 hundredths and it also is 1 out of 10 columns. | | | |
| 1 2 | | | | | | |
| 2 1/4 | | | | | | |
| 3 4 | | | | | | |

| COPYRIGHT (\$1991 BY ADDISON-WESLEY PUBLISHING COMPANY, BUC | | × 4 | × -Δω | B |
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| COMPANY, INC. | × w | ω ₄ × | X 04 | Thirty multiplication facts through fives |
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| | X | ×4 | X 24 | |
| | × | Χωω | X X | |
| 5 Dynamical Administration and | Y 0 00 Y 00 00 00 00 00 00 00 00 00 00 0 | X | × | |

Estimate first and then find exact answer.

Estimate ____

Estimate ____

312 X 7 Circle the equivalent fraction for each of the given fractions.

| (a) | 2/3 | 3 , | $\left(\frac{4}{6}\right)$, | <u>5</u> | |
|-----|-----|-----|------------------------------|----------|--|
| | | | | | |

(b)
$$\frac{4}{5}$$
 $\frac{2}{8}$, $\frac{3}{4}$, $\frac{8}{10}$

(c)
$$\frac{4}{10}$$
 $\frac{2}{5}$, $\frac{5}{8}$, $\frac{6}{12}$

(d)
$$\frac{3}{3}$$
 $\frac{4}{8}$, $\frac{6}{6}$, $\frac{8}{12}$

(e)
$$\frac{9}{12}$$
 $\frac{2}{3}$, $\frac{3}{4}$, $\frac{6}{10}$

(f)
$$\frac{1}{6}$$
 $\frac{1}{3}$, $\frac{2}{12}$, $\frac{3}{8}$

(g)
$$\frac{6}{8}$$
 $\frac{2}{5}$, $\frac{3}{4}$, $\frac{8}{12}$

(h)
$$\frac{1}{2}$$
 $\frac{2}{3}$, $\frac{6}{9}$, $\frac{5}{10}$

Raffle Tickets & Exercise Minutes

1 The middle school was giving away raffle tickets at Back to School Night. There were 48 classrooms altogether and 896 students at the school. Each classroom got a bundle of 108 tickets to give away. How many tickets did the classrooms get altogether?

2 Deja exercises four days a week at the gym. The gym is 7 blocks away from her house. Each time, she spends 45 minutes exercising. If she does this for 13 weeks, how much time will she spend exercising altogether?

Name:

Date: _

#a

Multiplying By 10, 11 and 12 (A)



Find each product.

5 × 12 × 10

11 × 3

4 × 12

10 × 11

6 × 12

12

× 11

12 × 5

10 × 11

. 8 × 11

12 × 4

9 × 11

12

7

12

11

6

9

× 1

× 10

× 10

× 12

× 12

 $\times 10$

1

× 10

10 × 7

9 \times 10

3 × 12

11 × 10

12 × 11

12

12

10

6

8

× 7

× 11

× 3

× 5

× 12

× 11

| 1. $Q Q Q Q Q Q Q Q Q Q $ | 2. $\frac{1}{5}$ of 25 = $\frac{3}{5}$ of 25 = |
|---|--|
| 3. | 4. |
| | 000 000 000 000 000 |
| | 000 000 000 000 |
| $\frac{1}{2}$ of 21 = | $\frac{1}{10}$ of 30 = |
| $\frac{1}{3}$ of 21 = $\frac{2}{3}$ of 21 = | $\frac{7}{10}$ of 30 = |
| 3 01 21 - | 10 01 30 = |
| 5. | 6. |
| | |
| 1 | 1 . |

$$\frac{1}{8}$$
 of 16 = $\frac{3}{8}$ of 16 =

$$\frac{1}{6}$$
 of 24 = $\frac{5}{6}$ of 24 =

Arrange the numbers in order, beginning with the smallest.

(a)
$$\frac{2}{3}$$
, $\frac{2}{5}$, $\frac{3}{8}$

Find the area and perimeter of the shapes below. Show your work.

10 ft. 24 ft.

90 in. 30 in.

Perimeter:

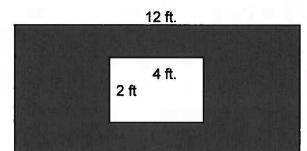
Perimeter:

Area:_____

Area:_____

Find the area of the shaded part.

