

**Summer IXL Assignments
Reverend Brown School
Incoming 4th Grade**

Students at Reverend Brown are required to complete summer lessons in mathematics and language arts. These are mandatory lessons for students coming into grades two through seven. These lessons will reinforce the math and language arts skills learned throughout the previous year. All work must be completed by August 31, 2022.

Math:

Go to the section for **THIRD GRADE**. The minimum requirement is a total of **3 hours** of IXL Math over the summer. Of course, the more practice, the better the fluency and understanding! Choose from any of these suggested skills:

- All activities in place value; comparing and ordering numbers; time; units of measurement; estimation and rounding, money; fractions; and geometry.
- Some specific sections for computation: (C.11-16), (D.1-8), (F.1-13), (J.1-12), (M.1-M13), (H.6-16), or (K.4-17).
- You do not have to stay on a skill to reach 100. You can stop at 80.
- *Challenges: All logical reasoning (any Q), Properties (any N), and Patterns (any R).

Design a Playground - A Multiplication Math Project - We would also like students to work on a “real life” math activity that involves their third grade skills. Complete the tasks in the attached packet. There will also be one posted on each of the teachers’ websites in case an extra page is needed. This project is due to your child’s teacher no later than Friday, September 2, 2022.

Language Arts

Go to the section for **THIRD GRADE**. The minimum requirement is a total of 3 hours over the summer (approximately 15 minutes per week). Choose from any of these suggested skills:

- Sentences, fragments and run-ons, Nouns, Pronouns, Verbs, Articles, Adjectives & Adverbs, Prepositions, Conjunctions, Contractions, Commas, and Capitalization.





Hello Planning Board!!

You are being asked to create a new playground for your town. You are going to be doing a number of tasks, using your math skills that you have learned in third grade. Follow the directions for each task assigned to you to complete the work. You will be handing in your plans to your fourth grade teacher on September 2, 2022.

Have fun!!

Reverend Brown Fourth Grade Teachers



TASK

#1

PLANNING THE PLAYGROUND

It's time to plan the layout of the new playground! The playground will consist of 3 different areas: the Picnic Area, the Play Zone, and the Fun and Games Area.

THE PICNIC AREA

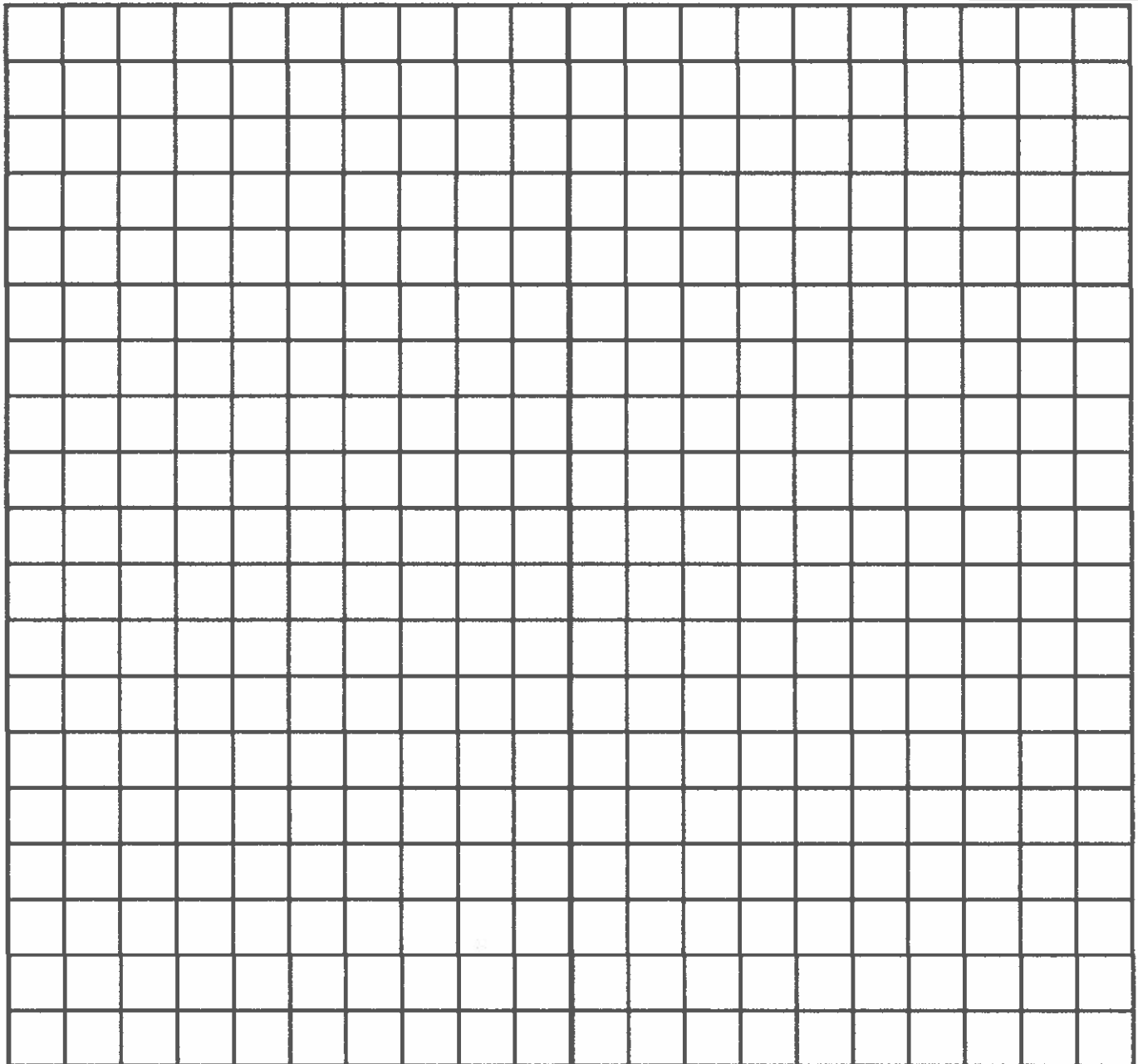
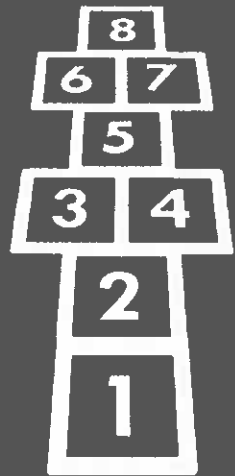
Include the following on your blueprint:

