Welcome to 3rd Grade!

The following is a list of **supplies** you will need for September:

- 2, 2-pocket folders
- 3 marble notebooks (NO BINDERS- they DO NOT fit)
- 1 Agenda/Planner to write homework in
- Earbuds/headphones ARE A MUST
- 1 mesh/material zip up pencil holder (No boxes!)
- 2 packs of #2 pencils (name on boxes)
- 2 highlighters
- 2 pencil erasers
- Box of colored pencils OR crayons
- 4 glue sticks
- 1 pair of child-safe scissors
- 1 box of tissues
- 1 container of baby wipes
- 2 rolls of paper towels
- Spill-proof, plastic, WATER bottle (LABEL WITH NAME)

Test Title: envmath_3_13-16_OCBA

Student Name:

Date :

Question 1

Each week, Laura walks around the lake for 4 hours and she walks around the block for 2 hours. How many total hours does she walk in 4 weeks? Enter your answer in the box.

[ ] hours

Question 2a

$\frac{2}{6}$ of a shape is shown below.

Part A

How many $\frac{2}{6}$'s do you need to make 1 whole?

- O 2
- O 3
- O 4
- O 6

Question 2b

Part B

Which picture represents the whole shape?

- O 
- O 
- O 
- O 

Question 3

Use properties of multiplication to show why $4 \times 50 = 8 \times 25$.

Enter your answers in the boxes.

$4 \times 50 = 4 \times (\square \times 25) = (4 \times \square) \times 25 = \square \times 25$

Question 4

Which number line shows $\frac{2}{5}$?

Question 5

Find the difference 639 – 347. Enter your answer in the box.

Question 6a

Part A

Four friends want to equally share 1 pizza.

What fraction of the pizza will each friend get?

- ○ $\frac{4}{1}$
- ○ $\frac{4}{4}$
- ○ $\frac{1}{4}$
- ○ $\frac{1}{8}$

Question 6b

Part B

If 2 more friends join the group, what fraction of the pizza would each friend get?

- ○ $\frac{6}{1}$
- ○ $\frac{1}{6}$
- ○ $\frac{1}{2}$
- ○ $\frac{1}{4}$

Question 7

Find 458 + 521.

Use place value to find the sum.

Enter your answers in the boxes.

400 + ☐ = 900

50 + 20 = ☐

8 + ☐ = 9

900 + ☐ + 9 = ☐

Question 8

Matthew wants to put a mirror and 4 posters on his bedroom walls.
The mirror costs $20, and the posters are $8 each.
How much will Matthew spend in all?
Enter your answer in the box.

$ [ ]

Question 9

What do a rectangle and trapezoid always have in common? Select all that apply.

- ☐ number of sides
- ☐ side lengths
- ☐ angle measures
- ☐ right angles
- ☐ number of angles

Question 10

Find the sum of 140 and 60. Enter your answer in the box.

[ ]

Question 11a

Sophie is making a rectangular pen for her rabbit. The pen is 4 feet wide and 6 feet long. She plans to put a fence around the pen, with fence posts that are 2 feet apart. Each corner has a fence post.

Part A

What is the perimeter of the pen?

- ○ 10 feet
- ○ 14 feet
- ○ 18 feet
- ○ 20 feet

Question 11b

Part B

How many fence posts will Sophie need? Draw a picture to help solve the problem. Enter your answer in the box.

[ ] posts

Question 12a

Part A

Which addition problems require regrouping?
Select all that apply.

- ☐ 265 + 428
- ☐ 361 + 618
- ☐ 737 + 462
- ☐ 365 + 477
- ☐ 489 + 428

Question 12b

Part B

Which addition problems do NOT require regrouping?

Select all that apply.

- ☐ 775 + 428
- ☐ 581 + 678
- ☐ 147 + 452
- ☐ 365 + 477
- ☐ 412 + 226

Question 13

Liam plants green beans in $\frac{2}{6}$ of his garden and sweet corn in $\frac{1}{3}$ of his garden.

Liam says $\frac{2}{6}$ and $\frac{1}{3}$ are equivalent fractions. Is he correct?

- ○ No, the wholes might be different.
- ○ No, $\frac{2}{6}$ and $\frac{1}{3}$ do not line up on the number lines.
- ○ Yes, $\frac{2}{6}$ and $\frac{1}{3}$ are the same distance from 0 when the wholes are equal.
- ○ No, $\frac{2}{6}$ and $\frac{1}{3}$ are not the same distance from 0.

Question 14

Leo is buying milk for his family for a week. He said he bought 7 kilograms of milk. Is his answer reasonable? Explain.