4 ft.



Area of shaded part:_____

Add or subtract.

$$\frac{7}{8} - \frac{2}{4} =$$

$$\frac{9}{12} - \frac{1}{6} =$$

$$\frac{3)}{3} - \frac{8}{12} =$$

$$\frac{4)}{3} + \frac{1}{2} =$$

$$\frac{5)}{10} - \frac{2}{5} =$$

$$\frac{6)}{4} + \frac{3}{5} =$$

7)
$$\frac{4}{10} + \frac{1}{4} =$$

$$\frac{1}{5} + \frac{1}{6} =$$

Thirty division facts through fives

TONIN CAN 4

3|27 5/40 2/12 4|32 48 319 5/10 2/18 33 4116

5|25

428 324

5|35

36

2/14

3/18

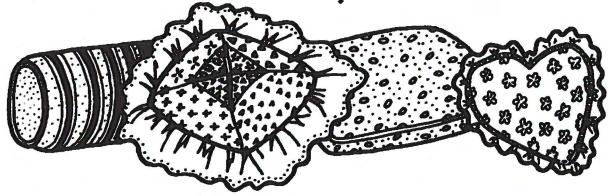
4[20

216

50

Sewing Class

| Name | |
|---|---------------------|
| Mrs. Hanson's advanced sewing class is working on their sewing projects. The students purchase various supplies. | need to |
| 1. Jennifer is going to make a quilt. She needs $1\frac{3}{4}$ yards of blue cotton, $2\frac{3}{8}$ yards of re $\frac{7}{8}$ yards of green cotton and $1\frac{1}{2}$ yards of white cotton. | d cotton, |
| How much material does she need for the quilt? | |
| 2. Brayden bought $4\frac{1}{2}$ yards of material and used only $2\frac{3}{8}$ yards. | |
| How much did he have left? | |
| 3. Lauren bought $\frac{1}{2}$ yard of lace trim and $\frac{3}{4}$ yard of beaded trim. If all trim cost \$2.00 How much did she spend? | per yard, |
| 4. It takes $1\frac{1}{3}$ yard of cotton to make a pair of shorts. Susan wants to make four pairs | of shorts. |
| How much material does she need to buy? | |
| 5. Larry needs $2\frac{1}{2}$ yards of denim for a pair of pants and $1\frac{1}{4}$ yards of denim for a shi \$4.00 per yard. | rt. Denim i |
| How much change would he get from a twenty-dollar bill? | |
| 6. Kathy bought 10 yards of material to make curtains and pillows for her room. She wards on the curtains. | used $6\frac{1}{4}$ |
| How much material did she have left? | |
| 7. A pillow can be made with $\frac{1}{2}$ yard of material. | |
| How many pillows can she make from the leftover material? | |
| How much material will she have left over? | |
| | |



Order the following from least to greatest (smallest to largest)

.08

.1

0.02

.13

.01

Add or subtract:

(Remember, this is like having \$1.25 and someone gives you 8 cents!)

+.86

3.84

-1.96

3.95

+2.71

1.08





7|42

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Estimate [

Estimate [

| | | | | 2.0 | |
|---|---|----|---|-----|---|
| 0 | 1 | 1 | 1 | 2 | 1 |
| V | } | 1, | 2 |) | 6 |
| | | 1 | | | _ |

Estimate

Name:

Date:__

6

Division Facts 10-12

11/22 |2/108 10/90 11/55 12/60 10110 1199 1224 1060 1188 12/96 10/30 11/66 12/72 10/80 11 33 12 84 10 70 12 36 7 77 12/132 11/12/ 10/40 11/11/0 12/144 12/120 11/132 10/100 12/48 11/44

74 x36

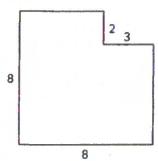
53 x 39 86 x 39

381 <u>- 45</u> 261 x <u>265</u> 93 <u>x47</u>

2 Find the area and perimeter of this shape. Show all your work.

Perimeter _____

Area _____



| Name: | Date: |
|--------|---|
| | Median, Mode, and Range |
| Find t | he median, mode, range, and mean of each set of data. |
| | 7, 4, 9, 5, 10, 3, 4 |
| 1. | Order the numbers from the least to the greatest: |
| 2. | Median: |
| 3. | Mode: |
| | |
| 4. | Range: |
| 5. | Mean: |
| | 18 ft, 16 ft, 16 ft, 12 ft, 19 ft, 15 ft |
| 6. | Order the distances from the least to the greatest: |
| 7. | Median: |
| 8. | Mode: |
| 9. | Range: |
| 10. | Mean: |

Find the median, mode, range, and mean of the set of data.

