



**Convent &
Stuart Hall**

Schools of the Sacred Heart San Francisco

Entering 4th Grade Summer Math Engagement

Name: _____

Summer Engagement Philosophy: 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 previous school year. This packet is designed to **review** some essential skills/concepts/math facts to ensure a smooth transition back to school.

Expectations: Students are expected to complete the packet of practice problems. Our goal is for students to spread out this practice with approximately one page per week so there is a continual engagement with mathematics. At the end of the packet, there is a list of extra games/resources that are also encouraged for additional practice. Students will be turning this packet in to their teacher to check on the first day of school. This is intended to be a part of the first check for understanding prior to our beginning of year Inventory Assessments.

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. Spacing the practice throughout the summer will be more effective in terms of keeping skill sets in place (ex: Monday Math fun!)
- Establish a place where your child can work without distractions and encourage independence when appropriate.

Week 1: Multiplication Facts Practice

1 a. $5 \times 7 = \underline{\quad}$

1 b. $9 \times 5 = \underline{\quad}$

2 a. $12 \times 9 = \underline{\quad}$

2 b. $9 \times 4 = \underline{\quad}$

3 a. $8 \times 4 = \underline{\quad}$

3 b. $8 \times 12 = \underline{\quad}$

4 a. $7 \times 8 = \underline{\quad}$

4 b. $3 \times 8 = \underline{\quad}$

5 a. $12 \times 8 = \underline{\quad}$

5 b. $9 \times 8 = \underline{\quad}$

6 a. $8 \times 5 = \underline{\quad}$

6 b. $12 \times 8 = \underline{\quad}$

7 a. $10 \times 7 = \underline{\quad}$

7 b. $11 \times 8 = \underline{\quad}$

8 a. $3 \times 9 = \underline{\quad}$

8 b. $7 \times 11 = \underline{\quad}$

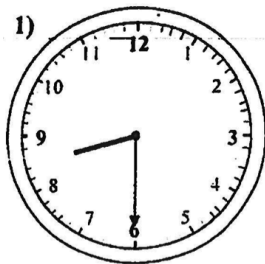
9 a. $10 \times 9 = \underline{\quad}$

9 b. $9 \times 3 = \underline{\quad}$

10 a. $6 \times 8 = \underline{\quad}$

10 b. $11 \times 7 = \underline{\quad}$

Reading Time Practice:



8:30



12:35



8:45

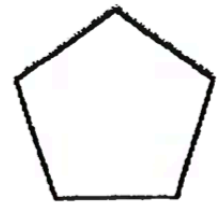
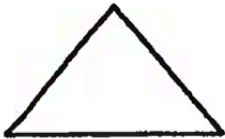
Week 2: Reading Data:

The graph below shows the favorite desserts chosen by a 3rd grade.
Each x stands for 2 students.

			
cupcakes	ice cream	brownies	pie

How many more students chose ice cream than pie? _____

If there are 40 students in the grade, how many do you think may have been absent the day the graph was made? _____

Geometry: Label each shape:**Multiplication Practice:**

Multiply each number in the box by 8. The first one is done for you.

7 56	5	3	1	4	8
4	6	0	5	9	10
3	10	2	7	3	6
6	9	8	5	0	9

Week 3: Word Problems:

1. Sammy put his toys into boxes. He put 250 toys equally into five (5) boxes. How many toys did each box have?
2. My dog had some bones. Then he dug up 367 bones. Now he has 860 bones. How many bones did he start with?
3. Jazmin had 1209 dolls and Geraldine had 2186 dolls. If they put their dolls together, how many would they have?
4. Joel was walking in the park and saw a flock of 5362 birds flying. How many total wings were in the flock?
5. Mariela was in the hospital and she got 403 get well cards from around the country. When she got home she got 287 more cards from friends and family. How many get well cards did Mariela get?

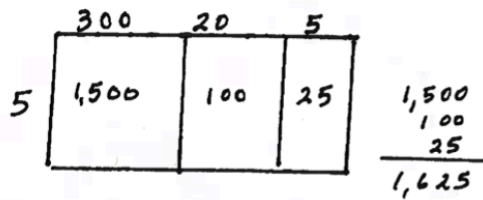
Multiplication Facts Practice: Multiply each of the numbers in the box by 6

7	5	3	1	4	8
4	6	0	5	9	10
3	10	2	7	3	6

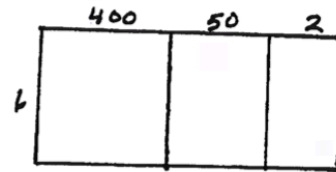
Week 4: Multiplication Practice

Complete the arrays for each multiplication problem below and record your answers:

