

Lakeland School of Walworth County



Mathematics Guide

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Welcome Message

Lakeland School believes in high learning expectations for all students. We see every student as an individual who is a capable learner. It is our goal to provide opportunities that meet the needs of the whole child--intellectual, physical, and social-emotional. At Lakeland School, instruction is aligned with the [Common Core Essential Elements](#). For this reason, we have chosen the [Equals Mathematics](#) curriculum.

Equals Mathematics allows students to learn foundational math skills while solving real-world problems as active learners. By connecting instruction to prior knowledge and real-life experiences, students in grades Kindergarten through 12th are able to acquire new concepts and expand what they know about math. In addition, instruction is supplemented with online programs such as [Happy Numbers](#) and [IXL](#).

Starting in third grade, students participate in the [Dynamic Learning Maps \(DLM\)](#) Alternate Assessment. DLM Essential Elements, linkage levels, and nodes have been developed by the University of Kansas Center for Research and correlate to the learning targets adopted by the state of Wisconsin. Lakeland School utilizes the existing DLM linkage levels. For earlier grade levels and non-tested standards, Lakeland School Linkage Levels have been created and follow the same format in order to guide instruction at an appropriate level for each individual.

This document is a resource for parents, guardians, and other community members to support teaching Lakeland School students to grow in skills and knowledge necessary for life outside the classroom.

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Kindergarten Overview

Kindergarten-Trimester One
Standards Addressed During Grading Period EE.K.CC.1, EE.K.CC.4, EE.K.CC.5, EE.K.CC.6
Counting & Cardinality: Students will understand, cardinality is the counting and quantity principle referring to the understanding that the last number counted represents the total number within a group of objects. Instruction will focus on introducing numbers 1-5 and zero.

Kindergarten-Trimester Two
Standards Addressed During Grading Period EE.K.CC.1, EE.K.CC.4, EE.K.CC.5, EE.K.CC.6 EE.K.MD.1-3 EE.K.G.2-3
Counting & Cardinality: Students will understand, cardinality is the counting and quantity principle referring to the understanding that the last number counted represents the total number within a group of objects. Instruction will focus on introducing numbers 6-10 while reviewing numbers 1-5 and zero.
Measurement & Data: Students will understand how to classify objects based on attributes.
Geometry: Students will be able to match shapes when they are presented with the same size and spatial representation. Instruction will introduce the names of shapes.

Kindergarten-Trimester Three
Standards Addressed During Grading Period EE.K.OA.1 EE.K.G.2-3
Operations & Algebraic Thinking: Students will understand addition as “putting together” and subtraction as “taking away”.
Geometry: Students will be able to match shapes when they are presented with the same size and spatial representation. Instruction will introduce the names of shapes.

Primary Overview

Primary-Trimester One
Standards Addressed During Grading Period EE.1.NBT.1.a, EE.1.NBT.1.b, EE.1.NBT.2, EE.1.NBT.3, EE.1.OA.1.b EE.2.NBT.1, EE.2.NBT.2.a, EE.2.NBT.2.b, EE.2.NBT.3, EE.2.NBT.4, EE.2.OA.3, EE.2.OA.4, EE.2.NBT.5.a, EE.2.NBT.5.b, EE.2.NBT.6-7
Numbers & Base Ten <ul style="list-style-type: none">• First graders will count by ones to 30, as well as create sets of 10 objects and match them to the corresponding numeral.• Second grade students will understand place value in numbers up to 30. They will also identify signs of operation to compose and decompose numbers 0-20.
Operations & Algebraic Thinking <ul style="list-style-type: none">• First grade students will recognize groups that are equal.• Second graders will equally distribute objects between two groups and use addition to solve up to 10.

Primary-Trimester Two
Standards Addressed During Grading Period EE.1.OA.1.a, EE.1.OA.2, EE.1.OA.5.a, EE.1.OA.5b, EE.1.NBT.4, EE.1.NBT.6 EE.2.MD.7, EE.2.MD.8, EE.2.NBT.5.a, EE.2.NBT.5.b, EE.2.NBT.6-7
Numbers & Base Ten <ul style="list-style-type: none">• First grade students will compose and decompose numbers up to five.• Second graders will continue to develop their understanding of signs of operation, as well as addition and subtraction with numerals 0-20.
Operations & Algebraic Thinking <ul style="list-style-type: none">• First graders will represent addition and subtraction in a variety of ways (i.e., clapping hands, acting out, objects, etc.) as well as focus on “one more/one less”.
Measurement & Data <ul style="list-style-type: none">• Second graders will match activities in their routine to the hour on a digital clock. They will also recognize that money has value.