35 yd, 38 yd, 30 yd, 38 yd, 34 yd

- 11. Order the distances from the least to the greatest:
- **12.** Median: _____
- **13.** Mode: _____
- **14.** Range: _____
- **15.** Mean: _____

Find the range, mode, median, and mean.

The table shows the time it takes a group of students to travel to school.

Travel Time

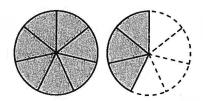
| Travel Time (minutes) | 10 | 15 | 20 | 25 | 30 |
|--------------------------|----|----|----|----|----|
| Number of Students | 1 | 3 | 2 | 1 | 2 |

- **16.** The range of the travel times is _____ minutes.
- 17. The mode of the travel times is _____ minutes.
- 18. The median travel time is _____ minutes.
- 19. The mean travel time is _____ minutes.

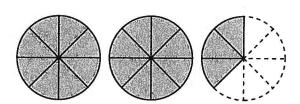
Improper Fractions

Write each mixed number as an improper fraction.

1.

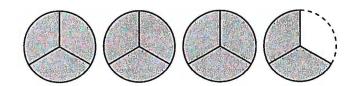


- **a.** 1 = _____ sevenths
- **b.** $\frac{3}{7} =$ _____ sevenths
- **c.** $1\frac{3}{7} =$ ______ sevenths



- **a.** 2 = _____ eighths
- **b.** $\frac{3}{8} =$ _____ eighths
- **c.** $2\frac{3}{8} =$ eighths

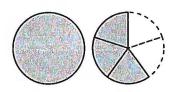
3.



- **a.** 3 = _____ thirds
- **b.** $\frac{2}{3} =$ _____ thirds
- **c.** $3\frac{2}{3} =$ _____ thirds
- **d.** =

Write the improper fractions for the shaded parts.

4.



$$1\frac{3}{5} = \begin{bmatrix} & & \\ & & \end{bmatrix}$$

5.



$$4\frac{2}{3} = \boxed{}$$













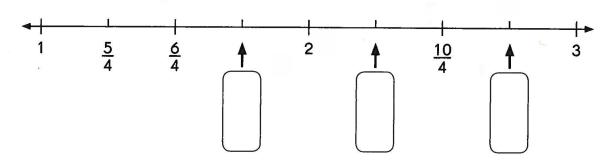


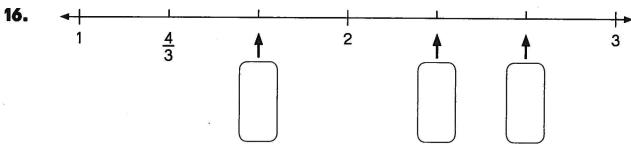
$$6\frac{1}{2} = \boxed{}$$

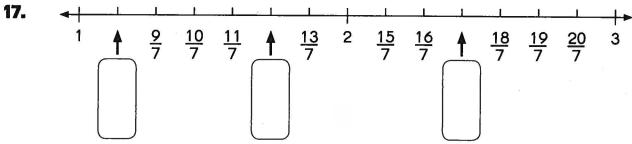
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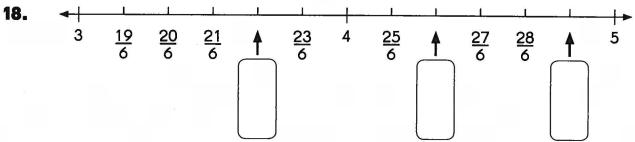
Date: .

Write the missing improper fraction in each box. Express each answer in simplest form.