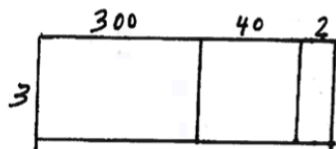
$$324 \times 5 = 1,625$$



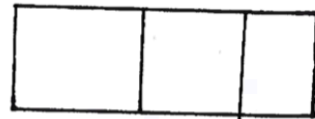
$$452 \times 6 = \underline{\hspace{2cm}}$$



$$342 \times 3 = \underline{\hspace{2cm}}$$



$$226 \times 8 = \underline{\hspace{2cm}}$$



$$5 \times 8 = \underline{\hspace{2cm}}$$

$$3 \times 7 = \underline{\hspace{2cm}}$$

$$23 \times 2 = \underline{\hspace{2cm}}$$

$$7 \times 8 = \underline{\hspace{2cm}}$$

$$5 \times 9 = \underline{\hspace{2cm}}$$

$$3 \times 8 = \underline{\hspace{2cm}}$$

$$4 \times 6 = \underline{\hspace{2cm}}$$

$$6 \times 3 = \underline{\hspace{2cm}}$$

Word Problems:

- During the basketball season, Eva scored 83 field goals and 37 free throws. She scored 2 points for each field goal and 1 point for each free throw. How many points did Eva score during the season?
- The relay team scored 10 points for each of the 7 first-place finishes and 6 points for each of the 4 second-place finishes. How many points did the team score?

Week 5: 3-4 Digit Subtraction Practice

$$\begin{array}{r} 802 \\ - 789 \\ \hline \end{array}$$

$$\begin{array}{r} 6,247 \\ - 3,694 \\ \hline \end{array}$$

$$\begin{array}{r} 3,005 \\ - 1,782 \\ \hline \end{array}$$

$$\begin{array}{r} 4,106 \\ - 2,343 \\ \hline \end{array}$$

$$\begin{array}{r} 912 \\ - 659 \\ \hline \end{array}$$

$$\begin{array}{r} 5,256 \\ - 2,191 \\ \hline \end{array}$$

$$\begin{array}{r} 6,001 \\ - 3,703 \\ \hline \end{array}$$

$$\begin{array}{r} 7,207 \\ - 1,439 \\ \hline \end{array}$$

$$\begin{array}{r} 661 \\ - 203 \\ \hline \end{array}$$

$$\begin{array}{r} 7,236 \\ - 6,798 \\ \hline \end{array}$$

$$\begin{array}{r} 4,111 \\ - 751 \\ \hline \end{array}$$

$$\begin{array}{r} 2,002 \\ - 1,562 \\ \hline \end{array}$$

$$\begin{array}{r} 772 \\ - 703 \\ \hline \end{array}$$

$$\begin{array}{r} 4,146 \\ - 1,278 \\ \hline \end{array}$$

$$\begin{array}{r} 5,135 \\ - 2,677 \\ \hline \end{array}$$

$$\begin{array}{r} 4,315 \\ - 3,013 \\ \hline \end{array}$$

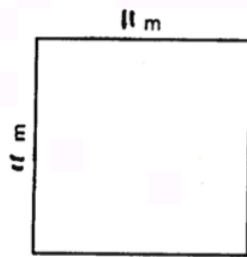
Word Problem Practice:

1. A florist ordered 96 roses and then put them into bouquets with a dozen roses in each. The florist sold each bouquet for \$50. How much money did the florist make?
2. Laura and her four sisters went apple picking. They each picked 14 apples. How many apples did they pick together?

Week 6: Geometry Calculations

Find the area and perimeter of each square. Be sure to include units!

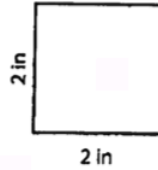
1)



Area : 121 sq. m

Perimeter : 44 m

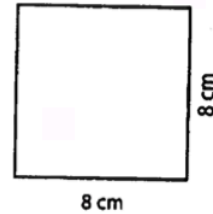
2)



Area : _____

Perimeter : _____

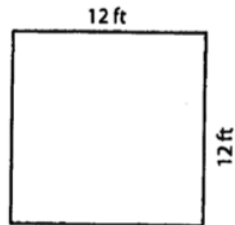
3)



Area : _____

Perimeter : _____

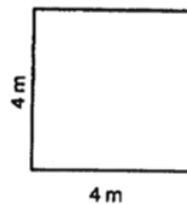
4)