Primary-Trimester Three
Standards Addressed During Grading Period EE.1.G.1, EE.1.G.2, EE.1.G.3, EE.1.MD.1-2, EE.1.MD.3.a, EE.1.MD.3.b, EE.1.MD.3.c, EE.1.MD.3.d, EE.1.MD.4 EE.2.G.1, EE.2.MD.1, EE.2.MD.3-4, EE.2.MD.5, EE.2.MD.6, EE.2.MD.9-10
Geometry <ul style="list-style-type: none">• First graders will sort shapes and put together two pieces to make a whole shape. They will also develop an understanding of relative position (e.g., on/off, in/out).• Second grade students will identify common two-dimensional shapes (e.g., square, circle, triangle, and rectangle).
Measurement & Data <ul style="list-style-type: none">• First grade students will understand that telling time is constant. They will also link activities that come before, next, and after to their understanding of how a day and week proceed (i.e., tomorrow, yesterday, afternoon, night, etc.) First graders will organize data by sorting.• Second graders are developing skills regarding measuring length using non-standard units. They will also begin using picture graphs to represent measurement data.

Elementary Overview

Elementary-Trimester One
Standards Addressed During Grading Period EE.3.NBT.1, EE.3.NBT.2, EE.3.NBT.3, EE.3.OA.4, EE.3.OA.8, EE.3.MD.1 EE.4.NBT.2, EE.4.NBT.3, EE.4.NBT.4, EE.4.MD.2.a, EE.4.MD.2d EE.5.NBT.1, EE.5.NBT.2, EE.5.NBT.3, EE.5.NBT.4, EE.5.OA.3
Numbers & Operations in Base Ten: <ul style="list-style-type: none">• Third grade students will understand how to count by tens and recognize decade numbers.• Fourth grade students will understand how to round numbers to the nearest ten and compare numbers to 10 using symbols of comparison.• Fifth grade students will round numbers to the nearest ten and compare numbers up to 99 using symbols of comparison.
Operations & Algebraic Thinking: <ul style="list-style-type: none">• Third graders will solve real-world and numerical addition and subtraction problems with results up to 20.• Fourth graders will understand how to add and subtract two-digit numbers.• Fifth graders will skip count to extend numerical patterns.
Measurement & Data: <ul style="list-style-type: none">• Third graders will understand how to tell time to the hour.• Fourth graders will understand how to tell time to the hour and half-hour. Students will identify coins by name.

Elementary-Trimester Two
Standards Addressed During Grading Period: EE.3.OA.1-2, EE.3.OA.9, EE.3.NF.1-3 EE.4.OA.1-2, EE.4.OA.3, EE.4.OA.4, EE.4.OA.5, EE.4.NF.1-2, EE.4.NF.3 EE.5.NBT.5, EE.5.NBT.6-7, EE.5.NF.1, EE.5.NF.2, EE.5.MD.1.a
Operations & Algebraic Thinking: <ul style="list-style-type: none">• Third graders will practice repeated addition and identify arithmetic patterns.• Fourth graders will connect repeated addition to multiplication and use arithmetic patterns to make predictions. Students will solve real-world and numerical addition and subtraction problems with results up to 100.
Numbers & Operations in Base Ten: <ul style="list-style-type: none">• Fifth graders will multiply up to 5x5 and understand division as equal shares.
Numbers & Operations-Fractions: <ul style="list-style-type: none">• Third graders will identify a fractional part versus the whole.• Fourth graders will identify half and one-fourth.• Fifth graders will identify halves, thirds, fourths, and tenths.
Measurement & Data: <ul style="list-style-type: none">• Fifth graders will understand how to tell time to the half or quarter-hour.

