



## 2021 IXL SUMMER MATH ASSIGNMENT

Dear Parents and Students,

We are pleased to tell you that we will be using the website IXL in our classroom again this year. IXL is a comprehensive math review site with an unlimited number of math practice questions in hundreds of skills — all of which are aligned to state standards. One of the best things about IXL is that your child can access it from home, so you have a chance to see your child's progress!

To get your child started on your home computer, please follow these easy steps:

1. Go to [www.IXL.com/signin/paterson](http://www.IXL.com/signin/paterson)
2. Enter your child's username and password and click *Sign in*.  
(Note: If the username and password are not listed below, they will be provided separately.)

Username \_\_\_\_\_

Password \_\_\_\_\_

3. Navigate to your **child's grade level for the 2020-2021 school year** on the *Practice* tab.
4. Find a skill to practice by doing one of the following:
  - Select a specific skill to practice from the list of skills. You can place your mouse over any skill to see a sample question and click on the link to begin.
  - Click on the *Awards* tab. Each grade level presents challenges for your child to conquer and virtual prizes to be uncovered. Place your mouse over any challenge to begin.
5. Using the account Profile, please enter your email address in case of lost/forgotten passwords.

In addition to making math practice exciting, IXL is designed to help your child learn at his or her own pace. The website is adaptive and will adjust to your child's demonstrated ability level. The site also saves all of your child's results, so you can monitor your child's progress anytime by clicking on the *Reports* tab.

Sincerely,  
Reverend Brown Teachers

**Summer Math Assignments  
Reverend Brown School**

**IXL Summer Assignments for Incoming Second Grade Students**

All work must be completed by August 31, 2021.

**MATH: Incoming Second Grade**

Go to the section for **FIRST GRADE**. Students entering second grade in September are required to practice math skills during the summer using the IXL website for 30 minutes a week. Please note that usage is tracked automatically by the IXL website. Teachers will use this information when assessing summer assignments. Any of the skills listed under **FIRST** grade topics would be beneficial to review. Below are some important ones.

**Understand Addition**

- >B.1 Add with pictures-sums up to 10
- >B.2 Addition sentences-sums up to 10
- >B.3 Addition sentences using number lines-sums up to 10

**Addition**

- >D.1 through D.14

**Addition Strategies**

- >E.1 Add doubles –with models
- >E.2 Add doubles
- >E.3 Add doubles –complete the sentence

**Understand Subtraction**

- >F.1 Subtract with pictures- numbers up to 10
- >F.2 Subtraction sentences –numbers up to 10
- >F.3 Subtraction sentences using number lines –numbers up to 10

**Subtraction**

- >H.1 through H.13

**Subtraction Strategies**

- >I.1 Relate addition and subtraction sentences
- >I.2 Subtract doubles
- >I.3 Subtract multiples of 10

**Mixed Operations**

- >J.3 Fact Families

## Incoming Third Grade

### **Incoming Third Grade**

Go to the section for SECOND GRADE. Students entering third grade in September are required to practice math skills during the summer using the IXL website for 30 minutes a week for a total of 6 hours. Any of the skills listed under second grade topics would be great to be reviewed. Below are some important ones. You do not have to stay on the skill to reach 100. You may stop at 80. **All work must be completed by August 31, 2021.**