PICNIC AREA ITEM	AREA
2 regular picnic tables	8 square units each
2 family sized picnic tables	18 square units each
BBQ area	24 square units
Enclosed eating area	40 square units

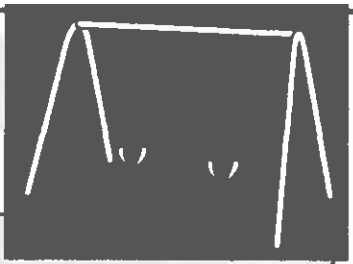
THE FUN AND GAMES AREA

Include the following on your blueprint:

PLAY ZONE ITEM	AREA
Hop Scotch	18 square units
Basketball Court	64 square units
Tetherball	10 square units
Monkey Bars	15 square units



THE PLAY ZONE



Include the following on your blueprint:

PLAY ZONE ITEM	AREA
Play Structure	50 square units
Teeter Totter	12 square units
Swing Set	24 square units
Bench	8 square units
Sandbox	18 square units

[illegible]

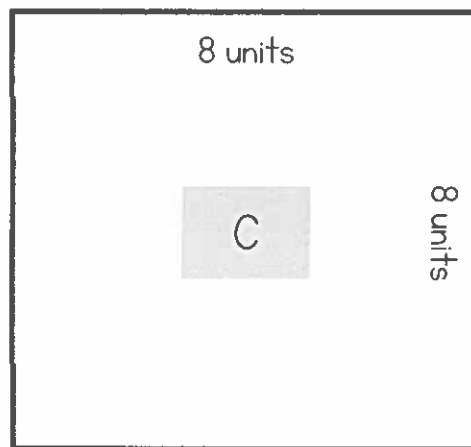
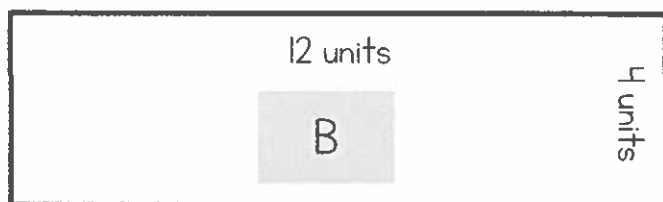
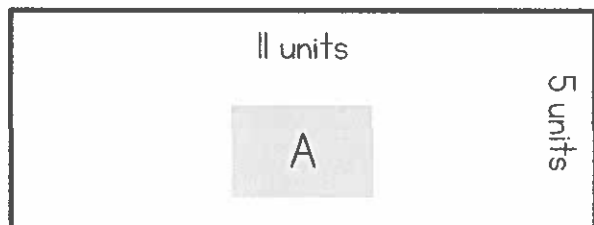
TASK

#2

THE SANDBOX

It's time to build a nice big sandbox for the new playground. You've got the materials – now let's build!

We have three options for designs:



List the designs in order from smallest area to largest area.

We want to use the design that has the largest area. Which design should we use? What is its area?

Look at Design B. Could you create another sandbox with the same area, but with different side lengths? Draw it and label the lengths of the sides.

Look at Design A. Create a sandbox design that is 5 square units larger. Draw it and label the lengths of the sides.

TASK

#3

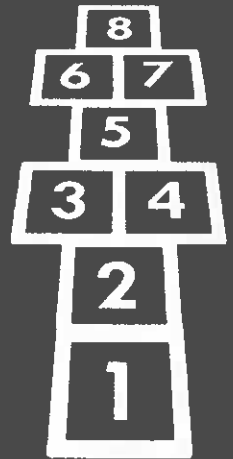
PLAYGROUND PROBLEM-SOLVING

You'll be painting 4 hopscotch games. For each one you will need 3 small cans of paint. How many cans of paint will you need for all 4?