Elementary-Trimester Three

Standards Addressed During Grading Period:

EE.3.MD.2, EE.3.MD.3, EE.3.MD.4, EE.3.G.1, EE.3.G.2
EE.4.MD.1, EE.4.MD.2.b, EE.4.MD.2.c, EE.4.MD.3, EE.4.MD.4.a, EE.4.MD.4.b, EE.4.MD.5,
EE.4.MD.6, EE.4.G.1, EE.4.G.2, EE.4.G.3
EE.5.MD.1.b, EE.5.MD.1.c, EE.5.MD.2, EE.5.MD.3, EE.5.MD.4-5, EE.5.G.1-4

Measurement & Data:

- Third graders will identify appropriate tools to measure mass and volume. Students will also measure length using standard tools. Instruction will focus on using graphs to answer questions.
- Fourth graders will measure mass, volume, and compare lengths. Students will determine area. Instruction will introduce angles and compare as larger and smaller. Students will represent data on bar and picture graphs.
- Fifth graders will understand the value of a collection of coins. Students will measure length, weight, and volume. Instruction will focus on identifying three-dimensional shapes and interpreting different types of graphs.

Geometry:

- Third graders will describe two-dimensional shapes and explore concepts of symmetry.
- Fourth graders will describe the defining features of two-dimensional shapes. Students will recognize parallel and intersecting lines. Instruction will expand understanding of symmetry.
- Fifth graders will sort two-dimensional figures by common attributes.

Middle School Overview

Middle School-Trimester One
<p>Standards Addressed During Grading Period EE.6.NS.2, EE.6.NS.3, EE.6.NS.5-8, EE.6.EE.1-2, EE.6.EE.3, EE.6.EE.5-7 EE.7.NS.2.a, EE.7.NS.2.b, EE.7.EE.1, EE.7.EE.2, EE.7.EE.4 EE.8.EE.1, EE.8.EE.2, EE.8.EE.3-4, EE.8.EE.5-6, EE.8.EE.7</p>
<p>The Number System</p> <ul style="list-style-type: none"> • Sixth grade students will learn about positive and negative number values, as well as how to solve two factor multiplication equations. They will also learn about division representing equal shares. • Seventh graders will multiply resulting in products within 100. They will also divide equal groups with divisors up to 10.
<p>Expressions & Equations</p> <ul style="list-style-type: none"> • Sixth graders will solve equivalent number sentences and apply what they know to real-world problems. • Seventh grade students will continue learning about equivalent number sentences. They will also identify arithmetic sequences using whole numbers. • Eighth graders will learn about exponents and variables within algebraic equations. They will continue connecting ratios to graphing skills.
Middle School-Trimester Two
<p>Standards Addressed During Grading Period EE.6.SP.1-2, EE.6.SP.5, EE.6.RP.1, EE.6.NS.1 EE.7.SP.1-2, EE.7.SP.3, EE.7.SP.5-7, EE.7.RP.1-3, EE.7.NS.1, EE.7.NS.2.c-d, EE.7.NS.3 EE.8.SP.4, EE.8.F.1-3, EE.8.F.4, EE.8.F.5, EE.8.NS.1, EE.8.NS.2.a, EE.8.NS.2.b</p>
<p>Measurement & Data</p> <ul style="list-style-type: none"> • Sixth graders will learn how to display and summarize data on a graph or table. • Seventh grade students answer questions after collecting data. They will also compare sets of data. • Eighth graders will construct graphs to compare data. Students in this grade will also complete function tables.
<p>Probability & Ratios</p> <ul style="list-style-type: none"> • Sixth graders will learn about simple ratios. • Seventh graders will learn about the probability of events and use ratios to describe a relationship of events.
<p>Fractions</p> <ul style="list-style-type: none"> • Sixth grade students will compare fractional units. • Seventh grade students will add fractions with the same denominator. They will also convert tenths in fraction form to a decimal and compare quantities. • Eighth graders will subtract fractions with like denominators. They will also convert hundredths in fraction form to a decimal and compare quantities.

Middle School-Trimester Three

Standards Addressed During Grading Period

EE.6.G.1, EE.6.G.2

EE.7.G.1, EE.7.G.2, EE.7.G.3, EE.7.G.4, EE.7.G.5, EE.7.G.6

EE.8.G.1, EE.8.G.2, EE.8.G.4, EE.8.G.5, EE.8.G.9

Geometry

- Sixth grade students will solve problems regarding area using square units and volume using unit cubes.
- Seventh grade students will learn perimeter. They will also solve area using the formula 'length x width'. Seventh graders will recognize geometric shapes and match two-dimensional and three-dimensional shapes that share attributes. Seventh graders will categorize angles.
- Eighth graders will solve perimeter, area and volume using formulas. They will compare angles as greater than or less than. Eighth graders will explore congruent shapes and recognize translations, rotations, and reflections.

