



Fairfax Collegiate Math 3-4 Syllabus

Course Goals

1 Develop New Skills

Students develop their mathematical knowledge and abilities as they learn and practice new skills from their upcoming school year math course.

2 Review Prior Skills

Students review and practice topics from their previous school year math course, and use them as a foundation for the new skills that they will acquire.

3 Build Confidence

Students gain confidence in their mathematical abilities through practice and supportive feedback.

4 Make Connections

Students make connections between different mathematical topics, and between math and everyday situations that connect to the math they learn.

Course Topics

1 Numbers and Number Sense

Students solidify their understanding of place value, working with values up to the hundred thousands place. This topic also includes an understanding of the steps for rounding to those same place values. Students also can compare numbers based on their value.

2 Addition and Subtraction

Students develop their understanding of addition and subtraction by learning different strategies to add or subtract. Students are also introduced to word problems involving addition and subtraction.

3 Multiplication and Division

Students develop their understanding of multiplication and division. Students learn how to solve multiplication problems using the box method and division problems using a grouping strategy, or long division. This topic includes times tables through 12.

4 Fractions

Students understand what a fraction represents. Students learn how to write, compare, and manipulate fractions. Students can simplify fractions, add and subtract fractions, compare fractions, and work with mixed numbers.

5 Decimals

Students understand what a decimal represents. Students learn how to round, compare, and add and subtract decimal numbers. Students can also write equivalent fractions. This topic includes the values of different coins and how to make change with amounts less than \$5.

6 Measurement

Students identify and choose the correct unit of measurement for a task or object. Students also learn how to convert between units of measurement, including measures of length, weight, and volume. This topic also includes how to tell time and problems involving elapsed time.

7 Geometry

Students are introduced to geometric terminology and topics. Students learn about polygons and work with angles, lines, and shapes, as well as determine perimeter and area.

8 Probability

Students are introduced to the basic concepts of probability, specifically through real-world examples, such as with dice or decks of cards. They understand the terminology specific to probability and are able to determine how likely an event is to occur.

9 Patterns and Graphing

Students are introduced to both patterns and graphing. Students are able to recognize and determine a pattern, as well as continue the sequence. They can read the data represented by charts and various types of graphs, and are able to draw a graph in order to represent a given set of data.

10 Word Problems

Students work on word problems within each of the Course Topics listed above. Students learn different strategies in order to solve word problems.

Course Schedule

Day 1

Introduction and Icebreaker

Students are introduced to the course and review the rules. Students also briefly get to know each other and the instructor.

Diagnostic Test

Students take the diagnostic assessment.

Daily Instruction & Practice

Students practice the class topics at their own pace.

Day 2

Daily Warm-Up

Students are introduced to a topic at the beginning of a lesson, or they review a previous topic before beginning a new lesson.

Daily Instruction & Practice

Students practice the class topics at their own pace.

Daily Enrichment

Students engage in an activity to enrich their learning of each topic.

Day 3

Daily Warm-Up

Students are introduced to a topic at the beginning of a lesson, or they review a previous topic before beginning a new lesson.

Daily Instruction & Practice

Students practice the class topics at their own pace.

Daily Enrichment

Students engage in an activity to enrich their learning of each topic.

Day 4

Daily Warm-Up

Students are introduced to a topic at the beginning of a lesson, or they review a previous topic before beginning a new lesson.

Daily Instruction & Practice

Students practice the class topics at their own pace.

Daily Enrichment

Students engage in an activity to enrich their learning of each topic.

Day 5

Daily Warm-Up

Students are introduced to a topic at the beginning of a lesson, or they review a previous topic before beginning a new lesson.

Daily Instruction & Practice

Students practice the class topics at their own pace.

Daily Enrichment

Students engage in an activity to enrich their learning of each topic.

Day 6

Daily Warm-Up

Students are introduced to a topic at the beginning of a lesson, or they review a previous topic before beginning a new lesson.

Daily Instruction & Practice

Students practice the class topics at their own pace.

Daily Enrichment

Students engage in an activity to enrich their learning of each topic.

Day 7

Daily Warm-Up

Students are introduced to a topic at the beginning of a lesson, or they review a previous topic before beginning a new lesson.

Daily Instruction & Practice

Students practice the class topics at their own pace.

Daily Enrichment

Students engage in an activity to enrich their learning of each topic.

Day 8

Daily Warm-Up

Students are introduced to a topic at the beginning of a lesson, or they review a previous topic before beginning a new lesson.

Daily Instruction & Practice

Students practice the class topics at their own pace.

Daily Enrichment

Students engage in an activity to enrich their learning of each topic.

Day 9

Daily Warm-Up

Students are introduced to a topic at the beginning of a lesson, or they review a previous topic before beginning a new lesson.

Daily Instruction & Practice

Students practice the class topics at their own pace.

Daily Enrichment

Students engage in an activity to enrich their learning of each topic.

Study for Final Test

Students study for the final assessment.

Day 10

Final Test

Students take the post-assessment.

©2019 Fairfax Collegiate School, LLC. All rights reserved.

Updated on 6/16/2019