Get Ready for 6th Grade!
Summer
Mathematics Activities

Dear Parents, Guardians, and Students,

Summer is a time to relax, explore, and have fun while keeping learning skills strong. Research shows that students can lose up to a month of math learning over the summer. Regular math practice helps students maintain their knowledge and confidence and prepare for the next grade. To help prevent this "summer slide," we have provided a variety of fun and engaging math activities for students to enjoy throughout the summer.

Daily Math Practice

We encourage students to complete one First in Math assignment each day to strengthen their math skills and build fluency.

Using the Summer Math Activity List

- Complete the activities in the boxes and cross off each activity as it is completed.
- Have fun completing a choice activity.
- Record completed activities on the activity log.
- Bring your completed log to school and show it to your new teacher to receive a special gift!

Helpful Materials

Keep these items nearby as you complete your summer math activities:

- Math notebook/journal from the school year
- A folder for organizing activities
- Blank paper
- Pencils
- A deck of playing cards
- Board games
- Coins

Our IB Transdisciplinary Theme, *How We Express Ourselves*, encourages scholars to explore, communicate, and apply ideas. Mathematics offers opportunities for creativity, problem-solving, and critical thinking. Whether cooking, shopping, traveling, or playing games, children can think mathematically in everyday situations.
Most importantly, encourage your child to explain their thinking as they solve problems. Asking questions such as, "How did you figure it out?" helps deepen understanding, build confidence, and strengthen mathematical reasoning.

We wish you a safe, enjoyable, and mathematically engaging summer!
Sincerely,

The Hempstead Public Schools Mathematics Team

Summer Math Activity Log

Activity log for student entering grade_____. Record the dates and descriptions of the math activities you complete. Bring this log back to your new teacher in September.

Activity #	Date Completed	Description of Activity
Example	**7/2/24**	**The Math Problem about drawing 2 dogs. *OR* choice activity, like Candy Land…**
#1		
#2		
#3		
#4		
#5		
#6		
#7		
#8		
#9		
#10		
#11		
#12		
#13		
#14		
#15		
#16		
#17		
#18		
#19		
#20		

Student's Name: _____

Parent Signature: _____

Summer Math Activity Log

Activity log for student entering grade_____. Record the dates and descriptions of the math activities you complete. Bring this log back to your new teacher in September.

Activity #	Date Completed	Description of Activity
#21		
#22		
#23		
#24		
#25		
#26		
#27		
#28		
#29		
#30		
#31		
#32		
#33		
#34		
#35		
#36		
#37		
#38		
#39		
#40		

Student's Name: _____

Parent Signature: _____

Get Ready for Grade 6: Math Activities

Complete these math activities this summer. Each time, choose an activity from the boxes below – or from the back. Cross off a box when you do it and record the activity on your math log.

If you have eight coins in your pocket, what is the most money that you could have? The least?	Calculate: 15 X 15= 25 X 25= 35 X 35= 45 X 45=	As of today, what fraction of their games have the Red Sox won?	Choose from the Problem Set!! 	List the next three terms in the sequence. {5, 16, 27, 38,...}
How many different combinations can you make with 3 types of ice cream, 2 types of sauce, and 2 types of toppings?	The sum of two numbers is 15 and their product is 54. What are the two numbers?	If you bought 3 CD's each costing $12.99, and paid with a $50 bill. What would your change be?	How many weeks are there in three years? How many days are there in three years?	Choose from the Problem Set!! 
If you spend $25 a day, how long would it take to spend $100,000?	Choose from the Problem Set!! 	If you tripled the number of sides of a pentagon, how many sides would the new figure have?	A table and four identical chairs cost $865. If the table cost $589, how much does each chair cost?	$\frac{4}{7} + ? = \frac{6}{7}$ $\frac{1}{2} + ? = \frac{11}{12}$
How many prime numbers are there between 0 and 50?	Six nickels is what percent of a dollar?	Matt swims 5 laps each day. Greg swims 3 times as many laps each day. How many laps will Greg swim after 5 days?	Choose from the Problem Set!! 	Ben has 8 square tiles. Each tile has a width of 9 inches. He lays the tiles down in a long row. What is the perimeter of the rectangle of tiles?
Choose from the Problem Set!! 	How many more even numbered days are there in July than there are in February?	Find the missing numbers in the pattern: {2,4,8,16,__,__,__,256}	A number divided by seven has 42 as its quotient and five as its remainder. What is the number?	If four chocolates cost $1.00, how many chocolates can you buy for $5.00?
How many seconds are there in 1 hour? How many seconds are there in a day? A week?	Choose from the Problem Set!! 	Change the following improper fractions to mixed numbers. $\frac{5}{4}, \frac{11}{5}, \frac{2}{10}$	What three even numbers add up to 54?	One side of an equilateral triangle is 9cm. What is the perimeter of the triangle?
A board 8ft. 4in. long is cut into four pieces of equal length. How long is each piece?	Order the following from least to greatest. $\frac{1}{2}, \frac{2}{3}, \frac{1}{4}, \frac{2}{5}$	Choose from the Problem Set!! 	How many edges does a cube have? How many faces does a cube have?	What do all of these numbers have in common? {17, 19, 41, 73, 79}