Write two different equations:

Draw an array:

Write a repeated addition sentence:



Each teeter-totter will take you about 12 minutes to assemble. You'll be putting together 5 of them. How long will it take you to put them all together?

Write an equation:

Skip-count to find the answer:

Draw a "groups of" picture:



THINK FAST! 

Write two different multiplication equations using these numbers: 8, 72, 9

TASK

#4

THE GRAND OPENING

The playground is complete and it's Grand Opening day!

There will be two groups of people working at the Grand Opening - the Town Council and the Playground Committee. There are 5 people in each of those groups. How many people will be working at the Grand Opening?

Hopscotch is popular at the Grand Opening! In each of the 4 hopscotch areas there are 6 kids in line. There are 4 kids in line at the swing set. How many kids are in line for hopscotch altogether?

Solve using repeated addition:



Solve using multiplication:

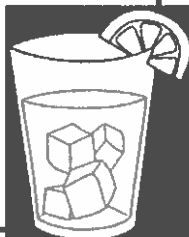


Grand Opening snacks include cookies and lemonade! Each pitcher of lemonade has enough for 9 people. There are 12 cookies inside each box.

How many people will get a glass of lemonade if you have 11 pitchers?

Show your work with skip-counting:

Write a multiplication sentence:



There are 3 boxes of chocolate cookies, 5 boxes of vanilla, and 7 boxes of wafer cookies. How many cookies of each kind are there?

Chocolate	$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
Vanilla	$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
Wafer	$\underline{\quad} \times \underline{\quad} = \underline{\quad}$






TASK

#5

MOST POPULAR ITEMS

The new playground is a huge hit! Let's take a look at the most popular playground items today.

This tally chart represents the number of people who used each item today. Each tally mark represents TEN people.

PLAYGROUND ITEM	NUMBER OF PEOPLE (in tallies) *Each tally mark represents 10 people*	NUMBER OF PEOPLE (# of tallies x 10)
Play Structure		___ x ___ = ___
Teeter Totter		___ x ___ = ___
Swings		___ x ___ = ___
Sandbox		___ x ___ = ___
Basketball Court		___ x ___ = ___
Tetherball		___ x ___ = ___
Monkey Bars		___ x ___ = ___

Write the playground items in order from most popular to least popular.

How many more people played on the swings than the teeter-totter?

How many more people played on the monkey bars than the basketball court?

TASK

#6

PLAYGROUND JOKES

Use multiplication to find the answers to the playground jokes.

A	4×5
B	5×2
C	7×3
D	5×5
E	4×3
F	3×2
G	8×5
H	2×2
I	4×4

J	8×4
K	3×8
L	10×8
M	7×2
N	4×2
O	9×3
P	9×8
Q	6×6
R	2×1

S	9×2
T	11×4
U	7×4
V	8×6
W	6×7
X	8×8
Y	6×5
Z	10×5

Why did the chicken cross the playground?

$\frac{44}{27}$	$\frac{40}{12}$	$\frac{44}{27}$	$\frac{44}{4}$	$\frac{12}{12}$	
$\frac{27}{44}$	$\frac{4}{12}$	$\frac{2}{2}$	$\frac{18}{80}$	$\frac{16}{25}$	$\frac{12}{12}$

Why are basketball players messy eaters?

$\frac{44}{4}$	$\frac{12}{30}$	$\frac{2}{2}$	$\frac{12}{20}$	$\frac{80}{42}$	$\frac{20}{30}$	$\frac{18}{18}$
$\frac{25}{2}$	$\frac{16}{10}$	$\frac{10}{80}$	$\frac{16}{8}$	$\frac{40}{40}$	$\frac{1}{1}$	$\frac{1}{1}$

TASK

#7

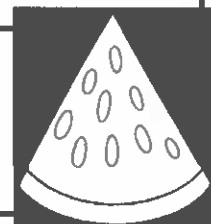
PICNIC PROBLEMS

The picnic area is a popular place for families and groups to get together. Use multiplication to solve the problems.

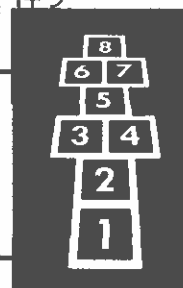
A family gathering is happening at the picnic area in the park. There will be 6 families in all. 4 of the families have 3 people. 2 of the families have 4 people. How many people are there in all?



You're having watermelon for dessert! If 12 people will each eat 2 pieces of watermelon, how many pieces of watermelon will you need?



The kids decide to play hopscotch! It takes each kid 8 seconds to complete the hopscotch pattern. How many seconds will it take for 6 kids to complete it?



There are 4 picnic tables, each with 4 people sitting at them. How many people are sitting on picnic tables altogether? Draw an array to show your work.



THINK FAST!



Use these numbers to write 5 different multiplication equations: 8, 4, 36, 32, 9, 3, 24

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

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