

Course Syllabus Report



MA151O Math 5

Meets Graduation Requirements: No

Details

Description

The fifth grade math program is designed with many activities that will help your child learn skills for problem solving and will involve them in exploring numbers, operations & algebraic thinking, fractions, measurement, and geometry. These activities will help your child see real-life mathematical applications. Using the Odyssey curriculum helps children learn in a fun and interactive way!

Ale Course Essential Learnings:

What We Will Study

- Write & interpret numerical expressions
- Understand place value system
- Perform operations: multi-digit whole numbers & decimals to hundredths
- Use equivalent fractions as a strategy to add & subtract
- Apply & extend previous $\times$ & $\div$ understanding to include operations with fractions
- Understand concepts of volume & relate volume to $\times$ & $+$
- Graph points on a coordinate plane to solve real-world & mathematical problems

Reference Priority Standards and course Learning Plan Contract (LPC) for additional details

Default Ale Certificated Teacher: Jodie Davis

Ale Course is Active: 1

Ale Course is Parent Template: 0

District Approved Curriculum Name:Teacher Created

District Approved Curriculum Name:Ready Math

State Course Codes:MISC0007 (Elementary Curriculum)

Ale Course Type:NCAA Approved

Ale Course Type:NCAA n/a

State Subject Area:Mathematics

SIS Course Code: MA151O

Ale Course Grading Scale: Excelling – EX - 3.50-4.00 Meeting – ME - 2.75-3.49 Approaching - AP- 2.00-2.74 Beginning – BE - 1.99 or below

Ale Course Available Credits:

Ale Course Prerequisites:

Ale Course Texts: Student Workbooks volumes 1 and 2

Ale Course Additional Resources: i-Ready MyPath I-Ready Web Site Kahn Academy

Instructional Materials needed: Internet access, computer, printer, printer paper and ink, modern OS/ software/web browser, webcam, headphones with microphone- if not built into computer, binder, filler paper, tabs, pencil, crayons, scissors, glue, small whiteboard with eraser and markers, camera (cell phone is fine)

Average Number Of Hours Of Study Per Week: 10.00

Syllabus

Ale Course Syllabus:

iA Math, Fifth Grade, 2021/22

Course Description: MA1510

Scholars will become skilled at the addition and subtraction of fractions and continue to develop understanding of the multiplication of fractions, as well as learn to do simple division of fractions. The students use the meaning of fractions, of multiplication and division, to understand why the processes for multiplying and dividing fractions make sense. Scholars will also will expand their knowledge of division to include 2-digit divisors and decimal operations. We will build upon multi-digit addition, subtraction, multiplication, and division and learn how to add and subtract numbers with decimals to the hundredths. This concept helps develop a foundational understanding regarding the relationship between fractions and decimals. Lastly, scholars will develop an understanding of volume as a property of three-dimensional space. They will learn how to approach and solve problems regarding the estimation and measurement of volume.

What We Will Study

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Formative assessments do not count toward the final grade, but are necessary for the learning process, teacher feedback, and providing practice for the skills taught.

All summative assessments will be graded according to the corresponding rubric or teacher directions. Only summative assessment scores will calculate towards a student's final grade. Each summative assessment is linked to a FWPS Priority Standard (PS).

Excelling - EX = 100%-90%

Meeting - ME = 89%-70%

Approaching - AP = 69%-60%

Beginning - BE = 59%-0%

Objectives

Ale Course Objectives:

What We Will Study

- Write & interpret numerical expressions
- Understand place value system
- Perform operations: multi-digit whole numbers & decimals to hundredths
- Use equivalent fractions as a strategy to add & subtract
- Apply & extend previous $\times$ & $\div$ understanding to include operations with fractions
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Ale Course Standards:

Course is aligned with current Federal Way Public Schools Priority Standards and Washington state standards.

Ale Course Learning Requirements:

Weekly Work Completion: Scholars will submit original work in all classes each week.

Original Work Submissions: Scholars will only submit their original work. If a scholar uses outside sources in the creation of their original work, citations must be present in the format requested by their teacher.

Weekly Communication: Scholars will communicate weekly with their teachers regarding their academic progress.

Functioning Technology/Required Materials: Scholars will always have constant and consistent access to the functioning hardware, software, technology, and required materials necessary to complete their coursework in all classes.

Academic Integrity: Academic integrity is essential to learning. scholars are expected to complete their own work. Copying, plagiarizing, cheating, or other methods of intentional deception are prohibited and could result in the scholar's removal from the class or iA entirely.

IA Policy1st Offense: The scholar will be contacted by the teacher via phone call, the scholar will be made aware of the plagiarism and examples of how this can be avoided will be discussed. Direct instruction on plagiarism will be delivered by the teacher. iA Administration and other teachers will be made aware of the plagiarism. The work must be redone without plagiarism.