Area : _____

Perimeter : _____

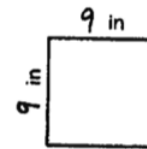
5)



Area : _____

Perimeter : _____

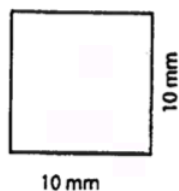
6)



Area : _____

Perimeter : _____

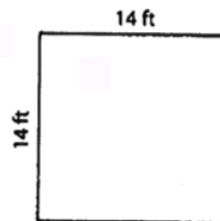
7)



Area : _____

Perimeter : _____

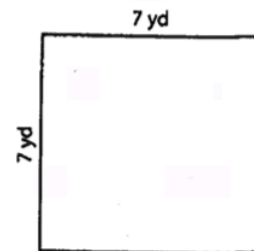
8)



Area : _____

Perimeter : _____

9)



Area : _____

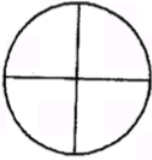
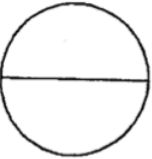
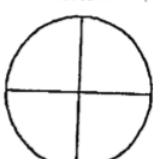
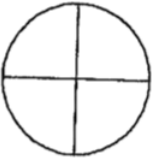
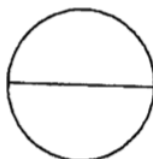
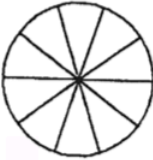
Perimeter : _____

Word Problem Challenge:

A farmer needs to build a small bridge to span a stream on his property. He needs a piece of strong wood for the bridge that is 9 feet long and 5 feet wide. He has a piece of wood in his shed that measures 115 inches long and 48 inches wide. Is the wood big enough to get the job done?

Week 7: Fraction Visualization:

Fill in each box with <, > or =

1)  $\frac{3}{4}$	 $\frac{5}{6}$	
2)  $\frac{6}{10}$	 $\frac{3}{5}$	
3)  $\frac{1}{2}$	 $\frac{3}{8}$	
4)  $\frac{1}{3}$	 $\frac{1}{4}$	
5)  $\frac{6}{7}$	 $\frac{7}{9}$	
6)  $\frac{9}{12}$	 $\frac{5}{6}$	
7)  $\frac{14}{16}$	 $\frac{6}{8}$	
8)  $\frac{2}{4}$	 $\frac{1}{2}$	
9)  $\frac{8}{9}$	 $\frac{8}{12}$	
10)  $\frac{7}{10}$	 $\frac{4}{6}$	

Multiplication Facts Practice:

$2 \times 7 =$

$3 \times 6 =$

$5 \times 5 =$

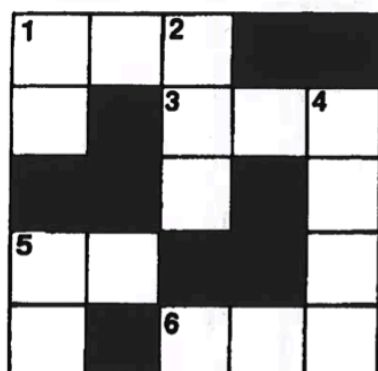
$4 \times 6 =$

$10 \times 2 =$

$6 \times 8 =$

Week 8: Logic Challenge:

Use the clues to find the numbers. Write the numbers in the cross-number puzzle:



ACROSS CLUES

1. ● It is less than 170.
● Its digits sum to 12.
● It is greater than 150.
● It is even.
3. ● It is odd.
● It is greater than 700.
● It is divisible by 3.
● It is less than 720.
● Each digit is different.
5. ● It is a multiple of 3.
● It is a multiple of 7.
● It is less than 40.
6. ● It is less than 110.
● If you subtract 1, it is a square number.

DOWN CLUES

1. ● Its digits sum to 3.
● It is a multiple of 4.
2. ● It is greater than 600.
● It is a multiple of 25.
● It is a multiple of 3.
● It is less than 750.
4. ● It is greater than 5000.
● Its digits sum to 7.
● It is less than 5100.
5. ● It is greater than 20.
● It is a multiple of 4.
● It is *not* a multiple of 6.
● It is *not* greater than 30.