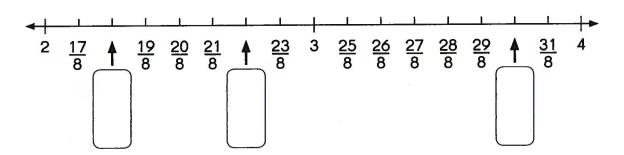


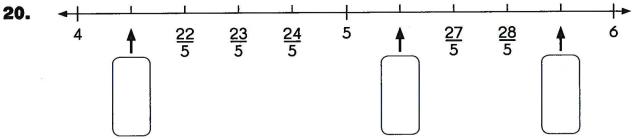




Name:

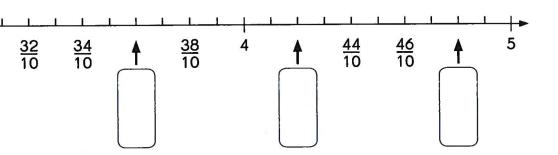
19.

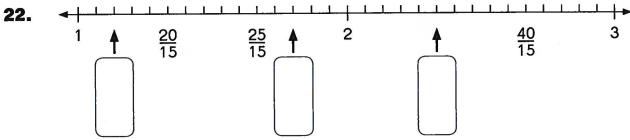




21.

3

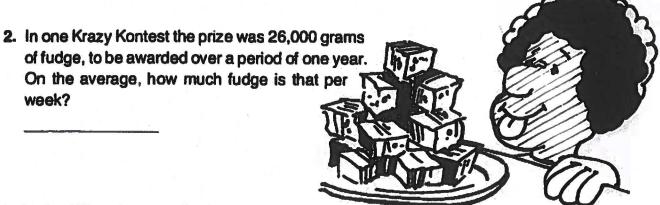




SOLVING PROBLEMS

KRAZY KONTESTS

1. A 13-year-old girl threw a brick 18.8 meters in the Brick Throwing Contest. Her throw was 7.9 meters shorter than the record. What was the record distance in the Brick Throwing Contest?



- 3. In the Pillow Fighting Contest, the two contestants sit on a pipe. They sit 70 centimeters apart. Each contestant sits 140 centimeters from an end of the pipe. How long is the pipe?
- 4. In a Money Stacking Contest, a 12-year-old boy stacked 136 quarters. What was the total value of the quarters in the stack?

Optional

Challenge

Section

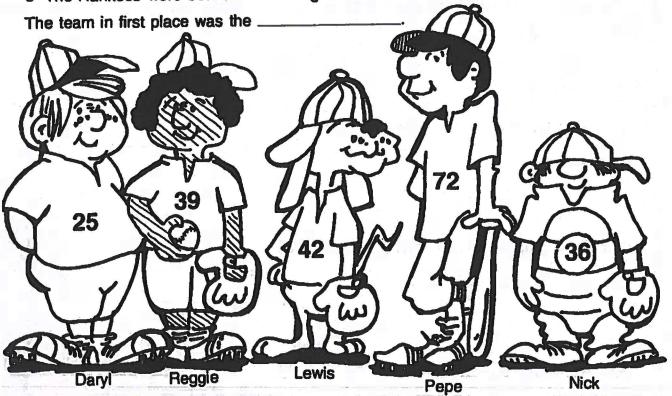
USING LOGIC

SOFTBALL FINALS

1. There were four teams in the softball league.

Which team was in first place?

- The Hankees were ahead of the Blue Sox.
- The Lions were in last place.
- The Hankees were between the Codgers and the Blue Sox.



- 2. Who is the Codger's team captain?
 - His number is less than 50.
 - When you divide his number by 5, you get a remainder.
 - His number is a multiple of 6.
 - His number is not a multiple of 7.

The Codger's team captain is ______

- 3. In the last game of the season, the Codgers played the Lions. What was the total score?
 - The score was tied 4-4 at the end of the fifth inning.
 - The Codgers scored twice as many runs as the Lions in the sixth inning.
 - The Codgers scored 5 more runs after the sixth inning.
 - The total number of runs made by both teams was 16.

The final score was Codgers _____ and Lions _____.

MAKING LISTS

ollow the rule to list the numbers on each cube.

| 1 | 2/ |
|---|----|
| 0 | |
| | |

RULE: Whole numbers less than 6.



RULE: Odd numbers between 4 and 16.

RULE: Multiples of 3 between 32 and 49.



RULE: Multiples of 9 between 10 and 70.

RULE: Odd multiples of 5 that are less than 60.



RULE: Prime numbers less than 14.

USING LOGIC

WHO'S WHO?

