## 2022 - Summer Math - IXL Incoming Grades 5-7 Pope John XXIII Middle School

Over the summer break, all PJMS students (incoming grades 5-7) are required to complete a review of math concepts from the outgoing grade level. It is recommended that students complete the assignments weekly, between the dates of Tuesday, June $15^{\text {th }}$, and Wednesday, August $31^{\text {st }}$. Students should aim to complete approximately one assignment per week. While it is understood that busy family schedules will periodically necessitate adjusting the practice schedule at home, students should not crowd all IXL work into either the end of June or the end of August, as this will result in a reduction of credit given for the assignments in marking period 1. Meaningful practice allows students reap the benefits of a steady usage and retain a higher percentage of their skillset.

At the start of the new school year, the math teachers will process IXL reports to review individual student progress and verify assignment completion. Fulfillment of the tasks will result in credit for additional homework assignments in the first quarter. Students who complete less than the required amount will receive a portion of the homework credits based on the percentage completed. The deadline to complete assignments for full credit is 8/31/22.

There are two options for students to consider. Select and complete ONE of following options:
A. Complete 10 assignments with a passing score of at least $90 \%$, OR
B. Complete 15 assignments with a passing score of at least $80 \%$.

Students enrolled in PJMS for the 2021-2022 school year should already have access to their IXL account and have saved their login information. Time was provided at the end of the school year to confirm student access to IXL.
***A list of assignments is provided, and students are to select their review topics from these options. Please note that IXL periodically updates the topic names, categories and letter/number assignments. Be sure to look for the specific assignment names, should the letter/number listings, or topic categories not match what is named below.

## Assignments completed before June $15^{\text {th }}$ or after August $31^{\text {st }}$ will not receive summer IXL credit.

*Please Note: Students were provided their login information in early June. Students will use their "@paterson" login to complete all summer assignments. Any student experiencing difficulty logging in from the "app" should go to ixl.com for access.
**Students must log in with their assigned username to receive credit for the practice completed in the program. Logging in as a "guest" will not store the individual's information, and the number of practice sessions available is restricted.

To avoid a grade penalty, students should complete assignments weekly, with minor adjustment when necessary. Therefore, assignment activity must be evident in June, July and August.

## INCOMING / RISING GRADE 5 IXL SUMMER PRACTICE TOPICS:

(IXL topics listed below are found in "GRADE 4")*******

## NUMBER SENSE

VALUE OF A DIGIT
IDENTIFYING PLACE VALUE NAMES
ROUNDING UP TO ONE MILLION

## SUBTRACTION

SUBTRACT NUMBERS UP TO SEVEN DIGITS: WORD PROBLEMS

## MULTIPLICATION

MULTIPLY A 2-DIGIT NUMBER BY A 2-DIGIT NUMBER
MULTIPLY NUMBERS ENDING IN ZEROS

## DIVISION

DIVISIBILITY RULES
DIVIDE LARGER UMBERS BY ONE DIGIT NUMBERS: INTERPRET REMAINDERS

## MIXED OPERATION

MULTI-STEP WORD PROBLEMS

## COORDINATE PLANE

GRAPH POINTS ON A COORDINATE PLANE

## MONEY

FIND THE CHANGE, PRICE, OR AMOUNT PAID
UNIT OF MEASUREMENT
ADD AND SUBTRACT MIXED CUSTOMARY UNITS
TIME
ELAPSED TIME: WORD PROBLEMS

## FRACTION EQUIVALENCE AND ORDERING

IDENTIFY EQUIVALENT FRACTIONS
WRITE FRACTIONS IN LOWEST TERMS
CONVERT BETWEEN IMPROPER FRACTIONS AND MIXED NUMBERS

## ADD \& SUBTRACT FRACTIONS WITH UNLIKE DENOMINATORS

ADD AND SUBTRACT MIXED NUMBERS WITH UNLIKE DENOMINATORS: WORD PROBLEMS

## DECIMALS

PLACE VALUES IN DECIMAL NUMBERS
ROUND DECIMALS
COMPARE DECIMAL NUMBERS
GEOMETRIC MEASUREMENT
RELATIONSHIP BETWEEN AREA AND PERIMETER

