

Name: _____

3rd Grade Math Distance Learning Packet

April 13th to April 17th



Parents please note that moving forward all academic packets will be available on our website at www.brighterchoice.org under the heading "Remote Learning." All academic packet assignments are mandatory and must be completed by all scholars. Online assignments are to be completed if you have access to technology. If you are unable to access packets online, every Wednesday between the hours of 8:00am-11:00am someone will be at our school to provide a hard copy. We thank you greatly for your continued support!

Harvard Yale Princeton

Date	Standards	Description of Packet Assignment (30 minutes of work)	Online Assignment
4.13.2020	3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	Scholars will be given 4 problems asking them to convert from g to kg and vice versa. Scholars will be given 4 problems asking them to estimate the mass of a given object given 4 choices. Scholars will be given a chart where they have to fill in blanks representing equal measurements on both sides of the equal sign. Scholars will be given a challenge: find 3 objects in your house that weigh about 1g and 1 kg	1) Watch Khan Academy video on grams and kilograms (mass) https://www.khanacademy.org/math/cc-third-grade-math/imp-measurement-and-data/imp-mass/v/intuition-for-grams 2) Complete corresponding practice problems https://www.khanacademy.org/math/cc-third-grade-math/imp-measurement-and-data/imp-mass/e/estimating-mass
4.14.2020	3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	Scholars will be given 4 problems asking them to convert from L to mL and vice versa. Scholars will be given 4 problems asking them to determine if given objects are filled to capacity. Scholars will be given a chart where they have to fill in blanks representing equal measurements on both sides of the equal sign. Scholars will be given a 2 step word problem on liquid volume as a challenge.	1) Watch Khan Academy video on liters and milliliters (liquid volume) https://www.khanacademy.org/math/cc-third-grade-math/imp-measurement-and-data/imp-volume/v/liter-intuition 2) Complete corresponding practice problems https://www.khanacademy.org/math/cc-third-grade-math/imp-measurement-and-data/imp-volume/e/estimating-volume
4.15.2020	3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Scholars will be asked to add 2 digit numbers with regrouping. There will be 10 questions (4 adding within 100 regrouping once and using inverse operation to check work and 6 adding within 1,000 regrouping twice). The challenge question will be a word problem involved 2 steps.	1) Watch Khan Academy video on addition with regrouping within 100 https://www.khanacademy.org/math/arithmetic/arith-review-add-subtract/arith-review-add-within-100a/v/addition-with-regrouping 2) Watch Khan Academy video on addition with regrouping within 1000 https://www.khanacademy.org/math/arithmetic/arith-review-add-subtract/arith-review-adding-carrying/v/example-adding-with-carrying 3) Complete corresponding practice problems a) within 100 https://www.khanacademy.org/math/arithmetic/arith-review-add-subtract/arith-review-add-within-100a/e/addition_3 b) within 1000 https://www.khanacademy.org/math/arithmetic/arith-review-add-subtract/arith-review-adding-carrying/e/addition_4
4.16.2020	3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain	Scholars will be asked to find the product and determine if it is even or odd. Scholars will be given a chart with 16 multiplication expressions and asked to circle the expressions that yield an odd product and underline the expressions that yield an even product. Scholars will be given 8 equations: they have to find the product of each and then put a check below the appropriate column to indicate if the product is even or odd.	1) Watch Khan Academy video on patterns with multiplying even and odd numbers https://www.khanacademy.org/math/cc-third-grade-math/arithmetic-patterns-and-problem-solving/imp-patterns-in-arithmetic/v/examples-thinking-about-multiplying-even-and-odd-numbers

