HISD | Elementary Curriculum and Development

INSPIRING TEACHING, IGNITING LITERACY & LEARNING.

2019-2020 HISD @ H.O.M.E. – Distance Learning – At-A-Glance

Mathematics – Grade 5

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Cycle 4 Week 1 May 11-15, 2020	I can use pictorial models to represent and solve multiplication of decimals with products to the hundredths in real-world problem situations. Ⓢ MATH.5.3D, Ⓡ MATH.5.3E	I can solve multiplication of decimals with products to the hundredths in real-world problem situations. Ⓡ MATH.5.3E	I can solve multiplication of decimals with products to the hundredths in real-world problem situations. Ⓡ MATH.5.3E	I can solve real-world division problems (including problem situations with money) using various strategies and algorithms. Ⓡ MATH.5.3G	I can solve real-world division problems involving decimals to the hundredths using the standard algorithm. Ⓡ MATH.5.3G
Cycle 4 Week 2 May 18-22, 2020	I can solve real-world division problems (including problem situations with money) using various strategies and algorithms. Ⓡ MATH.5.3G	I can solve real-world division problems (including problem situations with money) using various strategies and algorithms. Ⓡ MATH.5.3G	I can solve real-world division problems involving decimals to the hundredths using the standard algorithm. Ⓡ MATH.5.3G	I can use pictorial models to represent and solve multiplication of decimals with products to the hundredths in real-world problem situations. Ⓢ 5.3D, Ⓡ MATH.5.3E	I can solve multiplication of decimals with products to the hundredths in real-world problem situations. Ⓡ MATH.5.3E

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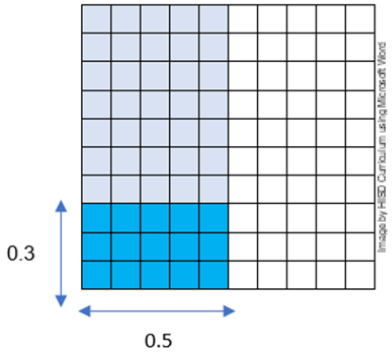
Mathematics – Grade 5

May 11-22, 2020 – Week 1

Monday – 30 minutes

Activity I can use pictorial models to represent and solve multiplication of decimals with products to the hundredths in real-world problem situations.	Look at the example: *Ms. Greene is sewing a skirt for her daughter. She purchased 0.5 yards of fabric. She needs 0.3 of the fabric she purchased to make a trim around the skirt. In yards, how long is the fabric Ms. Greene will use to make the trim around the skirt?* **Guiding Questions:** • To begin modeling this problem, which factor do you need to first represent? • You represented five tenths with five longs. How much is one tenth of your five tenths? • Where do you see one tenth of five tenths in your model? • How much is three tenths of five tenths?  *"I represented the five-tenths by shading vertically using a light blue. This represents the fabric Ms. Green purchased. I know that Ms. Greene used three-tenths of the fabric. I shaded the three-tenths horizontally using a dark blue. I know that one-tenth of five-tenths is five hundredths. I need three-tenths of five-tenths, so I must count three rows of five hundredths. This is 0.15. Therefore, I know that 0.3 x 0.5 = 0.15."* Use grid paper to represent and solve the problems below. **Problem A** Jessica bought 0.6 of a pound of chocolate. She used 0.4 of the chocolate she bought to bake a cake. How much of a whole pound of chocolate Jessica used? **Problem B** Carley has 0.8 liters of water in a pitcher. She used 0.4 of the water to water her flowers on her patio. How much water did Carley use to water her flowers? **Problem C** Janet had 0.9 of a yard of fabric. She used 0.5 of the fabric she had to make a new patch on her quilt. How much of a whole yard of fabric did Janet use for the new patch?
Resources	Handout: Grid Paper

Tuesday – 30 minutes

Activity

I can solve multiplication of decimals with products to the hundredths in real-world problem situations.

Look at the examples below.

Distributive Property	Partial Products
$2.75 x 5 = (2x5) + (0.75 x 5) 10 + 3.75 = $13.75	2.75 x 5 0.25 3.50 10.00 13.75

Image by HISD Curriculum using Microsoft Word

Solve the problems below using 2 of the following strategies: Distributive Property, Partial Products, or Standard Algorithm.

Problem A	**Problem B**	**Problem C**
Diana gives each of her 5 children $6.25 for their weekly allowance. How much money does Diana need for allowances each week?	Pizza Hut sells five bread sticks for $4.95. Miguel buys 25 breadsticks for a party. How much will Miguel pay for the breadsticks?	This week Matt ran 9 miles. He wants to run 1.25 times as far next week. How many miles does Matt want to run next week?