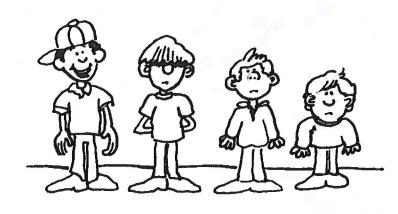
1. CLUES

- Cindy is taller than Sara.
- Rita is taller than Sara, but shorter than Cindy.
- Sara is shorter than Betsy.
- Cindy is not the tallest.
- The heights of the four women are 163.0 cm, 160.5 cm, 154.2 cm and 152.4 cm.

| Name | | ****************** | |
|--------|-------|------------------------|--|
| Height | ***** | | |

2. CLUES

- Arnold is 133.4 cm tall.
- Dan is 12.8 cm taller than Calvin.
- Arnold is 8.4 cm shorter than Calvin.
- Bruce is 6.5 cm taller than Dan.



| Name | | *************************************** | |
|--------|--|---|-----------|
| Height | | the same the second special and | - Connect |

3. CLUES

- Carl is taller than Jan.
- Peter is 12.9 cm shorter than Carl.
- Jan is 10.7 cm taller than Peter.
- Carl is 14.9 cm shorter than Margo.
- Jan is 128.2 cm tall.

| Em | | (80) |
|-----------------------|------------|--------|
| Control of the second | (Carry of | |
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| and the little | | WITH W |
| 21272 | 25 | 些 |

| Name | | |
|--------|--|---|
| Height | | *************************************** |

USING LOGIC

1. What coins do I have?

CLUES

- I have \$.60.
- Half of my coins are nickels.
- One-sixth of my coins is a single quarter.

| Му | coins | are | |
|----|-------|-----|--|
|----|-------|-----|--|



3. What coins do I have?

CLUES

- I have \$.85.
- One-third of my coins are quarters.
- Half of my coins are dimes.

| Му | coins | are | | |
|------|-------|---------|--|--|
| iviy | COMIC | | | |





2. What coins do I have?

CLUES:

- I have \$.65.
- Half of my coins are dimes.
- One-third of my coins are nickels.

| Му | coins | are | |
|----|-------|-----|--|



4. What coins do I have?

CLUES:

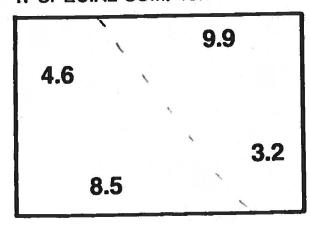
- I have \$.80.
- One-sixth of my coins are nickels.
- One-third of my coins are dimes.

| Му | coins | are | |
|----|-------|-----|--|
| | | | |

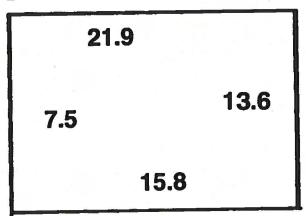
GUESSING AND CHECKING

Draw a line so that the sum of the numbers on each side of the line is equal to the SPECIAL SUM.

1. SPECIAL SUM: 13.1



2. SPECIAL SUM: 29.4



3. SPECIAL SUM: 17.0

| | 5.2 | |
|-----|-----|------|
| 5.3 | | 10.3 |
| | | 6.7 |
| 6. | 5 | |

4. SPECIAL SUM: 15.8

| | 5.8 | |
|-----|-----|-----|
| 3.2 | | 6.8 |
| 7.9 | | |
| | | 7.9 |

5. SPECIAL SUM: 25.3

| 8.6 | 16.7 |
|------|----------------|
| 11.8 | 7.7 5.8 |

6. SPECIAL SUM: 100.0

| 24.3 | 39.2 |
|------|------|
| 36.5 | 51.7 |
| 42.9 | 5.4 |

- 1. Roll a die.
- 2. Multiply that number times 1, 10, or 100 for your score.

$$6 \times 100 = 600$$

$$2 \times 100 = 200$$

$$800$$

$$4 \times 100 = 400$$

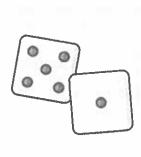
$$1200$$

$$6 \times 100 = 600$$

$$1800$$

- 3. Take turns rolling and adding to your score each time.
- 4. The first person to get to 2,000 exactly wins.