<p>4.17.2020</p>	<p>3.MD.7 d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.</p>	<p>Scholars will be asked to find the area of irregular figures using decomposition. Scholars will be asked to solve a word problem decomposing an irregular shape. Challenge will be to find the area of a shaded figure.</p>	<p>1) Watch Khan Academy video on decomposing shapes on a grid https://www.khanacademy.org/math/cc-third-grade-math/imp-geometry/imp-decompose-figures-to-find-area/v/decomposing-shapes-to-find-area-grids-math-3rd-grade-khan-academy</p> <p>2) Watch Khan Academy video on decomposing irregular shapes to find area (addition) https://www.khanacademy.org/math/cc-third-grade-math/imp-geometry/imp-decompose-figures-to-find-area/v/decomposing-shapes-to-find-area-add-math-3rd-grade-khan-academy</p> <p>3) Watch Khan Academy video on decomposing irregular shapes to find area (subtract) https://www.khanacademy.org/math/cc-third-grade-math/imp-geometry/imp-decompose-figures-to-find-area/v/decomposing-shapes-to-find-area-subtract-math-3rd-grade-khan-academy</p> <p>4) Complete corresponding practice problems a) decompose to find the area (grid) https://www.khanacademy.org/math/cc-third-grade-math/imp-geometry/imp-decompose-figures-to-find-area/e/decompose-figures-to-find-area-1 b) decompose to find the area https://www.khanacademy.org/math/cc-third-grade-math/imp-geometry/imp-decompose-figures-to-find-area/e/decompose-shapes-to-find-area</p>
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Name: _____

Date: April 13th, 2020

BCCS-Boys

College: _____



Parent Signature: _____

(Parent signature is proof that parent reviewed work with scholar)

Parent/Scholar Notes: These are notes that can/should be shared with scholar's teacher	
Today my scholar was successful with....	Today my scholar struggled with understanding...

Decomposing a Kilogram (kg) to grams (g)

When you hear..

- * "gram" (g), imagine holding a paperclip  → light
- * "kilogram" (kg) imagine holding a dictionary  → heavy

More Tips

* $1 \text{ kg} = 1,000 \text{ g}$

* $10 \times 100 \text{ g} = 1 \text{ kg}$

1 Kilogram									
100g	100g	100g	100g	100g	100g	100g	100g	100g	100g

Directions: convert the following using the anchor chart above

Example $2 \text{ kg} \overset{\times 1,000}{=} \boxed{2,000 \text{ g}}$

$2 \times 1,000 = 2,000 \checkmark$

① $4 \text{ kg} = \text{---} \text{ g}$

③ $6,000 \text{ g} = \text{---} \text{ kg}$

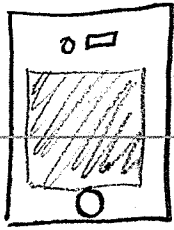
② $1,000 \text{ g} = \text{---} \text{ kg}$

④ $5 \text{ kg} = \text{---} \text{ g}$

TURN →

Circle one letter to estimate the mass (weight) of each object.

An iPhone



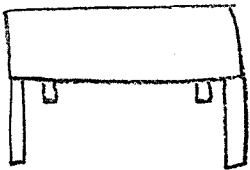
- a. 2 kg
- b. 400 kg
- c. 2 g
- d. 130 g

A pencil



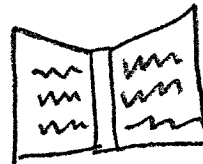
- a. 1 g
- b. 10 kg
- c. 7 g
- d. 700 g

A desk



- a. 15 kg
- b. 10 g
- c. 100 kg
- d. 1,000 g

A book



- a. 11 g
- b. 2,000 kg
- c. 1 kg
- d. 70 g

Fill in the blanks to show 1 kg. Remember that 1,000g=1kg

1,000 g	x	___	=	1 kg
100 g	x	___	=	1 kg
10 g	x	___	=	1 kg
1 g	x	___	=	1 kg

CHALLENGE ▽

List 3 objects that weigh about 1 gram and 1 kilogram.

1 g

1 kg

- 1) _____
- 2) _____
- 3) _____

- 1) _____
- 2) _____
- 3) _____

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Today my scholar was successful with...	Today my scholar struggled with understanding...

