# Parrottsville Elementary School

## 7th Grade Math
## Syllabus

## Part 1: Course Information

### Instructor Information

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## Part 1: Course Information

### Course Description

Students will build on their knowledge of Ratios and Proportions from 6th grade in order to study Unit Rates, Proportionality, and Multi-Step Percent problems. Other topics of study include understanding how to Add, Subtract, Multiply, and Divide rational numbers, Writing and Solving Proportional and Linear Equations, Writing and Solving Inequalities, understanding basic properties of Geometric Shapes, finding Area, Volume, and Surface Area, understanding basic Probability terms, and find Simple and Compound Probabilities.

### Textbook & Course Materials

**Required Text**

- Students will be given a textbook when needed, but students will be creating their own composition books of notes on their own that will be used as the primary source of information for the class.

### Course Requirements

- Calculators are provided in the classroom but are not always necessary to complete assignments.
- Internet access is needed for certain class projects, and students may be required to complete assignments at home that will require the internet.

### Course Structure

Lessons will be delivered through lectures and discussions. Students will be expected to work in pairs, groups, or individually on practice assignments.

Online Resources: *Students will be required to work on Prodigy, Study Island, and Google Classroom for weekly assignments*

## Part 2: Student Learning Outcomes

The Number System

- Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
- Solve real-world and mathematical problems involving the four operations with rational numbers.

Ratios and Proportional Relationships

- Compute unit rates
- Recognize and represent proportional relationships between quantities.
- Explaining points on a coordinate plane in regard to proportional relationships.
- Use proportional relationships to solve multistep ratio and percent problems.

Expressions and Equations

- Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
- Rewrite expressions in multiple forms.
- Solve real-life problems using numerical and algebraic expressions and equations.
- Convert between fractions, decimals, and percents.
- Solve contextual problems using inequalities.
- Graph and interpret solution set of an inequality.

Geometry

- Draw, construct, and describe geometrical figures, especially triangles, and describe the relationships between them.
- Solve problems involving scale drawings.
- Solve area and circumference of a circle.
- Know types of angles and solve equations involving them.
- Solve area, volume, and surface area of two- and three-dimensional objects.

Statistics and Probability

- Recognize the difference between populations and samples.
- Make generalizations about a population.
- Understand random sampling tends to produce representative samples and support valid inferences.
- Draw inferences about a population.
- Compare two populations using measures of center and variability.
- Find mean, median, mode, range, and interquartile range of a data set.
- Know and relate the choice of measures of variability.
- Understand the likelihood of a chance event.
- Approximate the probability of a chance event by collecting data.
- Develop a probability model.

# Part 3: Topic Outline/Schedule

## 1st 9 Weeks

Unit 1: Rational Number Operations- Addition and Subtraction

- Adding & Subtracting Rational Numbers
- Absolute Value
- Additive Inverse
- Convert between fractions, decimals, and percent
- Integer rules
- Application of adding and subtracting rational numbers

Unit 2: Rational Number Operations- Multiplying and Dividing

- Multiplying & Dividing Rational Numbers
- Apply rules for multiplying and dividing signed numbers
- Application of multiplication properties as they apply to rational numbers
- Determine that rational numbers can be expressed as a ration of two integers
- Use estimation to determine reasonableness of answers when solving rational numbers

Unit 3: Rates and Proportionality

- What is a ratio?
- Identify proportional relationships
- Represent proportional relationships in various forms

## 2nd 9 Weeks

Unit 4: Proportional Reasoning with Percent

- Ratios and proportional relationships
- Analyze and use proportional relationships to solve problems
- Expressions and equations
- Solve real-life mathematical problems and multi-step real life problems

Unit 5: Solving Equations

- Expressions and Equations
- Using properties of operations to generate equivalent expressions
- Rewrite expressions in different forms in a contextual problem
- Variables to represent quantities

Unit 6: Solving Equations and Inequalities

- Expressions and equations
- Simple equations
- Simple inequalities
- Graph simple inequalities
- Solutions sets of an inequality

