

AVOID SUMMER BRAIN DRAIN!

Dear Parents -

Experts from Johns Hopkins University, the University of Tennessee, the University of Virginia, and elsewhere say most students, regardless of family income or background, lose over two months of the math computational skills that they learned during the school year over the summer. These findings suggest the obvious, children lose math ability when they don't use it.

This summer, to prevent this learning loss, keep the students' math computational skills sharp, and to reinforce the skills that they learned in 5th grade, we will be using an interactive website math program - IXL. It is our hope that this will help all of our students enter their next math course well prepared and ready to go!

Over the summer, students are expected to complete at least **10 hours** of math skills practice within IXL. Our hope is that the review will take place over the entire summer rather than during the last few days before we return to school. Ideally, your child will be working on IXL about three times a week over the course ten weeks. All work should be completed between **June 17th and August 31st**. **Work completed after this deadline, although great, WILL NOT be counted towards your grade.** If you do not have a home computer, we encourage you to visit a local library or partner with a friend with internet access.

The summer assignment will be graded based on the amount of time spent actively working on IXL and it will be weighted as the equivalent of a test - 100 points. Thus, each $\frac{1}{2}$ hour fully completed is worth 5 points. Any student who goes above the assigned 10 hours will receive 1 point of extra credit for each extra hour of work they do! It is an easy way to start the term with an A+!

It is our hope that the students will find this a valuable opportunity. If you have any questions, please feel free to contact me. Sarah.Treacy@ourladyacademy.org

Thank you for your support!

Sarah Treacy

My New Sixth Graders -

You have worked so hard all year with Ms. Erskine. You have made the math muscles in your brain STRONG!! Just like any other muscle, if you don't use it, you will lose it. You need to keep flexing those strong math muscles this summer! I know you are thinking, "It is summer! I want to play and swim, not do math!" But believe me, the little time you spend doing math this summer, will save you A LOT of time next year.

This summer you need to practice AT LEAST ten hours of math skills on IXL. Take my advice, do not try to do all ten hours the last week of August! Look at your summer and spread it out. You have to complete (at least) ten hours, there are 60 minutes in an hour. How many minutes of IXL does that mean? How many days over the summer do you have to complete the work? From the amount of available days, subtract any days you know you don't want to be doing math. How many days does that leave you for IXL? Now, divide total IXL minutes by how many days you have to complete it. How much IXL should you do each day? Do the math! ☺ Not so bad, right? Plenty of time left for play!

For each topic listed on the back of this page, you should reach a "**smart score**" of at least 80. Getting started is easy! Sign on to IXL using your username and password. Choose the **6th grade** tab, select a skill from the checklist on the back and start answering questions! If you answer a question correctly, you will be given another question. If your answer is wrong you will be given an explanation of why your answer is wrong. Once you understand it, click on "Got it" and you will be given another question.

The skills you are assigned will be needed in the course you are entering in the fall. If you encounter an assigned skill that you don't remember, or think that you have not learned, you can view tutorials on the topic at www.khanacademy.org, as well as other websites you find helpful.

Unless otherwise noted, the section refers to **6th Grade**. If you complete the material in your grade level before you have spent 10 hours working, please either go back to the sections you had most difficulty with and try to beat your previous score OR challenge yourself by finding the corresponding skill in 6th grade and attempt those problems!

If you have any questions, email me! My email is sarah.treacy@ourladyacademy.org. I will answer within a day or two. Have a great summer! I can't wait to see you in the Fall.

Mrs. Treacy

6th Grade Math

Division

Divisibility Rules

Divide whole numbers - 3 digit divisors

Exponents and Square Roots

Write multiplication expressions

Evaluate Exponents

Number Theory

Convert between standard and scientific notation

Compare numbers written in scientific notation

Prime or Composite

Identify factors

Prime Factorization

Prime Factorization with exponents

Greatest Common Factor

Least Common Multiple

Decimals

Convert decimals to mixed numbers

Put decimal numbers in order

Convert decimals to mixed numbers

Inequalities with decimals

Round decimals

Add and Subtract Decimals

Add and subtract decimals

Multiply and Divide Decimals

Multiply Decimals

Divide Decimals by Whole numbers

Division with Decimal Quotients

Fractions and mixed numbers

Fractions and mixed numbers review

Equivalent fractions review

Write fractions in lowest terms

Least Common Denominator

Compare fractions with like and unlike denominators

Convert between improper fractions and mixed numbers

Add and Subtract Fractions

Add and subtract fractions with unlike denominators

Add and subtract mixed numbers

Multiply Fractions

Multiply mixed numbers

Divide Fractions

Reciprocals

Divide fractions and mixed numbers

Integers

Understanding integers

Absolute value and opposite integers

Operations with integers

Add integers

Subtract integers

Multiply integers

Divide integers

Mixed Operations

Add, subtract, multiply, divide two decimals

Add, subtract, multiply, divide two integers

Rational Numbers

Compare rational numbers

Put rational numbers in order

Multiply and divide rational numbers

Percents

Convert between percents, fractions, and decimals

Compare percents to each other and fractions

Expressions and Properties

Write variable expressions

Evaluate variable expressions and whole numbers

