Fairfax Collegiate

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Advanced Math 5-6 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 Rational & Irrational Numbers**
- **2 Evaluating Expressions**
- **3 Solving Equations**

4 Proportional & Additive Relationships

5 Slope & Graphing

6 Geometry

7 Volume & Surface Area

8 Transformations

Course Schedule

Day 1

Diagnostic Test

Students take a diagnostic test to determine their existing proficiency level in each of the units addressed by the course.

Course Introduction & Icebreakers

Students get to know their instructor and classmates, and learn about what the two weeks of the course will include.

Day 2

Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

Day 3

Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

Day 4

Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

Day 5

Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

Day 6

Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

Day 7

Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

Day 8

Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working

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on.

Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

Day 9

Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

Day 10

Last Day Review Activity

Students play a review game covering all the topics they've learned during the session.

Post-Test

Students take a post-test to demonstrate their proficiency level in each of the units they worked on during the course.

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