## 3rd 9 Weeks

Unit 7: Modeling Geometric Figures

Draw, construct, and describe geometrical figures

- Solve problems involving scale drawings

Unit 8: Circumference, Area, and Volume
- Formulas for Circumference, Area, Volume, and Surface Area of 2 and 3-dimensional figures

Unit 9: Sampling, Inferences, and Comparing Populations
- Statistics and probability
- Population, sample, sample size, random sampling, generalizations, valid, bias, and unbiased
- Analyze and interpret data
- Measures of central tendencies and variations

Unit 10: Probability and Simple Events
- Statistics and probability
- Expressing likelihood of simple events
- Theoretical and experimental probability

Unit 11: Probability of Compound Events
- Quantitative Measures of Center
- Data distribution

### 4th 9 Weeks
- Review
- TN Ready Test

# Part 4: Grading Policy

## Graded Course Activities

| **1st 9 Weeks** | |
|---|---|
| **Points** | **Description** |
| 10 – 25 points each | Unit 1 Practice Worksheets |
| 100 – 200 points | Unit 1 Test |
| 10 – 25 points each | Unit 2 Practice Worksheets |
| 100 – 200 points | Unit 2 Test |
| 10 – 25 points each | Unit 3 Practice Worksheets |
| 100 – 200 points | Unit 3 Test |
| 25 – 50 points each | Weekly Bell Ringer Quizzes |
| 5 – 10 points each | Daily Exit Tickets |
| 100 – 200 points | Unit 1 – 3 Project (At School or At Home Project) |
| **2nd 9 Weeks** | |
| **Points** | **Description** |
| 10 – 25 points each | Unit 4 Practice Worksheets |
| 100 – 200 points | Unit 4 Test |
| 10 – 25 points each | Unit 5 Practice Worksheets |
| 100 – 200 points | Unit 5 Test |
| 10 – 25 points each | Unit 6 Practice Worksheets |
| 100 – 200 points | Unit 6 Test |
| 25 – 50 points each | Weekly Bell Ringer Quizzes |
| 5 – 10 points each | Daily Exit Tickets |

| | |
|---|---|
| 100 – 200 points | Unit 4 – 6 Project (At School Project) |
| **3rd 9 Weeks** | |
| **Points** | **Description** |
| 10 – 25 points each | Unit 7 Practice Worksheets |
| 100 – 200 points | Unit 7 Test |
| 10 – 25 points each | Unit 8 Practice Worksheets |
| 100 – 200 points | Unit 8 Test |
| 10 – 25 points each | Unit 9 Practice Worksheets |
| 100 – 200 points | Unit 9 Test |
| 10 – 25 points each | Unit 10 Practice Worksheets |
| 100 – 200 points | Unit 10 Test |
| 10 – 25 points each | Unit 11 Practice Worksheets |
| 100 – 200 points | Unit 11 Test |
| 10 – 25 points each | Unit 12 Practice Worksheets |
| 100 – 200 points | Unit 12 Test |
| 25 – 50 points each | Weekly Bell Ringer Quizzes |
| 5 – 10 points each | Daily Exit Tickets |
| 100 – 200 points | Unit 7 – 12 Project (At Home Project) |

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|---|---|
| **4th 9 Weeks** | |
| **Points** | **Description** |
| 5 – 10 points each | Daily Exit Tickets |
| 25 points each day | Daily TCAP Review Questions/Game |
| 100 -200 points | 1st Project of 4th 9 Weeks (At School Project) |
| 100 -200 points | 2nd Project of 4th 9 Weeks (At School Project) |
| 100 -200 points | 3rd Project of 4th 9 Weeks (At School Project) |

**Late Work Policy**

If a student misses a class, it is up to the student to get the notes from a classmate over the missed lesson and check the missing work folder for their work. The work must be turned in the next day.

If a student misses several days and the student has a doctor's excuse for those days, the teacher will give the student more time to turn in assignments.

If a student is absent on a test day, the student will be asked to take the test the day he/she returns.