<p><b><u>Counting and number patterns</u></b></p> <p>Any in this section.</p> <p><b><u>Comparing and Ordering</u></b></p> <p>Any in this section.</p> <p><b><u>Names of Numbers</u></b></p> <p>C.4. Ordinal numbers up to 100.</p> <p>C.5. Writing numbers up to 100 in words.</p> <p>C6. Writing numbers up to 1,000 in words.</p> <p><b><u>Patterns-</u></b></p> <p>D.5 Complete a repeating pattern.</p> <p>D. 6. Make a repeating pattern.</p> <p>D. 7. Next row in a growing pattern.</p> <p><b><u>Addition-one digit</u></b></p> <p>E. 10. Input/ output</p> <p>E.16. Addition Sentences – Sums to 20</p> <p>E. 20. Add 3 addends – word problems</p> <p>E. 21 Add 3 addends word problems</p> <p><b><u>Subtraction-one digit</u></b></p> <p>F. 9. Subtraction Input/Output Tables</p> <p>F.11. Subtraction Word Problems</p> <p>F.13 Complete the subtraction sentence</p> <p><b><u>Addition-two digit</u></b></p> <p>G.2. Write addition sentences to describe</p>	<p><b><u>Subtraction- 2 digit</u></b></p> <p>H.4. Subtract a 1 digit number from a 2 digit number with regrouping.</p> <p>H.6. Subtract 2 digit numbers with regrouping.</p> <p>H.7. Subtraction – Input/Output Tables</p> <p>H.9. Subtraction word problems.</p> <p>H.10. Complete the subtraction sentence up to 2 digits.</p> <p>H.11. Write the subtraction sentence.</p> <p>H.12. Balance the subtraction equations.</p> <p><b><u>Addition-3 digit</u></b></p> <p>I.5. Add 2- 3digit numbers</p> <p>I.6. Addition word problems</p> <p>i.7. Complete the addition sentence</p> <p>I.8. Write the addition sentence</p> <p><b><u>Subtraction – 3 digit</u></b></p> <p>J.3 Subtract 2 -3digit numbers.</p> <p><b><u>Subtraction - 3 digit (continued)</u></b></p> <p>J.4 Subtraction word problems up to 3 digits.</p> <p>J.5. Complete the subtraction sentence.</p> <p>J.6. Write the subtraction sentence.</p> <p><b><u>Mixed Operations –</u></b></p> <p>L.10. Add or subtract up to 100 word problems</p>
--	---

pictures.

G.10. Add 2 digit numbers with regrouping

G.14. Addition word problems up to 2 digits.

G.19 Add 3 or more numbers up to 2 digits word problems.

G.21. Add 4 or more numbers up to 2 digits word problems.

### **Data & Graphs**

R.2 Interpret tally charts and tables

R.4. Interpret data in tables

R.12 Interpret pictographs II

### **Measurement**

All

### **Geometry**

All

### **Fractions -\*All**

L11. Two step addition and subtraction word problems.

L.16. Which sign – addition or subtraction?

### **Properties-All**

#### **Place Values**

M.6. Place value models up to hundreds.

M.8. Convert to/from a number 10's and 1's

M.11. Convert to from a number up to 100's.

M.12. Convert between Place Values Ones, hundreds

M.13. Convert between place values ones, tens, hundreds

M.14. Convert to from expanded form through 100's

#### **Estimating and Rounding**

N.3 Rounding to the nearest 10 and 100.

N.5 Estimate sums

N.6. Estimate differences

#### **Logical reasoning**

O.1 Guess the number

#### **Money**

P.2 Identify the names and values of all coins.

P.5 Count money up to \$5

P.14 Add and subtract money

P.15 Add and subtract money word problems

P.17 Do I have enough money up to \$5?

P.19. Least number of coins.

#### **Time**

Q.3. Match analog and digital clocks

Q.7. A.M. and P.M.

Q.10 Elapsed time II

Q.11. Time Patterns

Q.14. Read the calendar

### **Incoming 4<sup>th</sup> Grade**

Go to the section for **THIRD GRADE**. The minimum requirement is a total of 6 hours over the summer (approximately one-half hour per week). Of course, the more practice, the better the fluency and understanding! All work must be completed by August 31, 2021.

Choose from any of these suggested skills:

#### **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 (B.1-9); comparing and ordering numbers (A.8-11); time (T.1-7, 11-13); units of measurement (Z.1-22); estimation and rounding (P.1-11), money (S.1-11); fractions (V.1-8 and W.1-8,); and geometry (AA. 1-10) (BB.1-8) (CC. 1-5) (DD. 1-19).
- 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 3, 2021.

# Incoming 4<sup>th</sup> Grade



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 3, 2021.

Have fun!!

Reverend Brown Fourth Grade Teachers



# TASK

#1

# FUNDRAISING

Your town is fundraising for the new playground. Let's take a look at two of the different fundraisers.

## FUNDRAISING BBQ

The BBQ will run all day on Saturday. Complete the chart to figure out how much money you raised between 1:00 pm and 2:00 pm.

### ITEMS SOLD BETWEEN 1:00 PM AND 2:00 PM

ITEM	COST	NUMBER SOLD	TOTAL AMOUNT
Hot Dog	\$2.00	10	
Hamburger	\$4.00	8	
Bag of Chips	\$1.00	25	
Drink	\$1.00	36	
Hamburger Meal	\$5.00	12	
Hot Dog Meal	\$3.00	11	
TOTAL AMOUNT RAISED BETWEEN 1:00 PM AND 2:00 PM			

THINK FAST! Which is more expensive - 5 hamburgers or 9 hot dogs?



