

**Grade 4 and 5
New York State
Mathematics Exam
2020**

TESTING DATES: MATH

- DAY 1-
 - Multiple- Choice
 - Tuesday, April 21st

- Day 2-
 - Short Answer and Extended Response
 - Wednesday, April 22nd

4th Grade Content

- Multiplication and Division
- Place Value of Multi-Digit Whole Numbers
- Properties of Operations (Associative, Commutative, Distributive Properties)
- Fractions!
 - Equivalencies (like/unlike denominator)
 - Ordering fractions (like/unlike denominator)
 - Add/Subtract fractions
 - Multiply fractions by a whole number
 - Represent fractions in models (number line, area, fraction strips)
- Factors and Multiples
- Measurement and Data (line plots, converting units)
- Patterns
- Geometric Measurement
 - Understand concepts of angles, measure angles, draw angles
 - Draw and identify lines
 - Classify shapes by their lines and angles

5th Grade Content

- Understand the place value system
- Addition/Subtraction/Division/Multiplication of multi-digit whole numbers
- Fractions
 - Use equivalent fractions as a strategy to add/subtract fractions
 - Multiply and divide fractions
- Geometric Measurement
 - Volume
- Convert measurement units
- Represent and Interpret Data
- Geometry
 - Classify two-dimensional figures into categories based on their properties

Day 1- Multiple Choice

Day 1 4th and 5th Grade

Untimed

30 multiple choice questions

Day 2 (Short & Extended Response)

Day 2
4 th and 5 th Grade
Untimed
8 multiple choice
6 short response
1 extended response
15 total questions

Day 2- Short and Extended Response

■ Short-Response Questions

Short-response questions are worth 2 points and require students to complete a task and show their work.

- require multiple steps within one question
- the application of multiple mathematics skills
- include real-world applications

■ Extended-Response Questions

Extended-response questions are worth 3-points, asking students to show their work in completing two or more tasks.

- students to show their understanding of mathematical procedures, conceptual understanding, and application.
- assess student reasoning and the ability to critique the arguments of others.

Reference Sheet – 5th Grade

Reference Sheets

Each student testing in Grades 5–8 will be provided with a mathematics reference sheet for his or her exclusive use during both Session 1 and Session 2.

Grade 5 Mathematics Reference Sheet

CONVERSIONS

1 mile = 5,280 feet

1 mile = 1,760 yards

1 pound = 16 ounces

1 ton = 2,000 pounds

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 liter = 1,000 cubic centimeters

FORMULAS

Right Rectangular Prism

$V = Bh$ or $V = lwh$

How to Obtain Full Credit on the Short and Extended Responses

- Student has completed the task correctly, using mathematical procedures and math language
- Shows sufficient work to demonstrate a thorough understanding of the mathematical concepts and/or procedures
- May contain an error that does not detract from the correct solution and the demonstration of a thorough understanding

How can you help your child prepare for the test?

- Visit <https://www.engageny.org/resource/released-2017-3-8-ela-and-mathematics-state-test-questions>
- Students should practice their addition, subtraction, multiplication, and division facts. They should have their facts memorized!
- Try to incorporate math using everyday life situations. Ask your children, “What time is it? What time will it be in 3 hours?”, “How much money do I have?”, etc.
- Students should know key math vocabulary words such as sum, difference, product, quotient.

Reminders:

- Make sure your child gets a good night's rest.
- Make sure your child eats breakfast.
- Make sure your child has #2 pencils and an eraser.
- Make sure your child knows how to bubble in the answer sheet.
- Encourage your child to check over his/her work.
- Your child will be provided with a ruler and protractor.