Decomposing a Liter (L) to Milliliters (mL)

When you hear...

* "Liter" (L), imagine holding a small bottle of soda



* "Milliliter" (mL), imagine holding a drop of water

More tips

* Capacity means the amount of liquid a full container holds!

* 1 L = 1,000 mL

* L and mL measure liquids

1 Liter									
100 mL	100 mL	100 mL	100 mL	100 mL	100 mL	100 mL	100 mL	100 mL	100 mL

Directions: Convert the following

Example: $4L = \overset{\otimes 1,000}{4,000} mL$

$4 \times 1,000 = 4,000 \checkmark$

① $6L = \underline{\hspace{2cm}} mL$

③ $6,000 mL = \underline{\hspace{2cm}} L$

② $1,000 mL = \underline{\hspace{2cm}} L$

④ $9L = \underline{\hspace{2cm}} mL$

Turn \rightarrow

Is each object filled to capacity? Circle yes or no.

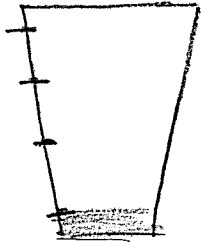
Example



yes

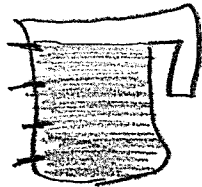
NO

NO because the liquid doesn't reach the top line



yes

NO



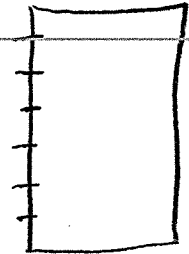
yes

no



yes

no



yes

no

Fill in the blanks to show 1 liter. Remember that 1,000 mL = 1L

$$1,000 \text{ mL} \times \underline{\quad} = 1 \text{ L}$$

$$100 \text{ mL} \times \underline{\quad} = 1 \text{ L}$$

$$10 \text{ mL} \times \underline{\quad} = 1 \text{ L}$$

$$1 \text{ mL} \times \underline{\quad} = 1 \text{ L}$$

challenge ! (use CUBES)

Ms. Young needs 3 liters of water for her garden. She has one container that has 2 liters of water and another with 200 milliliters of water. How much water does Ms. Young still need?

Name: _____

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Tips for adding with regrouping

- ✓ Add from right to left (start with ones, then tens, etc)
- ✓ line up place values
- ✓ check your work using inverse operation (subtraction)

Directions: Regroup once to find the sum. check.
↳ (1 time)

Example

$$\begin{array}{r} 47 \\ + 36 \\ \hline 83 \end{array}$$

check

$$\begin{array}{r} 7313 \\ - 36 \\ \hline 47 \end{array}$$

①

$$\begin{array}{r} 64 \\ + 29 \\ \hline \end{array}$$

②

$$\begin{array}{r} 37 \\ + 13 \\ \hline \end{array}$$

③

$$\begin{array}{r} 81 \\ + 19 \\ \hline \end{array}$$

④

$$\begin{array}{r} 46 \\ + 28 \\ \hline \end{array}$$

Regroup twice to find the sum.

①

$$\begin{array}{r} 138 \\ + 463 \\ \hline \end{array}$$

②

$$\begin{array}{r} 648 \\ + 294 \\ \hline \end{array}$$

③

$$\begin{array}{r} 581 \\ + 369 \\ \hline \end{array}$$

④

$$\begin{array}{r} 433 \\ + 578 \\ \hline \end{array}$$

⑤

$$\begin{array}{r} 706 \\ + 295 \\ \hline \end{array}$$

⑥

$$\begin{array}{r} 577 \\ + 248 \\ \hline \end{array}$$

CHALLENGE !

Directions: Use CUBES to solve the problem below.

Ms. Quance has 145 stickers. Ms. Sherman gives her 196 more stickers. After Ms. Quance gave model scholars some stickers, she had 84 remaining. How many stickers did Ms. Quance give away?