The next fundraiser is a Fundraising Gala. Supper will be sold for \$10/plate and desserts will be sold for \$5 each. Complete the table to show how much money was raised in all from the Gala.

### FUNDRAISING GALA

SUPPER ITEM	COST PER PLATE	NUMBER SOLD	TOTAL AMOUNT RAISED
Roast Beef	\$10.00	12	
Chicken	\$10.00	9	
Fish	\$10.00	7	
Vegetarian	\$10.00	10	
Steak	\$10.00	12	
TOTAL AMOUNT RAISED			

Draw an array to represent the amount raised by fish meals.



DESSERT ITEM	COST PER DESSERT	NUMBER SOLD	TOTAL AMOUNT RAISED
Blueberry Cheesecake	\$5.00	5	
Deluxe Fruit Salad	\$5.00	10	
Black Forest Cake	\$5.00	12	
Pineapple Crumble	\$5.00	11	
Strawberries and Cream	\$5.00	12	
<b>TOTAL AMOUNT RAISED</b>			

Show how you could use skip-counting to figure out the total money made from blueberry cheesecake:

In all, how much was raised from the supper and dessert at the Gala?

TASK

#2

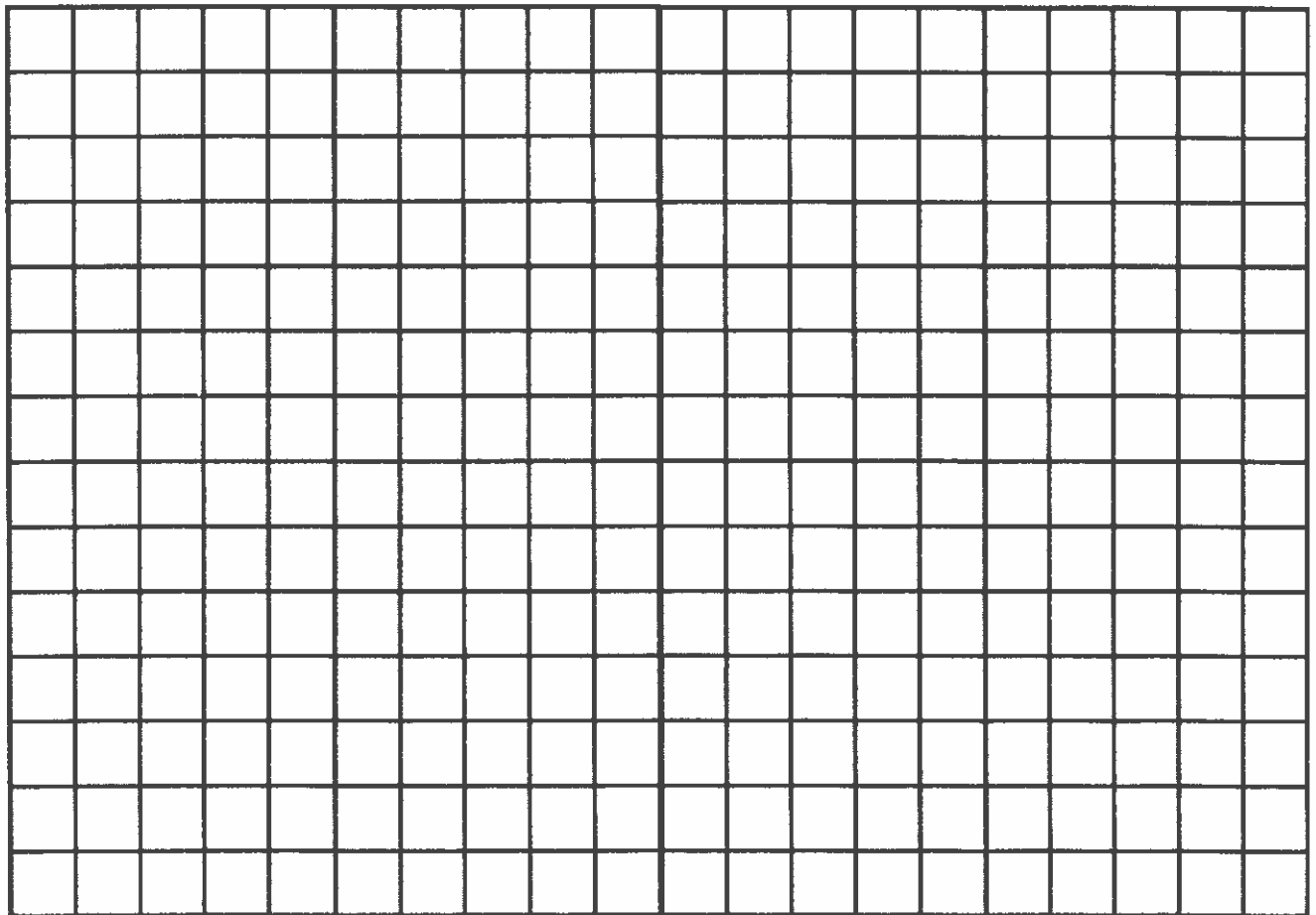
# PLANNING THE PLAYGROUND

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.