- ○ No, Leo probably meant 7 millimeters instead of kilograms.
- ○ No, Leo probably meant 7 liters instead of kilograms.
- ○ No, Leo probably meant 70 kilograms instead of 7 kilograms.
- ○ Yes, Kilograms is the correct unit for milk.

Question 15a

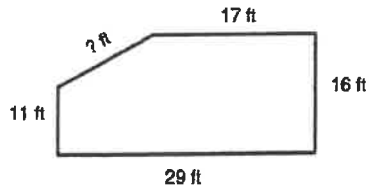
Part A

A community is putting up a fence around the pool area as shown below.

The manager measured all of the sides except one. She used 86 feet of fencing.

What is the length of the side the manager did not measure?

Enter your answer in the box.



ft

Question 15b

Part B

The perimeter of the rectangular community park is also 86 feet. What could the dimensions of the community park be?

- ☐ 20 feet by 23 feet
- ☐ 10 feet by 23 feet
- ☐ 15 feet by 28 feet
- ☐ 18 feet by 25 feet
- ☐ 17 feet by 28 feet

Question 16

Select all of the terms that can describe the figure.

- ☐ polygon
- ☐ rectangle
- ☐ trapezoid
- ☐ pentagon
- ☐ parallelogram

Question 17a

Owen plans to eat dinner at 6:30 P.M.
It takes 20 minutes to make a salad, 45 minutes to make spaghetti, and 5 minutes to set the table.
Owen wants to set the table and make the salad before making the spaghetti.
What time should he set the table? Use a number line to help find the answer.

Part A

Order the steps used to solve the problem in order from 1 to 3, where 1 is the first step and 3 is the last step.
Enter **1**, **2**, or **3** in each answer box. Numbers may only be used once.

Step [ ]: It takes Owen 5 minutes to set the table, so subtract 5 minutes from 5:25 to get 5:20.

Step [ ]: It takes Owen 45 minutes to make spaghetti, so subtract 45 minutes from 6:30 to get 5:45.

Step [ ]: It takes Owen 20 minutes to make the salad, so subtract 20 minutes from 5:45 to get 5:25.

Question 17b

Part B

What time should Owen set the table?

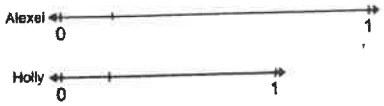
- ○ 5:10
- ○ 5:20
- ○ 5:25
- ○ 5:30

Question 18a

Part A

Alexei draws a number line showing $\frac{1}{4}$. Holly does the same.

Which answer explains why their number lines look different?



- ○ Alexei's number line is shorter.
- ○ Holly's number line shows sixths.
- ○ The distance from 0 to 1 is different.
- ○ They are not different. Both show $\frac{1}{4}$.

Question 18b

Part B

If Alexei draws $\frac{3}{8}$ on her number line and Holly draws $\frac{5}{8}$ on her number line, whose fraction will be greater? Explain.

- ○ Alexei's fraction will be greater because her number line is longer.
- ○ Holly's fraction will be greater because $\frac{5}{8} > \frac{3}{8}$.
- ○ Their fractions will be equal in length because the larger fraction is on the smaller number line.
- ○ It is impossible to tell whose fraction will be greater because comparisons are only valid when the fractions refer to the same whole.

Question 19

Zander shops 57 minutes in the grocery store and 43 minutes at the farmers' market. How long does Zander spend shopping in all? Enter your answer in the boxes.

[ ] hour [ ] minutes

Question 20

This figure is a parallelogram, but it is NOT a square.
Why? Select all that apply.

☐ **The figure is not a square because it does not have straight line sides.**

☐ **The figure is not a square because it does not have 4 right angles.**

☐ **The figure is not a square because it has 4 sides.**

☐ **The figure is not a square because it does not have 4 equal sides.**

☐ **The figure is not a square because it has more than 4 sides.**

Question 21a

Part A

Which fractions are closer to 1 than to 0? Select all that apply.

- ☐ $\frac{1}{8}$
- ☐ $\frac{5}{8}$
- ☐ $\frac{4}{8}$
- ☐ $\frac{6}{8}$
- ☐ $\frac{3}{8}$

Question 21b

Part B

Explain your reasoning.

- ○ If the numerator is greater than 1, the fraction is closer to 1 than to 0.
- ○ If the numerator is equal to 1, the fraction is closer to 1 than to 0.
- ○ Because $\frac{1}{2}$ is halfway between 0 and 1, any fraction greater than $\frac{1}{2}$ is closer to 1 than to 0.
- ○ Because $\frac{3}{4}$ is closer to 1 than to 0, I chose all the fractions that are equal to or greater than $\frac{3}{4}$.

Question 22

Clara says she should use a measuring cup to find the amount of salt to add to her bowl of soup. Is this reasonable? Explain.