High School I-Cycle A Overview

High School I-Cycle A-Trimester One
Standards Addressed During Grading Period EE.S-ID.1-2, EE.G-CO.6-8
Ninth and tenth graders are learning to construct different types of graphs, given sets of data. They are also comparing similar and congruent shapes.

High School I-Cycle A-Trimester Two
Standards Addressed During Grading Period EE.F-IF.1-3, EE.G-MG.1-3, EE.S-IC.1-2
Ninth and tenth graders will utilize graphs to solve linear functions. They will also compare the probability of events. Ninth and tenth grade students will learn to compare geometric shapes to real-life objects.

High School I-Cycle A-Trimester Three
Standards Addressed During Grading Period EE.G-CO.1, EE.G-CO.4-5
Ninth and tenth grade students will build skills in geometry regarding perpendicular and parallel lines, angles, and circles. They will also learn about rotations, reflections and translations of geometric figures.

High School I-Cycle B Overview

High School I-Cycle B-Trimester One
Standards Addressed During Grading Period EE.N-CN.2.a, EE.F-BF.2
Students in ninth and tenth grade will use the commutative, associative, and distributive properties to solve equations. They will also apply the recursive rule to complete a number sequence.

High School I-Cycle B-Trimester Two
Standards Addressed During Grading Period EE.A-REI.10-12, EE.S-ID.4, EE.G-GPE.7
Ninth and tenth graders will learn to interpret graphs and calculate the mean value of data. They will solve for area and perimeter connected to real-world problems.

High School I-Cycle B-Trimester Three
Standards Addressed During Grading Period EE.A-SSE.1, EE.N-Q.1-3
Ninth and tenth grade students will measure with precision, as well as learn to represent real-world problems as mathematical equations.

High School II-Cycle A Overview

High School II-Cycle A-Trimester One
Standards Addressed During Grading Period EE.N-CN.2.b, EE.N-CN.2.c
Eleventh and twelfth graders will solve real-world problems while adding and subtracting decimals and multiplying and dividing whole numbers.

High School II-Cycle A-Trimester Two
Standards Addressed During Grading Period EE.A-CED.2-4, EE.S-ID.3, EE.A.SSE.4
Eleventh and twelfth grade students will solve inequalities and geometric sequences. They will also interpret trends in data.

High School II-Cycle A-Trimester Three
Standards Addressed During Grading Period EE.G-GMD.3, EE.G-GMD.4
Students in eleventh and twelfth grade will make predictions to solve for volume, area, and perimeter. They will also match two-dimensional cross sections to three-dimensional figures.

High School II-Cycle B Overview

High School II-Cycle B-Trimester One
Standards Addressed During Grading Period EE.N-RN.1, EE.A-SSE.3, EE.A-CED.1
Eleventh and twelfth graders will solve exponents, as well as multiplication and division equations with one variable.

High School II-Cycle B-Trimester Two
Standards Addressed During Grading Period EE.F-IF.4-6, EE.F-BF.1
Students in eleventh and twelfth grade will graph constant and dynamic rates of change.

High School II-Cycle B-Trimester Three
Standards Addressed During Grading Period EE.F-LE.1-3, EE.S-CP.1-5
Eleventh and twelfth grade students will be able to identify when events are dependent or independent, as well as continue to build graphing skills to show intervals of change.

Standards-Based Grading

Standards-based grading is a method for teachers to measure how students are doing in meeting the learning goals for their grade level as determined by the Wisconsin Common Core Essential Elements. Standards-based report cards give a rubric-scaled score for each learning goal that will place student achievement as At Target, Approaching Target, or Emerging within various subject areas. At Lakeland School, this will assist educators and parents alike in recognizing present levels of performance and priority areas of need.

How will Progress Be Measured?

As stated previously in the Welcome Message, Lakeland School believes that all students should have high learning expectations that meet them where they are in the learning process. In order to assess student growth in a number of skill areas, teachers utilize formal and informal Curriculum-Based Measures (CBM). These assessments provide a quick snapshot of student progress at regular intervals and do not take a large amount of time away from instruction. Summative assessments, or assessments that measure growth for a complete unit or time period of instruction, as well as formative assessments, those that gather information of student learning in the moment will be balanced throughout the school year.

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