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	End with...	Examples
Odd	1, 3, 5, 7, 9	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 23, 25, 27, 29, 31, 33, 35, 37...
Even	0, 2, 4, 6, 8	0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20 22, 24, 26, 28, 30, 32, 34, 36...

Rules for multiplying even and odd numbers

Rule	Examples
Odd x odd = odd	$3 \times 5 = 15$ $5 \times 7 = 35$ $7 \times 9 = 63$
odd x even = even	$3 \times 4 = 12$ $5 \times 6 = 30$ $7 \times 8 = 56$
even x even = even	$2 \times 2 = 4$ $4 \times 6 = 24$ $8 \times 4 = 32$

Directions: Find the product of each equation.

Write E for Even and O for odd

Example $2 \times 3 = 6$ E

- ① $4 \times 5 = \underline{\quad} \underline{\quad}$ ② $7 \times 2 = \underline{\quad} \underline{\quad}$ ③ $9 \times 3 = \underline{\quad} \underline{\quad}$

→ Turn

Circle the expressions with an even product. Underline the expressions with an odd product.

<u>4x6</u>	7x3	4x8	5x3
<u>3x9</u>	6x9	8x7	5x6
8x4	10x4	6x6	8x1
2x6	10x3	5x9	10x0

Put a check under the appropriate column to indicate whether the product is even or odd.

Equation	Even	Odd
$6 \times 8 = \underline{48}$ (EXAMPLE)	✓	
$9 \times 5 = \underline{\quad}$		
$5 \times 7 = \underline{\quad}$		
$10 \times 10 = \underline{\quad}$		
$8 \times 9 = \underline{\quad}$		
$7 \times 2 = \underline{\quad}$		
$3 \times 11 = \underline{\quad}$		
$9 \times 2 = \underline{\quad}$		

Name: _____

Date: April 17th, 2020

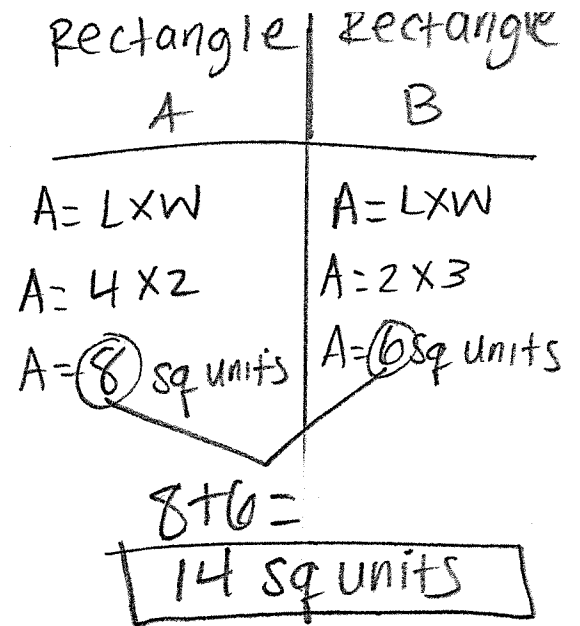
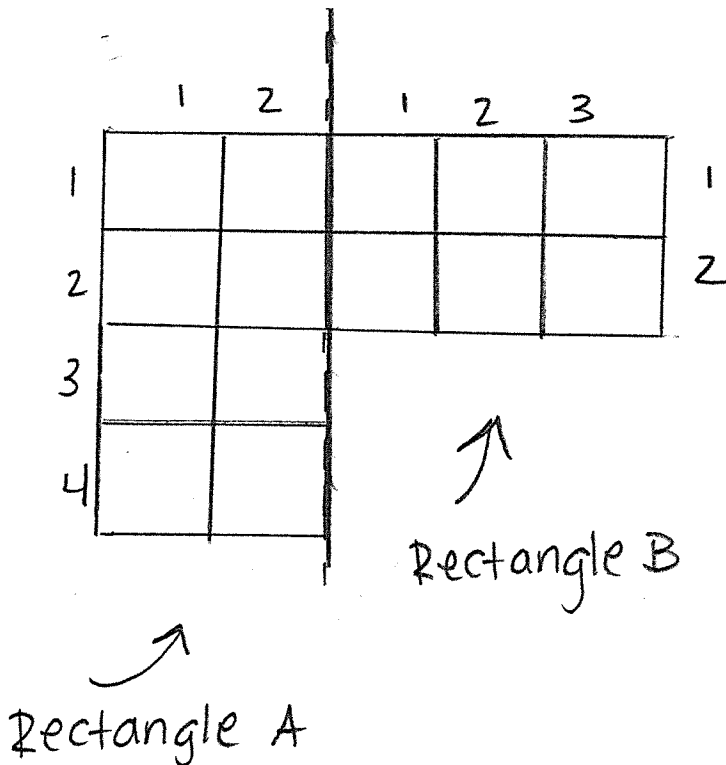
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To decompose means to break apart. Decompose each irregular figure (shape) to find the product in square units.