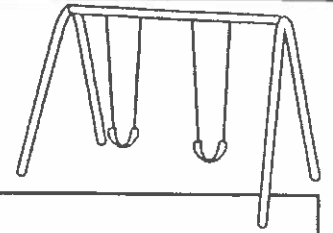
## THE PICNIC AREA

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

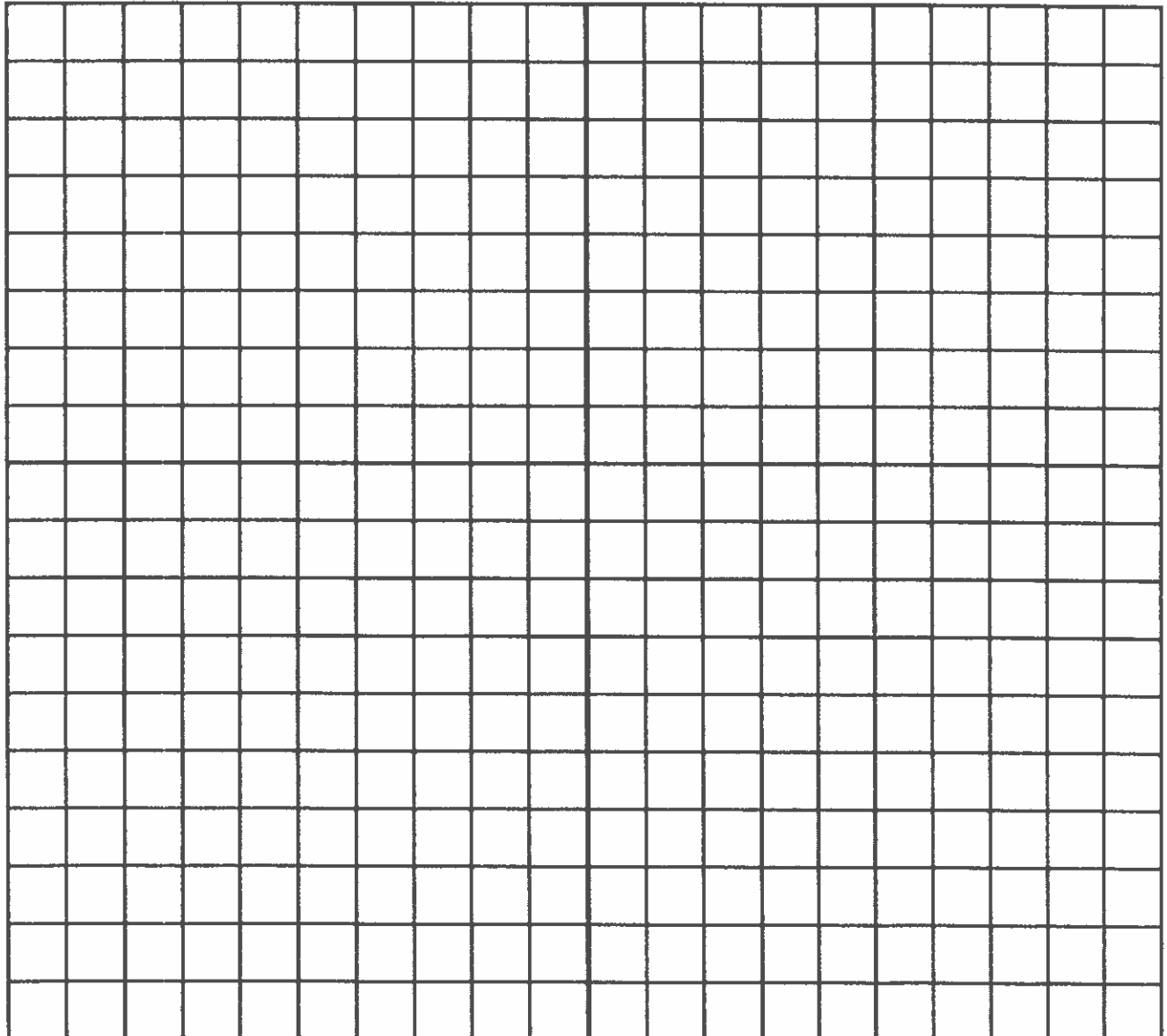


# THE PLAY ZONE



Include the following on your blueprint:

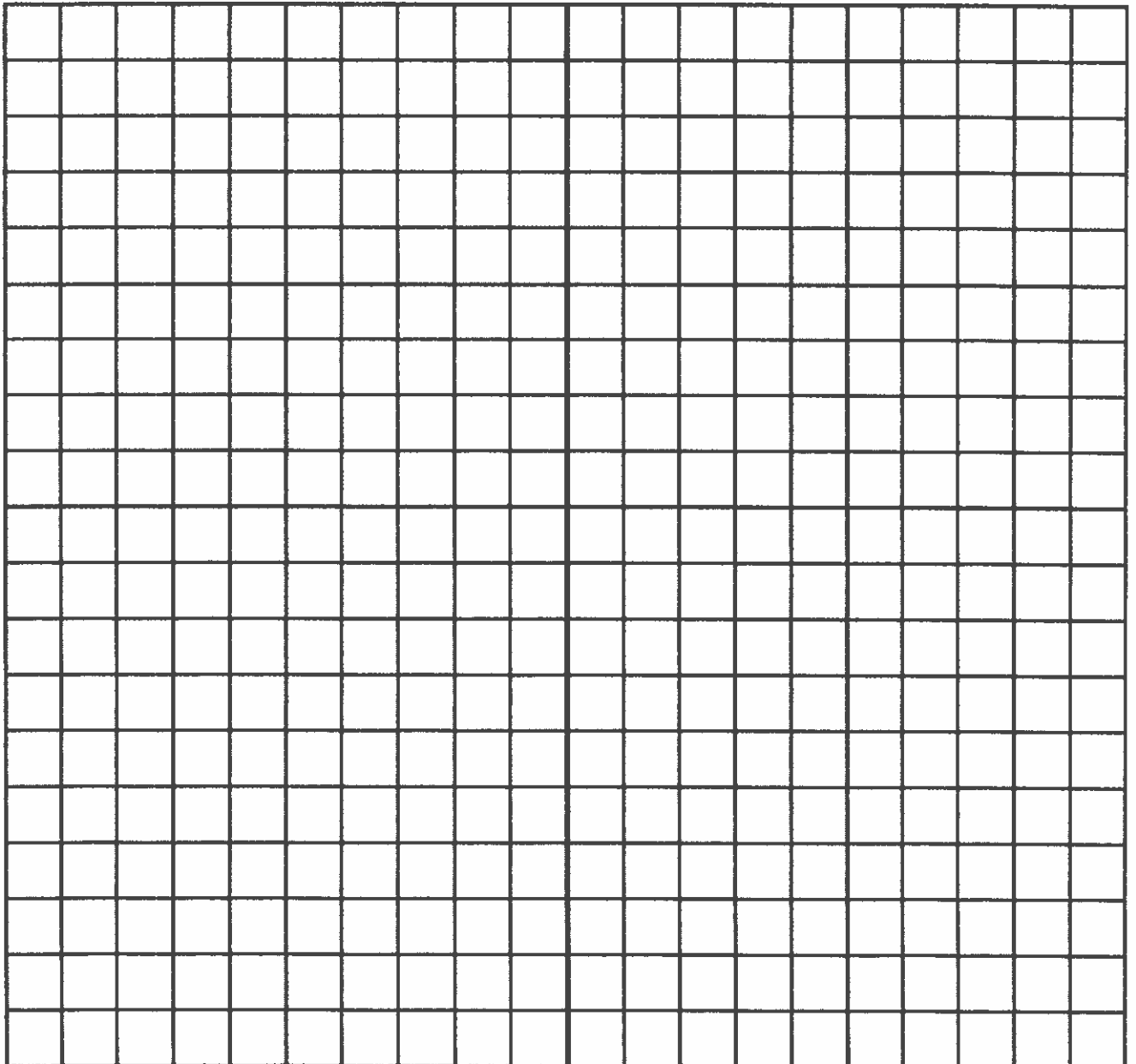
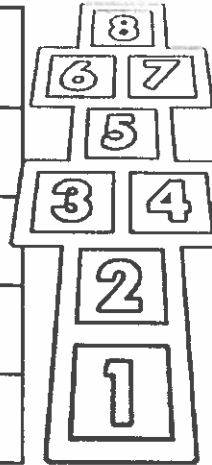
PLAY ZONE ITEM	AREA
Play Structure	50 square units
Teeter Totter	12 square units
Swing Set	24 square units
Bench	8 square units
Sandbox	18 square units