Choose one of the problems. Explain how you solved the problem using mathematical language and complete sentences.

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Mathematics – Grade 5

May 11-22, 2020 – Week 1

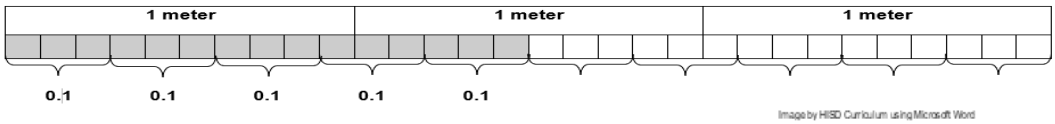
Wednesday – 30 minutes

Activity

I can solve multiplication of decimals with products to the hundredths in real-world problem situations.

Look at the example.

Mr. Mills is a carpenter. He needs to cut 0.5 of his 3-meter board for a project. In meters, how long of a piece will Mr. Mills cut?



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Explanation of Model: *I know that I need to partition three meters into tenths. This gives me thirty tenths sized pieces. One-tenth of 30-tenth sized pieces is equal to three of the small squares. I need 0.5 of the three meters. I need to group one-tenth of the three meters five times. I can see that 0.5 of 3 meters is equal to 1.5 meters. My equation would be 3 x 0.5 = 1.5.*

Represent and solve the problems using a model and provide an explanation in the box provided.

Problem A Jeremy spent 4.75 hours working with his father each day for 5 days. What is total number of hours Jeremy worked with his father during this time?	**Model:**
	Explanation of Model:
Problem B Paul drank 3.5 bottles of water yesterday. Each of these bottles contained 1.5 liters of water. How much water did Paul drink?	**Model:**
	Explanation of Model:

Thursday – 30 minutes

Activity

I can solve real-world division problems (including problem situations with money) using various strategies and algorithms.

Look at the example.

Mandy spent $1.30 on a yard of ribbon. Mandy cut the ribbon into 5 equal pieces. In dollars, how much did Mandy spend on each piece of ribbon?

Guiding Questions:

- How can you show $1.30 of ribbon shared equally between five groups?
- How is the partial quotient strategy the same/different than the standard algorithm?

Partial Quotients

```
        0.26
5 | 1.30   | 0.20
  | -1.00  | +
  |  .30   | .06
  | - .30  | 0.26
  |  .00   |
```

Standard Algorithm

```
        0.26
5 | 1.30
  | -1.00
  |  .30
  | - .30
  |  .00
```

Each piece of ribbon cost $0.26

Image by HISD Curriculum using Microsoft Word

Solve the problem below using partial quotients or standard algorithm.

Randy, Margarita, and Candy earned $54.57 selling lemonade. Each person received an equal share of the earnings. In dollars, how much money did each person receive?	Write a letter to your parents explaining how you would solve this word problem.

Friday – 30 minutes

Activity

I can solve real-world division problems involving decimals to the hundredths using the standard algorithm.

Look at the example.

Lisa paid a total of $91.70 for a 14-month subscription to her favorite magazine. She paid the same amount each month. How much did Lisa pay each month?

```
      06.55
14 | 91.70 | 6.00
   -84.00
   -------
     7.70 | 0.50
   - 7.00
   -------
     0.70 | + 0.05
     0.70
   -------
      .00 | 6.55
```

Image by HISD Curriculum using Microsoft Word

Lisa paid $6.55 each month.

Solve the problems using standard algorithm.

Problem A Shawn purchased a yearly music subscription for $115.20. He will make monthly payments of the same amount for twelve months. What is the amount of Shawn's monthly payment for the music subscription?	**Standard Algorithm**
Problem B Rhonda bought 16.72 meters of yarn from the fabric store. She cut the yarn into 11 pieces of equal length. What was the length of each piece of yarn in meters?	**Standard Algorithm**

Monday – 30 minutes

Activity

I can solve real-world division problems (including problem situations with money) using various strategies and algorithms.

Odd One Out

Solve each problem. After solving the problems, look at the quotients. Explain how the quotient from one of the problems is different from the other two.

Problem A	**Problem B**	**Problem C**
Adriana and her two friends go to lunch. They decided to equally split the bill of $28.35. How much will each person pay?	Daniel purchased a yearly subscription for $105.20. He will make monthly payments of the same amount for eight months. What is the amount of Daniel's monthly payment for the subscription?	Kate can purchase a parking permit at University of Houston for $246.75. She will make monthly payments of the same amount for seven months. How much money will Kate pay each month for the park permit?
Solve	**Solve**	**Solve**

Which of these three problems is different from the other two problems?

Use the sentence stem below to help you justify your answer.

The quotient from problem ____ is different from the quotients in problems____ and_____ because _____.