Get Ready for Grade 6 Choice Activities

1. **Read a Cool Mathematics Book:**

The Phantom Tollbooth by Norton Juster ***Math Curse*** by Jon Scieszka ***Chasing Vermeer*** by Blue Balliett ***All of the Above*** by Shelley Pearsall ***The Man Who Counted: A Collection of Mathematical Adventures*** by Malba Tahan	***The Number Devil*** by Hans Magnus Enzensberger ***Sir Cumference and the Dragon of Pi*** by Cindy Neuschwander ***Sir Cumference and the Sword in the Cone*** by Cindy Neuschwander
Find Mathematics Books to Read Online at Epic!: https://www.getepic.com/ Parents can sign up for free!	

2. **Use a cool mathematics website!**

http://illuminations.nctm.org http://www.shodor.org/interactivate/activities http://www.aaamath.com http://nlvm.usu.edu/en/nav/vlibrary.html https://www.youcubed.org/students/	www.mathplayground.com www.funbrain.com https://www.khanacademy.org/ http://www.visualfractions.com/ https://www.firstinmath.com/

3. **Exercise your brain with a strategy game. A great way to have fun with friends and family! Some good games are listed below. Maybe you've got some favorites of your own!**

   - **Sequence**
   - **Chess**
   - **Dominoes**
   - **Blokus**
   - **Quirkle**
   - **Set**
   - **Settlers of Catan**
   - **Ticket to Ride**
   - **Mastermind**
   - **Go**

4. **Take a free online course designed for learners of all levels of mathematics Just follow the link below:**

   Stanford Online

PROBLEM SET

Name _____ Date _____

1. Express as decimal numerals. The first one is done for you.

a. Four thousandths	0.004
b. Twenty-four thousandths	
c. One and three hundred twenty-four thousandths	
d. Six hundred eight thousandths	
e. Six hundred and eight thousandths	
f. $\frac{46}{1000}$	
g. $3\frac{946}{1000}$	
h. $200\frac{904}{1000}$	

2. Express each of the following values in words.

a. 0.005 _____

b. 11.037 _____

c. 403.608 _____

3. Write the number on a place value chart. Then, write it in expanded form using fractions or decimals to express the decimal place value units. The first one is done for you.

a. 35.827

Tens	Ones		Tenths	Hundredths	Thousandths
3	5	●	8	2	7

$35.827 = 3 \times 10 + 5 \times 1 + 8 \times \left(\frac{1}{10}\right) + 2 \times \left(\frac{1}{100}\right) + 7 \times \left(\frac{1}{1000}\right)$ *or*

$= 3 \times 10 + 5 \times 1 + 8 \times 0.1 + 2 \times 0.01 + 7 \times 0.001$

b. 0.249

c. 57.281

4. Write a decimal for each of the following. Use a place value chart to help, if necessary.

a. $7 \times 10 + 4 \times 1 + 6 \times \left(\frac{1}{10}\right) + 9 \times \left(\frac{1}{100}\right) + 2 \times \left(\frac{1}{1000}\right)$

b. $5 \times 100 + 3 \times 10 + 8 \times 0.1 + 9 \times 0.001$

c. $4 \times 1{,}000 + 2 \times 100 + 7 \times 1 + 3 \times \left(\frac{1}{100}\right) + 4 \times \left(\frac{1}{1000}\right)$

A

Number Correct: _____

Multiply Decimals by 10, 100, and 1,000

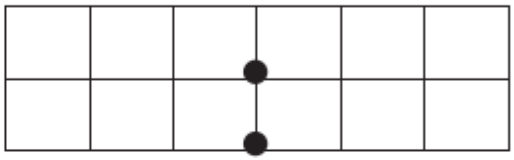
1.	62.3 × 10 =	
2.	62.3 × 100 =	
3.	62.3 × 1,000 =	
4.	73.6 × 10 =	
5.	73.6 × 100 =	
6.	73.6 × 1,000 =	
7.	0.6 × 10 =	
8.	0.06 × 10 =	
9.	0.006 × 10 =	
10.	0.3 × 10 =	
11.	0.3 × 100 =	
12.	0.3 × 1,000 =	
13.	0.02 × 10 =	
14.	0.02 × 100 =	
15.	0.02 × 1,000 =	
16.	0.008 × 10 =	
17.	0.008 × 100 =	
18.	0.008 × 1,000 =	
19.	0.32 × 10 =	
20.	0.67 × 10 =	
21.	0.91 × 100 =	
22.	0.74 × 100 =	