# 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



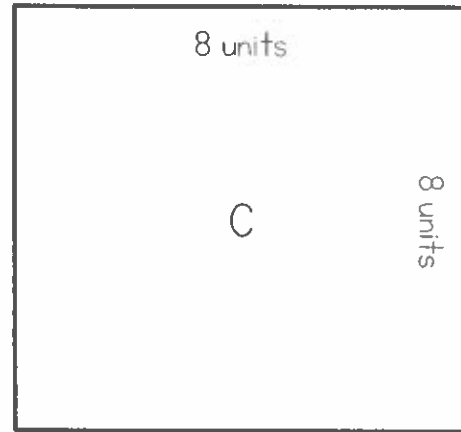
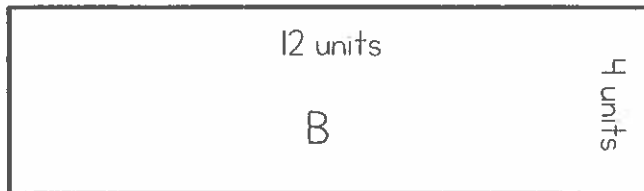
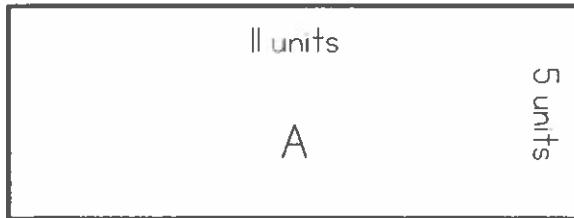
# TASK

## #3

# 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.

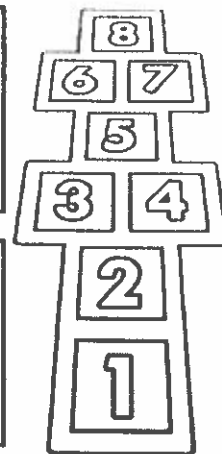
TASK

#4

# 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:

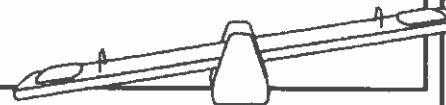
Write a repeated addition sentence:

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

## #5

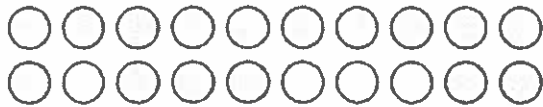
# TREE PLANTING

You'll be planting a few rows of trees throughout the playground. But first, you need to plan!

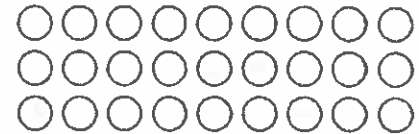


These arrays represent the trees that will be planted throughout the playground.

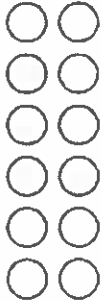
NORTH SIDE OF PLAYGROUND



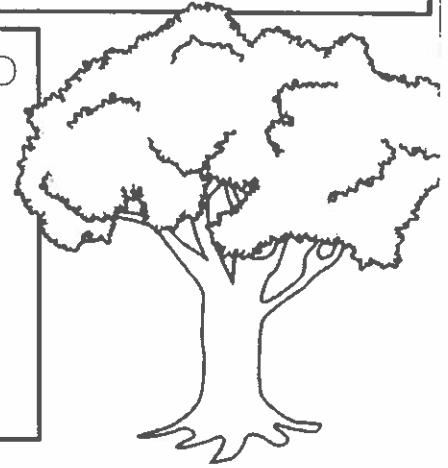
SOUTH SIDE OF PLAYGROUND



EAST SIDE OF PLAYGROUND



WEST SIDE OF PLAYGROUND



Write two different multiplication equations to represent the trees planted on the:

west side

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

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

east side

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

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

south side

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

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

north side

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

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

Use repeated addition to represent the number of trees on the south side in TWO different ways.