## INCOMING / RISING GRADE 6 IXL SUMMER PRACTICE TOPICS:

******(IXL topics listed below are found in "GRADE 5")*****

## NUMBER THEORY

IDENTIFY FACTORS
PRIME FACTORIZATION
GREATEST COMMON FACTOR
LEAST COMMON MULTIPLE
DECIMALS
PLACE VALUE IN DECIMAL NUMBERS
ROUND DECIMALS
PUT DECIMAL NUMBERS IN ORDER
CONVERT FRACTIONS TO DECIMALS
MULTIPLY DECIMALS
MULTIPLY A DECIMAL BY A POWER OF TEN
MULTIPLY TWO DECIMALS: PRODUCTS UP TO THOUSANDTHS

## DIVIDE DECIMALS

DIVIDE A DECIMAL BY POWERS OF 10
DIVIDE FOUR DIGIT NUMBERS BY TWO DIGIT NUMBERS

## EXPONENTS

EVALUATE EXPONENTS
FRACTIONS AND MIXED NUMBERS
WRITE FRACTIONS IN LOWEST TERMS
CONVERT BETWEEN IMPROPER FRACTIONS AND MIXED NUMBERS
ADD AND SUBTRACT FRACTIONS
ADD AND SUBTRACT FRACTIONS IN RECIPES
ADD AND SUBTRACT MIXED NUMBERS: WORD PROBLEMS

## MULTIPLY FRACTIONS

MULTIPLY THREE OR MORE MIXED NUMBERS, FRACTIONS, AND/OR DECIMALS
MULTIPLICATION WITH MIXED NUMBERS: WORD PROBLEMS
DIVIDE FRACTIONS
DIVIDE FRACTIONS \& MIXED NUMBERS: WORD PROBLEMS
MIXED OPERATIONS
ADD, SUBTRACT, MULTIPLY AND DIVIDE FRATIONS AND MIXED NUMBERS: WORD PROBLEMS

## TWO DIMENSIONAL FIGURES

NUMBER OF SIDES IN POLYGONS

## GEOMETRIC MEASUREMENT

PERIMETER WITH WHOLE NUMBER SIDE LENGTHS
AREA OF SQUARES AND RECTANGLES

## INCOMING / RISING GRADE 7 IXL SUMMER PRACTICE TOPICS:

******(IXL topics listed below are found in "GRADE 6")******

## NUMBER THEORY

CONVERT BETWEEN STANDARD AND SCIENTIFIC NOTATION
DECIMALS
PUT DECIMALS IN ORDER
FRACTIONS AND MIXED NUMBERS
CONVERT BETWEEN DECIMALS, FRACTIONS, OR MIXED NUMBERS
ADD AND SUBTRACT FRACTIONS
ADD AND SUBTRACT MIXED NUMBERS: WORD PROBLEMS
OPERATIONS WITH INTEGERS
ADD AND SUBTRACT INTEGERS: INPUT AND OUTPUT TABLES
MULTIPLY INTEGERS
DIVIDE INTEGERS

## MIXED OPERATIONS

EVALUATE NUMERICAL EXPRESSIONS INVOLVING INTEGERS

## RATIOS AND RATES

RATIO TABLES
RATIOS AND RATES: WORD PROBLEMS
SOLVE THE PROPORTION

## PERCENTS

CONVERT BETWEEN PERCENTS, FRACTIONS, AND DECIMALS
PERCENTS OF NUMBERS AND MONEY AMOUNTS
SOLVE PERCENTS: WORD PROBLEMS

## COORDINATE PLANE

FOLLOW DIRECTIONS ON A COORDINATE PLANE
DISTANCE BETWEEN TWO POINTS

## EXPRESSIONS AND PROPERTIES

WRITE VARIABLE EXPRESSIONS: TWO OPERATIONS

ONE VARIABLE EQUATIONS
WRITE AN EQUATION FROM WORDS
SOLVE ONE-STEP EQUATIONS WITH DECIMALS, FRACTIONS, AND MIXED NUMBERS
GEOMETRIC MEASUREMENT
PERIMETER
AREA OF TRIANGLES
AREA OF PARALLELOGRAMS
AREA OF TRAPEZOIDS
TWO DIMENSIONAL FIGURES
AREA OF RECTANGLES AND SQUARES
CLASSIFY TRIANGLES
CLASSIFY QUADRILATERALS