2nd Offense: The scholar and parents will be contacted by the teacher directly and the scholar will have to complete the plagiarized assignment without plagiarism before moving on in the course. iA Administration will be made aware.

3rd Offense: The scholar will be withdrawn from the course or iA depending on the severity and/or frequency of the plagiarism.

WAC (Weekly Academic Contact): State regulations require scholars in online programs to have weekly academic contact with each teacher. This occurs by engaging with the curriculum and online instruction, submitting assignments to make progress in learning, and successfully completing courses. Scholars have multiple opportunities and methods to achieve weekly academic contact and receive teacher assistance and feedback: email, message, live online sessions, assignments, phone, and/or face-to-face meetings by appointment when applicable and in accordance with social distancing guidelines. In accordance with new state law the iA Weekly Academic Contact policies are changing. To ensure the success of all iA scholars, Weekly Academic Contact is required to remain enrolled at iA.

1st week missed WAC= Notification of missed WAC that informs scholars and parents of the consequences of additional missed WAC.

(Step 1)

2nd consecutive or 3rd cumulative week of missed WAC= The scholar and parent must conference with a designee to discuss the missed contact, administer a "screener", and develop a data-based interventions plan. (Step 2)

5th consecutive OR 6 cumulative of missed WAC= BECCA petition will be filed. (Step 3)

Ale Course Academic Goals:

Grade Level:

Standard Selections:

- Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.
- Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.
- Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $1/10$ of what it represents in the place to its left.
- Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.
- Read, write, and compare decimals to thousandths.
- Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
- Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- Use place value understanding to round decimals to any place.
- Fluently multiply multi-digit whole numbers using the standard algorithm.
- Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
- Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.
- Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.
- Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
- Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$.
- Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
- Interpret multiplication as scaling (resizing), by:
- Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.
- Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given

number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.

- Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.
- Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.
- Interpret division of a whole number by a unit fraction, and compute such quotients.
- Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem.
- Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.
- Make a line plot to display a data set of measurements in fractions of a unit ($1/2$, $1/4$, $1/8$). Use operations on fractions for this grade to solve problems involving information presented in line plots.
- Recognize volume as an attribute of solid figures and understand concepts of volume measurement.
- A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume.
- A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.
- Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
- Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
- Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.
- Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.
- Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.
- Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).
- Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
- Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
- Classify two-dimensional figures in a hierarchy based on properties.

Activities

Ale Course Learning Activities:

Activity Selections

- Text Books and/or Work Books.
 - Activities.
 - Private Tutoring.
 - Private Lessons.
 - Discussion.
 - Practice/Rehearsal.
 - Skill Drills.
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Evaluation

Ale Course Evaluation Methods:

Monthly Progress Review (MPR)

Each month teachers decide whether a scholar is making Satisfactory or Unsatisfactory progress in each course. Then the homeroom/advisory teacher will determine if scholar is overall Satisfactory or Unsatisfactory for the month.

Secondary (6-12) - to be overall SATISFACTORY for the month, a scholar must be passing half or more of their courses with a 70% or better grade (9-12 letter grade of A, B or C; 6-8 grade of EX or ME)

Elementary - to be SATISFACTORY, a scholar must score at least 70% or above with 75% assignment submission in 4 core classes (ELA, SCI, SS, Math)
If a scholar has Unsatisfactory Progress for the month the advisor or homeroom teacher will create an intervention plan communicated in the ALE App.

Three consecutive months of Unsatisfactory Progress will result in a course reduction - which may affect graduation for high school scholars.

Four consecutive months of Unsatisfactory progress will result in complete withdrawal from iA. Scholars withdrawn from iA for Unsatisfactory progress may not re-enroll until the following school year.

Timelines:

September Timeline:

Complete all lessons and assignments in the September module on your "modules" page in Canvas.

October Timeline:

Complete all lessons and assignments in the October module on your "modules" page in Canvas.

November Timeline:

Complete all lessons and assignments in the November module on your "modules" page in Canvas.

December Timeline:

Complete all lessons and assignments in the December module on your "modules" page in Canvas.

January Timeline:

Complete all lessons and assignments in the January module on your "modules" page in Canvas.

February Timeline:

Complete all lessons and assignments in the February module on your "modules" page in Canvas.

March Timeline:

Complete all lessons and assignments in the March module on your "modules" page in Canvas.

April Timeline:

Complete all lessons and assignments in the April module on your "modules" page in Canvas.

May Timeline:

Complete all lessons and assignments in the May module on your "modules" page in Canvas.

June Timeline:

Complete all lessons and assignments in the June module on your "modules" page in Canvas.