23.	4.1 × 1,000 =	
24.	7.6 × 1,000 =	
25.	0.01 × 1,000 =	
26.	0.07 × 1,000 =	
27.	0.072 × 100 =	
28.	0.802 × 10 =	
29.	0.019 × 1,000 =	
30.	7.412 × 1,000 =	
31.	6.8 × 100 =	
32.	4.901 × 10 =	
33.	16.07 × 100 =	
34.	9.19 × 10 =	
35.	18.2 × 100 =	
36.	14.7 × 1,000 =	
37.	2.021 × 100 =	
38.	172.1 × 10 =	
39.	3.2 × 20 =	
40.	4.1 × 20 =	
41.	3.2 × 30 =	
42.	1.3 × 30 =	
43.	3.12 × 40 =	
44.	14.12 × 40 =	

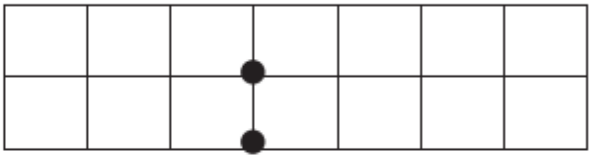
Name _____ Date _____

1. Show the numbers on the place value chart using digits. Use >, <, or = to compare. Explain your thinking in the space to the right.

34.223 ◯ 34.232



0.8 ◯ 0.706



2. Use >, <, or = to compare the following. Use a place value chart to help, if necessary.

a. 16.3	◯	16.4
b. 0.83	◯	$\frac{83}{100}$
c. $\frac{205}{1000}$	◯	0.205
d. 95.580	◯	95.58
e. 9.1	◯	9.099
f. 8.3	◯	83 tenths
g. 5.8	◯	Fifty-eight hundredths

3. Arrange the numbers in increasing order.

a. 3.049 3.059 3.05 3.04

_____

b. 182.205 182.05 182.105 182.025

Name _____ Date _____

1. Solve, and then write the sum in standard form. Use a place value chart if necessary.

   a. 1 tenth + 2 tenths = _____ tenths = _____

   b. 14 tenths + 9 tenths = _____ tenths = _____ one(s) _____ tenth(s) = _____

   c. 1 hundredth + 2 hundredths = _____ hundredths = _____

   d. 27 hundredths + 5 hundredths = _____ hundredths = _____ tenths _____ hundredths = _____

   e. 1 thousandth + 2 thousandths = _____ thousandths = _____

   f. 35 thousandths + 8 thousandths = ____ thousandths = ____ hundredths ____ thousandths = _____

   g. 6 tenths + 3 thousandths = _____ thousandths = _____

   h. 7 ones 2 tenths + 4 tenths = _____ tenths = _____

   i. 2 thousandths + 9 ones 5 thousandths = _____ thousandths = _____

2. Solve using the standard algorithm.

a. 0.3 + 0.82 = _____	b. 1.03 + 0.08 = _____
c. 7.3 + 2.8 = _____	d. 57.03 + 2.08 = _____
e. 62.573 + 4.328 = _____	f. 85.703 + 12.197 = _____

3. Van Cortlandt Park's walking trail is 1.02 km longer than Marine Park's. Central Park's walking trail is 0.242 km longer than Van Cortlandt's.

   a. Fill in the missing information in the chart below.

New York City Walking Trails	
Central Park	_____ km
Marine Park	1.28 km
Van Cortlandt Park	_____ km

   b. If a tourist walked all 3 trails in a day, how many kilometers would he or she have walked?

Name _____ Date _____

1. Subtract, writing the difference in standard form. You may use a place value chart to solve.

   a. 5 tenths – 2 tenths = _____ tenths = _____

   b. 5 ones 9 thousandths – 2 ones = ones thousandths =

   c. 7 hundreds 8 hundredths – 4 hundredths = _____ hundreds _____ hundredths = _____

   d. 37 thousandths – 16 thousandths = _____ thousandths = _____

2. Solve using the standard algorithm.

a. 1.4 – 0.7 = _____	b. 91.49 – 0.7 = _____	c. 191.49 – 10.72 = _____
d. 7.148 – 0.07 = _____	e. 60.91 – 2.856 = _____	f. 361.31 – 2.841 = _____

3. Solve.

a. 10 tens – 1 ten 1 tenth	b. 3 – 22 tenths	c. 37 tenths – 1 one 2 tenths
d. 8 ones 9 hundredths – 3.4	e. 5.622 – 3 hundredths	f. 2 ones 4 tenths – 0.59

4. Mrs. Fan wrote *5 tenths minus 3 hundredths* on the board. Michael said the answer is 2 tenths because 5 minus 3 is 2. Is he correct? Explain.