Which do you prefer - multiplication or repeated addition? Why?

# TASK

#6

# THE GRAND OPENING

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

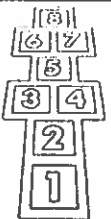
There will be two groups of people working at the Grand Opening - the Town Council and the Playground Committee. There are 5 people in each of those groups. How many people will be working at the Grand Opening?

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:

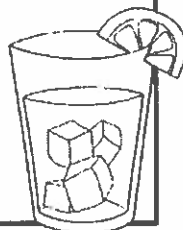


Grand Opening snacks include cookies and lemonade! Each pitcher of lemonade has enough for 9 people. There are 12 cookies inside each box.

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	___ x ___ = ___
Vanilla	___ x ___ = ___
Wafer	___ x ___ = ___



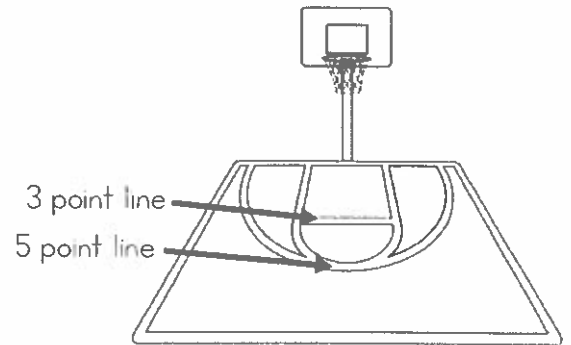
# TASK

#7

# BASKETBALL TOURNAMENT

There's a basketball competition happening at the playground today! Let's see who wins!

Two friends have decided to have a basketball competition. They will each take shots from two different lines. Each line represents a number of points.



Player Name	ROUND ONE		ROUND TWO	
	# of 3-point baskets	# of 5-point baskets	# of 3-point baskets	# of 5-point baskets
Anthony	8	4	9	6
Isabella	6	7	11	2

Use the chart to answer the questions:

How many points did Anthony get from 5-point baskets in Round One?

How many points did Isabella get from 3-point baskets in Round Two?

Draw an array to represent the number of points that Anthony got from 3-point baskets in Round Two:

Draw an array to represent the number of points that Isabella got from 3-point baskets in Round One:

Let's figure out who won Round One. Complete the chart:

Name	Points from 3-point baskets	Points from 5-point baskets	Total Points
Anthony			
Isabella			

Who won Round One? \_\_\_\_\_

Now let's take a look at Round Two:

Name	Points from 3-point baskets	Points from 5-point baskets	Total Points
Anthony			
Isabella			

Who won Round Two? \_\_\_\_\_

WORKSPACE  

# TASK

#8

# 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

## # 9

# PLAYGROUND JOKES

Use multiplication to find the answers to the playground jokes.

A	4x5
B	5x2
C	7x3
D	5x5
E	4x3
F	3x2
G	8x5
H	2x2
I	4x4

J	8x4
K	3x8
L	10x8
M	7x2
N	4x2
O	9x3
P	9x8
Q	6x6
R	2x1

S	9x2
T	11x4
U	7x4
V	8x6
W	6x7
X	8x8
Y	6x5
Z	10x5

Why did the chicken cross the playground?

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

Why are basketball players messy eaters?

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

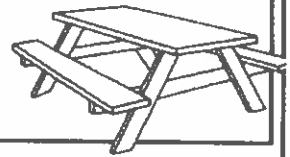
TASK

#10

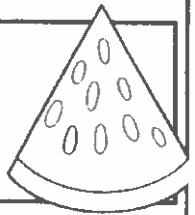
# PICNIC PROBLEMS

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?



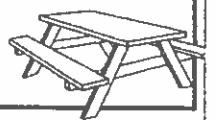
You're having watermelon for dessert! If 12 people will each eat 2 pieces of watermelon, how many pieces of watermelon will you need?



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

\_\_\_ x \_\_\_ = \_\_\_    \_\_\_ x \_\_\_ = \_\_\_    \_\_\_ x \_\_\_ = \_\_\_    \_\_\_ x \_\_\_ = \_\_\_    \_\_\_ x \_\_\_ = \_\_\_