- ○ Yes, the amount of salt added to the bowl of soup would be more than a cup.
- ○ No, a measuring cup is too large. She should use a pan balance instead.
- ○ No, a measuring cup is too large. She should use a teaspoon instead.
- ○ Yes, a cup of salt is a reasonable amount to add to a bowl of soup.

Question 23a

Sheila draws three rectangles with a perimeter of 14.

Part A

Which of the following sizes of rectangles could Sheila have drawn? Select all that apply.

- ☐ 2×5
- ☐ 3×5
- ☐ 3×4
- ☐ 2×4
- ☐ 1×6

Question 23b

Part B

Which generalization can be made about the rectangles Sheila could have drawn?

- ○ It is possible for the rectangles to have the same perimeter and the same area.
- ○ It is possible for the rectangles to have the same perimeter but different areas.
- ○ It is possible for the rectangles to have a different perimeter and the same area.
- ○ It is possible for the rectangles to have different perimeters and a different area.

Question 24a

The perimeter of rectangle Q is 20 inches. The perimeter of rectangle R is 22 inches. Both rectangles have the same area.

Part A

Which of the following could be the dimensions of the rectangles?

- ○ Rectangle Q: 2×10
Rectangle R: 2×11
- ○ Rectangle Q: 4×6
Rectangle R: 8×3
- ○ Rectangle Q: 4×5
Rectangle R: 8×3
- ○ Rectangle Q: 3×6
Rectangle R: 4×8

Question 24b

Part B

What is the area of each rectangle? Enter your answer in the box.

[ ] square inches

Question 25

Talia buys 45 grams of nutmeg and 78 grams of cinnamon.

She uses the least number of weights to balance the total mass of the spices.

Which combination of weights does Talia use? Enter your answers in the boxes.

[ ] 100-gram weight(s)

[ ] 10-gram weight(s)

[ ] 1-gram weight(s)

Question 26a

Part A

Georgia is making a square sign for her bedroom door. The length of one side is 9 inches.

What is the perimeter of the sign? Enter your answer in the box.

[ ] inches

Question 26b

Part B

Georgia makes a rectangular sign for the other side of her bedroom door. She wants the rectangular sign to have different side lengths but the same perimeter as the square sign. Which of the following could be the dimensions of the rectangular sign?

- ○ 10 inches by 8 inches
- ○ 10 inches by 10 inches
- ○ 8 inches by 7 inches
- ○ 7 inches by 10 inches

Question 27

A quadrilateral with at least 2 same length sides and 4 right angles is NOT a trapezoid. Why?

- ○ Trapezoids cannot have more than 1 right angle.
- ○ Trapezoids cannot have any sides of the same length.
- ○ Trapezoids are not quadrilaterals.
- ○ Trapezoids cannot have more than 2 right angles.

Question 28a

Part A

Amelia biked $\frac{4}{6}$ mile on Thursday and $\frac{3}{6}$ mile on Friday.

Which day did she bike farther? Use the number line to help solve the problem.

○ Thursday

○ Friday

○ She biked the same distance both days.

○ Not enough information is given.

Question 28b

Part B

Amelia then biked $\frac{4}{8}$ mile on Saturday. She says that the distance she biked on Thursday is the same distance she biked on Saturday. Is she correct? Explain.

○ Yes. $\frac{4}{8} = \frac{4}{6}$ because the numerators are the same.

○ No. $\frac{4}{8} > \frac{4}{6}$ because the denominators are different.

○ No. $\frac{4}{8} < \frac{4}{6}$ because the denominators are different.

○ Yes. $\frac{4}{8} = \frac{4}{6}$ because the numerators and denominators are the same.

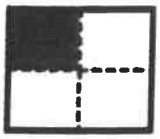
Question 29a

Part A

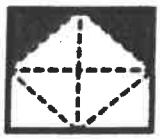
Byron has two quilt squares.

Which best describes the relationship between the shaded areas of the squares?

Quilt Square 1



Quilt Square 2



- ○ $\frac{1}{4} > \frac{1}{8}$
- ○ $\frac{1}{4} = \frac{2}{8}$
- ○ $\frac{1}{4} > \frac{2}{8}$
- ○ Not enough information is given.

Question 29b

Part B

Suppose 1 more small square of Quilt Square 1 is shaded. Which fraction describes the total amount of Quilt Square 2 that would need to be shaded for the two squares to have the same shaded area?

- ○ $\frac{2}{8}$
- ○ $\frac{4}{8}$
- ○ $\frac{6}{8}$
- ○ $\frac{8}{8}$

Question 30a

Part A

A soccer tournament starts at 7:00 A.M. and ends at 3:30 P.M.