Name _____ Date _____

1. Solve by drawing disks on a place value chart. Write an equation, and express the product in standard form.

   a. 3 copies of 2 tenths

   b. 5 groups of 2 hundredths

   c. 3 times 6 tenths

   d. 6 times 4 hundredths

   e. 5 times as much as 7 tenths

   f. 4 thousandths times 3

2. Draw a model similar to the one pictured below for Parts (b), (c), and (d). Find the sum of the partial products to evaluate each expression.

   a. 7×3.12

	3 ones	+ 1 tenth	+ 2 hundredths
7	7×3 ones	7×1 tenth	7×2 hundredths

   _____ + _____ + 0.14 = _____

   b. 6×4.25

   c. 3 copies of 4.65

   d. 4 times as much as 20.075

3. Miles incorrectly gave the product of 7×2.6 as 14.42. Use a place value chart or an area model to help Miles understand his mistake.

4. Mrs. Zamir wants to buy 8 protractors and some erasers for her classroom. She has $30. If protractors cost $2.65 each, how much will Mrs. Zamir have left to buy erasers?

A

Number Correct: _____

Add Decimals

1.	3 + 1 =	
2.	3.5 + 1 =	
3.	3.52 + 1 =	
4.	0.3 + 0.1 =	
5.	0.37 + 0.1 =	
6.	5.37 + 0.1 =	
7.	0.03 + 0.01 =	
8.	0.83 + 0.01 =	
9.	2.83 + 0.01 =	
10.	30 + 10 =	
11.	32 + 10 =	
12.	32.5 + 10 =	
13.	32.58 + 10 =	
14.	40.789 + 1 =	
15.	4 + 1 =	
16.	4.6 + 1 =	
17.	4.62 + 1 =	
18.	4.628 + 1 =	
19.	4.628 + 0.1 =	
20.	4.628 + 0.01 =	
21.	4.628 + 0.001 =	
22.	27.048 + 0.1 =	

23.	5 + 0.1 =	
24.	5.7 + 0.1 =	
25.	5.73 + 0.1 =	
26.	5.736 + 0.1 =	
27.	5.736 + 1 =	
28.	5.736 + 0.01 =	
29.	5.736 + 0.001 =	
30.	6.208 + 0.01 =	
31.	3 + 0.01 =	
32.	3.5 + 0.01 =	
33.	3.58 + 0.01 =	
34.	3.584 + 0.01 =	
35.	3.584 + 0.001 =	
36.	3.584 + 0.1 =	
37.	3.584 + 1 =	
38.	6.804 + 0.01 =	
39.	8.642 + 0.001 =	
40.	7.65 + 0.001 =	
41.	3.987 + 0.1 =	
42.	4.279 + 0.001 =	
43.	13.579 + 0.01 =	
44.	15.491 + 0.01 =	

Name _____ Date _____

1. Choose the reasonable product for each expression. Explain your reasoning in the spaces below using words, pictures, or numbers.

a. 2.5×4	0.1	1	10	100

b. 3.14×7	2198	219.8	21.98	2.198

c. 8×6.022	4.8176	48.176	481.76	4817.6

d. 9×5.48	493.2	49.32	4.932	0.4932

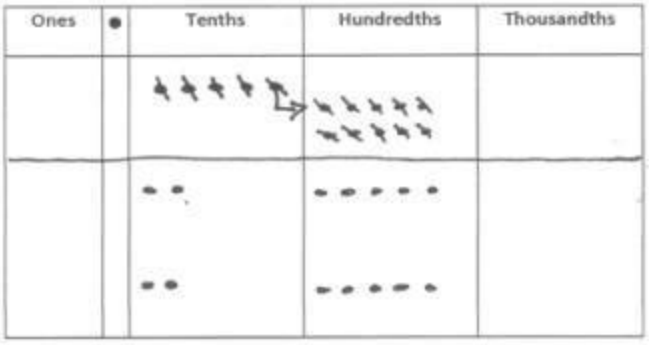
2. Pedro is building a spice rack with 4 shelves that are each 0.55 meter long. At the hardware store, Pedro finds that he can only buy the shelving in whole meter lengths. Exactly how many meters of shelving does Pedro need? Since he can only buy whole-number lengths, how many meters of shelving should he buy? Justify your thinking.