If a student is absent the day a project is due, it will not be accepted late unless the student has an excused absence for the day the project was due.

Students who have missing assignments, and they were not absent will be asked to stay in from Activity Periods and/or Free Periods until the work is completed.

Exit Tickets that are not turned in the day they are given will not be accepted late because they are to be turned in the same day given.

## Grading Policy:

Grades will not be weighted in this class. All tests, quizzes, homework, classroom assignments and projects will be on a 100 point scale. Below is the complete grading scale.

**A= 90-100**
**B= 80-89**
**C=70-79**
**D=60-69**
**F=0-59**

### Viewing Grades in ASPEN (optional)

Points you receive for graded activities will be posted to the ASPEN GradeBook in a timely manner. Click on the My Grades link on the left navigation to view your points.

# Part 5: Course Policies

## Attend Class

Students are expected to attend all class sessions as listed on the course calendar.

- Tardies will be counted this year. Every three tardies will count as a demerit. We are giving the students more responsibility this year in letting them switch classes in a certain amount of time. With shorter than normal class time, every second is needed in class.
- Participation is key in learning. If a student does not participate, it is impossible for the teacher to know what the student knows or is having trouble with. Students will be given demerits for being off task, not participating, or being disrespectful if asked to participate.

## Build Trust

If you find that you have any trouble keeping up with assignments or other aspects of the year, make sure you let me know as early as possible. Please know that it is my job to help you understand and learn. I care whether you pass or fail. Do not feel embarrassed or afraid to talk to me. If you choose to talk to me privately or in front of the class, please know that I will try to help you to the best of my ability.

## Complete Assignments

All assignments must be submitted by the next class period unless otherwise told differently.

All exit tickets must be turned in the day they are passed out.

Projects must be turned in on the due date.

Late or missing assignments will affect the student's grade.

**Incomplete Policy**

Sometimes emergencies happen and a student may miss a large amount of school and be behind in several classes. During this time, the teacher may give the student an Incomplete Grade to give the student more time to finish; however, this will only take place under special circumstances.

## Academic Dishonesty Policy

Dishonesty will not be tolerated. This includes cheating, plagiarism, doing someone else's project, or helping someone be dishonest.

The teacher will deal with these situations privately with students. If the teacher feels the student was being dishonest, the teacher has the right to re-test or give an alternative assignment for the student to complete separately. The teacher may also contact the parent and/or the principal.

# Student Testing Code of Ethics and Security

It is important for you as a student to know that the following guidelines are to be strictly followed. This year the TNReady test will count at least 10% of your final semester grade. Your work on this test is very important and it deserves your best effort.
I understand that during testing on the days of the assessment, I am responsible for:

- Not having any electronic devices on me or in my purse/backpack/pockets
    - Including but not limited to cell phones, smart phones, smart watches, etc. **during testing or during breaks.**
    - Best practice is for students to leave devices at home or in their lockers on the day of testing.
    - If I am caught with a device during testing or during breaks, my test may be nullified, resulting in a zero as at least 10% of my final semester grade, and any school level disciplinary action as deemed appropriate by the administration.
- Trying my best on the test
    - If I do not attempt to test (I give **no answers or randomly answer** questions) my test score may be nullified, resulting in a zero as at least 10% of my final semester grade, and any school level disciplinary action as deemed appropriate by the administration.
    - The testing administrators and proctors in the testing environment will determine if no answers or random answering is taking place.
    - I will focus and put forth effort on the test.
- Being honest and not cheating
    - If I am caught cheating (taking pictures of the test, writing down and passing answers, talking to other students, looking on other computers, using software outside the testing platform), my test may be nullified, resulting in a zero as at least 10% of my final semester grade, and any school level disciplinary action as deemed appropriate by the administration.

**Important Note:** Any form of academic dishonesty, including cheating and plagiarism, may be reported to the office of student affairs.

**Course policies are subject to change.** It is the student's responsibility to check for corrections or updates to the syllabus. Any changes will be posted in the classroom.