How long does the tournament last?

Enter your answer in the boxes.

[ ] hours [ ] minutes

Question 30b

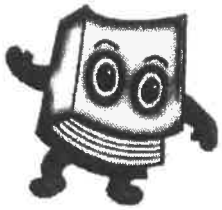
Part B

During the soccer tournament, they have a one-hour lunch break. How long does the tournament last without the lunch break?

[ ] hours [ ] minutes

Cereal Box Report

Print



What you will need:

A book of your choosing and...

1. An empty cereal box.
2. Markers, crayons or other art supplies.
3. Construction paper, white or light colored paper.
4. Tape or glue.

You may you the templates attached, type your responses or write them directly on the box. You may also use the computer to print images or draw your own illustrations. Points are awarded for creativity and accuracy!

Directions:

FRONT OF BOX: Use a piece of white or light colored paper to cover the cereal box. You may also use a light colored wrapping paper. You should probably create your cover before gluing it onto your box. Include the name of the cereal and a picture. Invent a name for the cereal that is related to the title of the book and sounds like a cereal. Do NOT use the exact title of the book. You may want to look at the attached page of cereal boxes for some ideas. Choose a shape for your cereal as well as colors and ingredients that all relate to the book.

For example: For The Cat in the Hat, you might invent a cereal called Crunchy Cats, a toasted oat cereal in the shape in mini hats.

RIGHT SIDE: Make a list of ingredients that includes the story elements, character and setting.

Characters and Setting: Under the heading, "Ingredients," list the main characters and write a sentence about each one. Then describe the setting. Make sure to include information about where and when the story takes place You can use the template on the attached sheet or you may do it your own way, as long as the box is covered with white or light colored paper. Just make sure you include the main characters and the setting.

LEFT SIDE: Design a game that is based on the story. It can be a puzzle, a word search, a words scramble, a maze, a crossword puzzle, a hidden picture illustration, or any other fun activity that might be on a cereal box. Make sure it includes information and or vocabulary from the book.

BACK OF BOX: Write a summary that describes the main problem and the solution of the book. Try to use words that "grab" the readers' attention and make them want to buy your cereal. You can use the attached template or you may do it your own way. Make sure to include the important details from the beginning, middle and end of the story.

TOP OF BOX: Include the title, author, illustrator, and number of stars you would give this book if you were a book critic. The maximum number of stars would be 5. You can use the template or create the top of the box yourself as long as you include all the things listed above.

PRIZE: (optional) Cereal boxes often include a prize. Your prize must be something the main character could have used in the book or something that reminds you of the main character. You can even include a picture of the prize on the front of your box to let your reader know what's inside your box.

TEMPLATE

TOP OF BOX: Write the title of your book, the author and illustrator. Color the stars to show how you rate this book. Cut out the box below and place it on the top of your cereal box.

Title of Book: _____

Author: _____ **Illustrator:** _____

Rating: ☆ ☆ ☆ ☆ ☆

Cereal Box Report Templates

BACK OF THE BOX: First, write a summary that describes the important events of the beginning, middle and end. Remember to include the main problem and the solution. Cut out the box below and place on the back of your box. Make sure you use your NEATEST handwriting.

SUMMARY:

Cut out this box and place in on the right side of your cereal box.

Characters:
List the main characters and write a sentence about each one. For example, if you were using the story "Charlie and the Chocolate Factory," you might include the following characters:

Charlie Bucket: He is a poor boy who finds the last golden ticket and wins a trip to Willy Wonka's Chocolate Factory.

Willy Wonka: He is the lively owner of the chocolate factory who allows six children and a member of their family to spend a day at his magical factory. .

Setting:
Use complete sentences to tell where the story takes place. You may find that there is more than one setting in the story. For example, if you were using the story "Charlie and the Chocolate Factory," you might write:

The beginning of the story takes place in Charlie Bucket's very small house that he shares with his large family. Once Charlie finds the golden ticket and wins the contest, the rest of the story takes place in Willy Wonka's amazing chocolate factory.

INGREDIENTS

CHARACTERS:

SETTING:


Fast Furniture

Cereal Box Book Report Rubric

Criteria	Points Earned	Points possible
Projected was submitted on time.		10
Cereal box is neat, colorful and attractive.		15
The front and the top of the box are thoughtfully done. The top includes the necessary information. The front of the box demonstrates creativity, includes a cereal name related to the title and an original illustration.		15
The back of the box includes a complete and accurate summary.		20
The right side of the box is complete and accurate.		15
The left side of the box is neat, thoughtfully done and is related to the book.		15
Spelling, punctuation and grammar are correct.		10
TOTAL		100

Name:_____

Title of Book:_____