Math Facts Practice:

1 a. $5 \times 2 =$ _____

1 b. $8 \times 4 =$ _____

2 a. $8 \times 9 =$ _____

2 b. $3 \times 6 =$ _____

3 a. $4 \times 3 =$ _____

3 b. $7 \times 3 =$ _____

4 a. $3 \times 10 =$ _____

4 b. $9 \times 8 =$ _____

5 a. $6 \times 3 =$ _____

5 b. $9 \times 5 =$ _____

Week 9: Basic Division Practice

1. $12 \div 4 =$ _____ 2. $6 \div 6 =$ _____ 3. $49 \div 7 =$ _____

4. $16 \div 8 =$ _____ 5. $18 \div 6 =$ _____ 6. $48 \div 6 =$ _____

7. $42 \div 7 =$ _____ 8. $1 \div 1 =$ _____ 9. $35 \div 7 =$ _____

10. $28 \div 7 =$ _____ 11. $7 \div 1 =$ _____ 12. $40 \div 10 =$ _____

13. $42 \div 6 =$ _____ 14. $72 \div 9 =$ _____ 15. $50 \div 10 =$ _____

16. $12 \div 2 =$ _____ 17. $18 \div 3 =$ _____ 18. $5 \div 1 =$ _____

19. $2 \div 2 =$ _____ 20. $72 \div 8 =$ _____ 21. $25 \div 5 =$ _____

22. $18 \div 2 =$ _____ 23. $54 \div 9 =$ _____ 24. $20 \div 10 =$ _____

25. $24 \div 3 =$ _____ 26. $15 \div 3 =$ _____ 27. $56 \div 8 =$ _____

Word Problem Challenge:

1. A spider is climbing up a wall which is 27m high. Every day, it climbs 7m, but slips down 2 at night. How many days will it take the spider to reach the top of the wall?
2. A landlord collects \$125 for each of the 8 apartments in his building to help pay for a new security camera. If the camera costs \$1100 will the landlord have collected enough money to pay for it? Explain.

Week 10: Find the Missing Number

1. $4 \times \underline{\quad} = 32$

2. $\underline{\quad} \times 10 = 100$

3. $11 \times \underline{\quad} = 121$

4. $7 \times \underline{\quad} = 35$

5. $11 \times 10 = \underline{\quad}$

6. $11 \times \underline{\quad} = 99$

7. $2 \times \underline{\quad} = 22$

8. $4 \times 5 = \underline{\quad}$

9. $\underline{\quad} \times 2 = 16$

10. $9 \times \underline{\quad} = 18$

11. $\underline{\quad} \times 12 = 132$

12. $7 \times 6 = \underline{\quad}$

13. $8 \times 3 = \underline{\quad}$

14. $10 \times \underline{\quad} = 70$

15. $\underline{\quad} \times 2 = 14$

16. $3 \times \underline{\quad} = 12$

17. $7 \times \underline{\quad} = 70$

18. $\underline{\quad} \times 7 = 42$

19. $10 \times \underline{\quad} = 110$

20. $\underline{\quad} \times 4 = 16$

21. $\underline{\quad} \times 8 = 80$

22. $11 \times 6 = \underline{\quad}$

23. $7 \times \underline{\quad} = 77$

24. $3 \times \underline{\quad} = 33$

25. $\underline{\quad} \times 12 = 144$

26. $7 \times 7 = \underline{\quad}$

27. $\underline{\quad} \times 9 = 72$

Fraction Practice: Color in the fraction:

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

--	--	--

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

--	--

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

--	--	--	--	--	--

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

--	--	--	--	--	--	--	--	--	--

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

--	--	--	--	--

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

--	--	--	--	--	--	--	--

7. $\frac{1}{5} =$

--	--	--	--	--

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

--	--	--	--	--	--

9. $\frac{6}{10} =$

--	--	--	--	--	--	--	--	--	--

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

--	--	--

Additional Games and Resources:

Games:

Qwirkle	Catan (Jr)	Sorry
Mastermind	PayDay	Uno
Flip 4	Monopoly	Dominos
Make 7	Chutes and Ladders	Spot It
Ken-Ken/Sudoku/Inkie	Connect Four	Chess
Battleship	Guess Who	
Ticket to Ride	Fishing for 10	

Math Websites:

Youcubed: <http://youcubed.org>

Website by Jo Boaler with weekly tasks and some free online classes for students from Stanford.

Beast Academy: <http://beastacademy.com/books>

Math-related books for all ages!

PBS Kids Cyber Games: <http://pbskids.org/cyberchase>

Free math games, as well as other subject areas

Summer Enrichment Camps:

Berkeley Academic Talent Development Program

Elementary sessions run in July

Art of Problem Solving Summer Camps

Offers both in-person and virtual options