- 1. Print out or draw a game board for each player.
- 2. Roll 2 dice. Use the digits to make a number. (If you roll a 5 and a 1, you could make 51 or 15.)
- 3. Is your number divisible by 2, 3, or 5? Write your number in one of the columns.



| 2 | 3 | 5 |
|----|----|----|
| 62 | 36 | 15 |
| 14 | | |
| | H | |

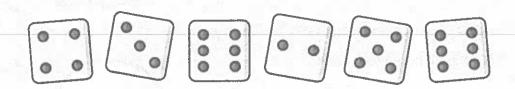
- 4. If you roll numbers that you cannot play, skip your turn.
- 5. Take turns rolling and writing in numbers that are divisible by 2, 3, or 5.
- 6. The first one to fill in their game board wins.



PLAYERS: 2-4

SKILL: division with remainders YOU NEED: paper & pencil, dice

1. Roll 6 dice (or roll one die 6 times). Add the dots to find your starting number.



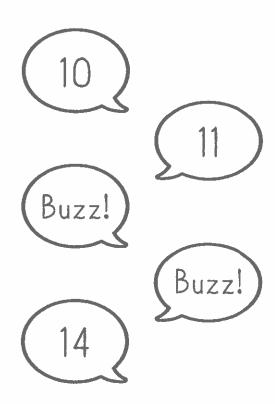
4+3+6+2+5+6 = 26 IS YOUR STARTING NUMBER

- 2. All the players use the same starting number (the dividend).
- 3. Each player rolls a die. This is your divisor; you'll divide the starting number into that many groups. Example: You rolled a 4, so your problem is 26 ÷ 4.

- 4. Each player solves for the number they rolled.
- 5. Ignore the remainders. Write the answer (in this case a 6) as your score for the round.
- 6. Roll 6 dice again for a new starting number.
- 7. The highest score after 5 rounds wins.

YOU NEED: no supplies needed

- This is a counting game. The first person says 1. The second person says 2, and so on.
- 2. Any time you get to a multiple of 3, say BUZZ instead of the number.
- 3. Any time you get to a number with a 3 in it, say BUZZ instead of the number.
- 4. How far can you get without making a mistake?
- 5. Play with other multiples, like 4 or 9.



level up!

Play Bish Bash Bosh. It's the same idea as Buzz, but a little trickier:

- Say BISH for a multiple of 3
- Say BASH for a multiple of 5
- Say BOSH for a multiple of 3 and 5

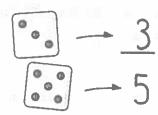
copy cat

PLAYERS: 2

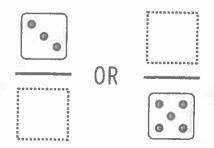
SKILL: comparing fractions

YOU NEED: 4 dice, Fraction Strips

- 1. Give 2 dice to each player.
- 2. The first player rolls...and makes...two dice. Make a fraction like this:



3. The second player copies...either the numerator (top number) or denominator (bottom number) of the other player's fraction.



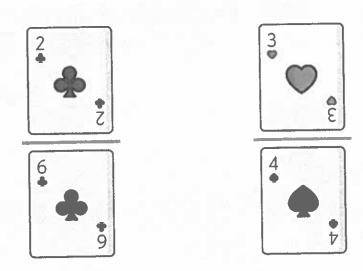
- 4. Roll your die to fill in the missing number.
- 5. Compare fractions: which one is bigger? If you're not sure, check your answer with fraction strips.
- 6. The player with the larger fraction gets $1\frac{1}{2}$ points.
- 7. Play 8 rounds. The player with the higher score wins.

fracto giganto

PLAYERS: 2

SKILL: comparing fractions YOU NEED: deck of cards

- Take out the jacks, queens, and kings. Aces =1
- 2. Give each player half the deck. Put your cards face down in front of you.
- Take 4 cards from your pile. Use two of those cards to make the largest fraction you can.
- 4. Compare your fraction to the other player's fraction. Who has the bigger fraction?



- 5. The player with the higher fraction takes all 4 cards that were played.
- 6. Draw another 2 cards, so each of you now have 4 cards to choose from.
- 7. Play until you can't draw any more cards. The player with the most cards wins.