3. Marcel rides his bicycle to school and back on Tuesdays and Thursdays. He lives 3.62 kilometers away from school. Marcel's gym teacher wants to know about how many kilometers he bikes in a week. Marcel's math teacher wants to know exactly how many kilometers he bikes in a week. What should Marcel tell each teacher? Show your work.

Name _____ Date _____

1. Draw place value disks on the place value chart to solve. Show each step in the standard algorithm.

a. $0.5 \div 2 =$ _____



$$\begin{array}{r} 0.25 \\ 2\overline{)0.50} \\ -04 \\ \hline 10 \\ -10 \\ \hline 0 \end{array}$$

b. $5.7 \div 4 =$ _____

Ones	•	Tenths	Hundredths	Thousandths

$$4\overline{)5.7}$$

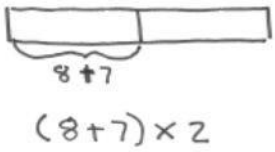
2. Solve using the standard algorithm.

a. $0.9 \div 2 =$	b. $9.1 \div 5 =$	c. $9 \div 6 =$
d. $0.98 \div 4 =$	e. $9.3 \div 6 =$	f. $91 \div 4 =$

3. Six bakers shared 7.5 kilograms of flour equally. How much flour did they each receive?

Name _____ Date _____

1. Draw a model. Then, write the numerical expressions.

a. The sum of 8 and 7, doubled  $(8+7)\times 2$	b. 4 times the sum of 14 and 26
c. 3 times the difference between 37.5 and 24.5	d. The sum of 3 sixteens and 2 nines
e. The difference between 4 twenty-fives and 3 twenty-fives	f. Triple the sum of 33 and 27

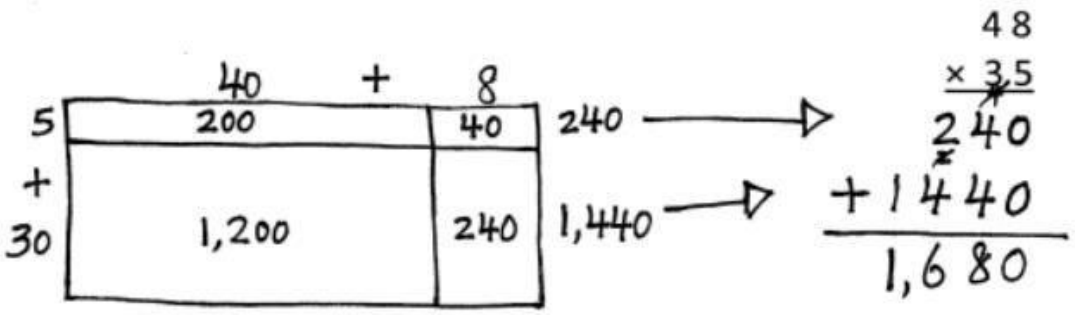
2. Write the numerical expressions in words. Then, solve.

Expression	Words	The Value of the Expression
a. $12 \times (5 + 25)$		
b. $(62 - 12) \times 11$		
c. $(45 + 55) \times 23$		
d. $(30 \times 2) + (8 \times 2)$		

Name _____ Date _____

1. Draw an area model. Then, solve using the standard algorithm. Use arrows to match the partial products from your area model to the partial products in the algorithm.

   a. 48 × 35



   b. 648 × 35

   648

   × 35

2. Solve using the standard algorithm.
   a. 758 × 92
   b. 958 × 94

3. Carpet costs $16 a square foot. A rectangular floor is 16 feet long by 14 feet wide. How much would it cost to carpet the floor?

4. General admission to The American Museum of Natural History is $19.
   a. If a group of 125 students visits the museum, how much will the group's tickets cost?

2. When dividing 82 by 43, Linda estimated the quotient to be 2. Examine Linda's work, and explain what she needs to do next. On the right, show how you would solve the problem.

Linda's Estimation:	Linda's Work:	Your Work:
2 40 | 80	2 43 | 82 - 86 ??	43 | 82

3. A number divided by 43 has a quotient of 3 with 28 as a remainder. Find the number. Show your work.

4. Write another division problem that has a quotient of 3 and a remainder of 28.

5. Mrs. Silverstein sold 91 cupcakes at a food fair. The cupcakes were sold in boxes of "a baker's dozen," which is 13. She sold all the cupcakes at $15 per box. How much money did she receive?