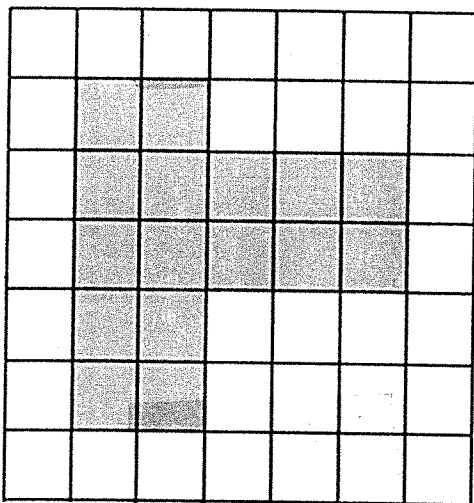
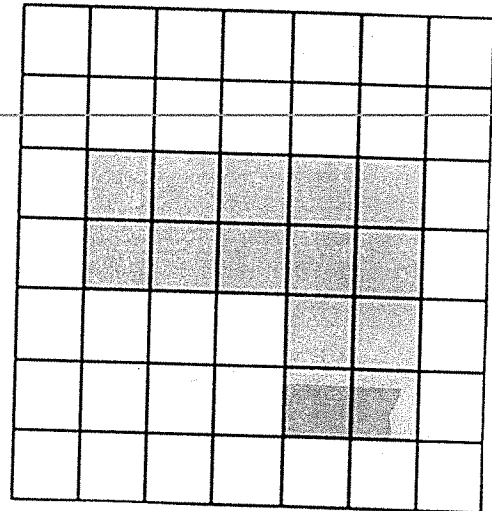
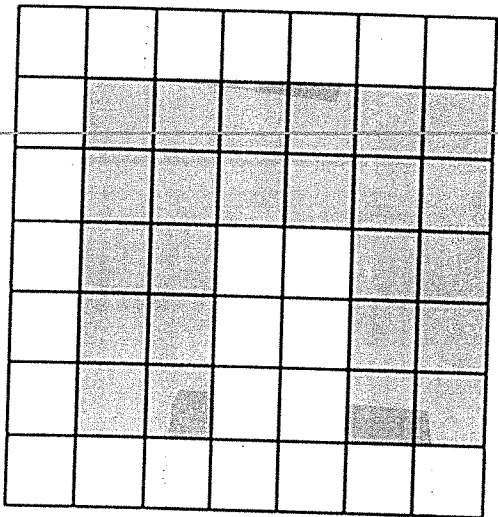


Steps

- ① Decompose your figure
- ② find the area of each rectangle
- ③ Add

→ TURN

Decompose each figure to find the area in square units.



CHALLENGE!
Find the area of the shaded part.