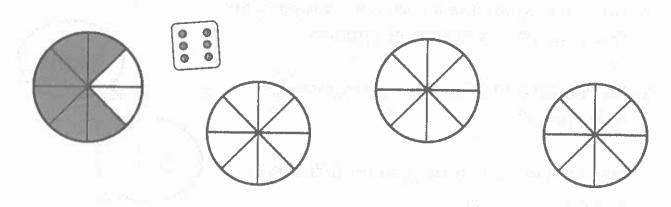


PLAYERS: 2-4

SKILL: adding fractions

YOU NEED: Pizza Game Board, dice

- 1. Print out the Pizza Game Boards.
- 2. Roll the die. Color in that many pieces of pizza. If you rolled a 6, you would color 6 pieces of pizza.



- 3. The pizzas are cut in eighths. Six pieces of pizza is 6/8 of the pizza.
- 4. On your next turn, roll for more pieces of pizza.
- 5. Fill in your score sheet to show how much pizza you have:

| Fraction (My Roll) | Total Eighths | Mixed Number |
|--------------------|----------------|--------------|
| <u>6</u> 8 | <u>6</u> 8 | |
| <u>5</u> 8 | <u>11</u> 8 | 1 3/8 |

6. The first person to fill in all 4 pizzas wins.



PLAYERS: 2

SKILL: decimals concept

YOU NEED: Hundred Chart, dice,

colored pencils or markers

- Print a Hundred Chart for each player. A grid is one whole. This is your game board.
- 2. Choose to roll one or two dice on your turn.
- 3. If you roll two dice, make a decimal number in the hundredths.





$$= 0.62$$

4. Color in that much of THE OTHER PLAYER'S board. The part you color in shows where the zombies are.

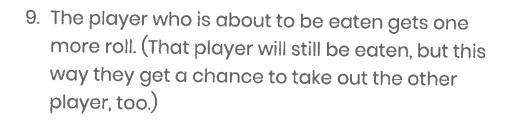
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|----|----|----|----|----|----|----|----|-----|
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

zombies

5. If you choose to roll just one die, you must say whether you are rolling for tenths or hundredths BEFORE you roll the die.



- 6. You must roll an exact number to fill in the last of your opponent's board.
- 7. If you roll a number that you can't play, skip your turn.
- 8. Once a board is completely filled in, the zombies have invaded!



10. Any players still alive at the end of the game win.



get in line

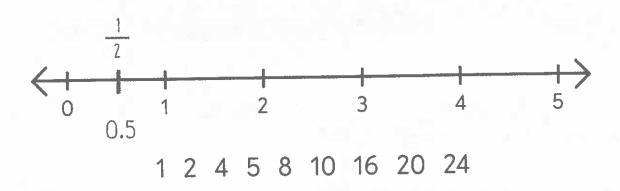
PLAYERS: 2

SKILL: ordering fractions and decimals YOU NEED: Get In Line Game Board,

different-colored markers

 Print a Get In Line Game Board. Each player takes a different-colored marker.

2. Pick 2 numbers from the list at the bottom of the game board. Make a fraction with the numbers.



EXAMPLE: YOU PICK A 1 AND A 2 AND MAKE THE FRACTION 1/2.

- 3. Write your fraction in the correct spot on the number line in your color.
- 4. Write the decimal below your fraction.
- 5. Take turns writing in a new fraction and decimal in your color.
- 6. The first player to get 4 numbers in a row in their color wins.

round four

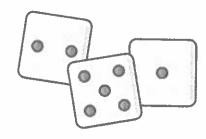
PLAYERS: 2

SKILL: rounding decimals

YOU NEED: Round Four Game Board, dice,

colored markers

- Print the game board. Both players will use the same game board.
- 2. Roll 3 dice.
- 3. Use the three digits to make a decimal number.
- 4. For example, you roll 2, 5 and 1. You make the decimal number 21.5 (or 5.12, or some other number).
- 5. Round it to the nearest whole number.
- 6. Circle that number on the game board in your color.
- 7. Take turns making numbers and circling them on the game board.
- 8. The first player to get 4 in a row wins.



21.5 (or 51.2 or 12.5 etc.)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|------|------|------|----|----|----|
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 21 | (22) | 23 | 24 | 25 | 26 | 27 |
| 31 | | (33) | | | | 37 |
| 41 | 42 | 43 | (44) | 45 | 46 | 47 |
| 51 | | | | | 56 | |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 |

level up!

Roll 4 dice and make numbers into the thousandths.



mixed skill games

| BOWLING FOR NUMBERS | 52 |
|---------------------------|----|
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