Tuesday – 30 minutes

Activity

I can solve real-world division problems (including problem situations with money) using various strategies and algorithms.

Read the problem. Then solve the problem using one of the following strategies: partial quotients, area model, or standard algorithm.

Problem:

Mr. Washington purchased 23 packs of pencils from the store. The total price of the pencils, including tax, was $80.27. Matthew was asked to determine how much money Mr. Washington paid for each pack of pencils. Matthew's work is shown below.

Matthew's Work

```
        3  4.9
23 | 8  0.2  7
   - 6  9  0  0     300
     1  1  2  7
   -    9  2  0      40
        2  0  7
   -       9  2       4
        1  1  5
   -    1  1  5   +   5
                0   349
```

Image by HISD Curriculum using Microsoft Word

Your Work

Record the similarities and differences of Matthew's work and your work in the Venn diagram below.

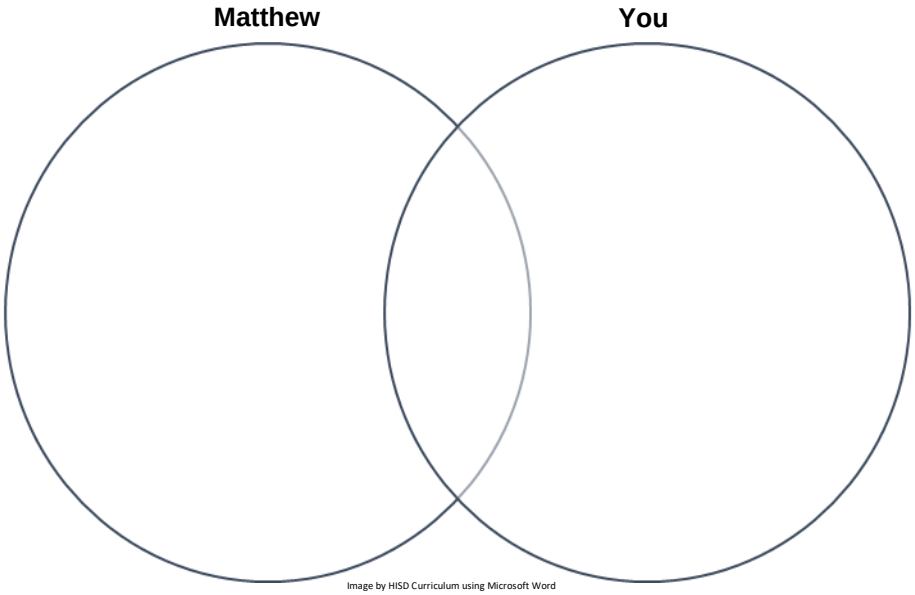

Image by HISD Curriculum using Microsoft Word

Wednesday – 30 minutes

Activity

I can solve real-world division problems involving decimals to the hundredths using the standard algorithm.

Solve the problems below using the standard algorithm.

23.05 ÷ 5	**2,305 ÷ 5**

Use mathematical language to explain how using the standard algorithm to solve 23.05 ÷ 5 is **similar** and **different** to solving 2,305 ÷ 5.

Similar	**Different**

Thursday – 30 minutes

Activity

I can use pictorial models to represent and solve multiplication of decimals with products to the hundredths in real-world problem situations.

Am I in the wrong place?

Determine if the decimal is correctly placed in the answer for each problem. In the spaces provided, solve each problem using a model and explain why the decimal placement in the given answer is or is not correct.

Problem A
Lisa bought 3.5 pounds of grapes. The grapes cost $0.40 per pound. How much did Lisa pay for these grapes?

Answer: $14.00

Pictorial model:	**Explanation of the decimal point:**

Problem B
Jim earns $5.25 a week for walking two dogs. He walked the dogs for 5 weeks. How much money did Jim earn walking the dogs for 5 weeks?

Answer: $26.25

Pictorial model:	**Explanation of the decimal point:**

2019-2020 HISD @ H.O.M.E. – Distance Learning

Mathematics – Grade 5

May 11-22, 2020 – Week 2

Friday – 30 minutes

Activity

I can solve multiplication of decimals with products to the hundredths in real-world problem situations.

Complete the steps below:

- Solve problems A and B.
- Create a word problem that would require you to multiply decimals to the hundredths.
- Ask a family member to solve your word problem and provide help if needed.

Problem A Chris worked 35 hours last week at GameStop. He earns $8.75 per hour. In dollars, how much money did Chris earn working at GameStop last week?	**Solution:**
Problem B This week Mara ran 12 miles. She wants to run 2.75 times as far next week. How many miles does Mara want to run next week?	**Solution:**
Your Word Problem	**Solution:**