PARENTS — PLEASE NOTE REQUIREMENTS FOR THE SUMMER WORK LISTED BELOW:

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 15th, and Wednesday, August 31st. 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 15th or after August 31st 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 <u>must log in with their assigned username to receive credit</u> 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