

Parrottsville Elementary School

7th Grade Math Syllabus



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

Students will be given a textbook and workbook. Any other resources will be provided by the teacher.

Online Resources: Students will be required to work on myPath (iReady), Canvas, Google Forms, Mastery Connect, Boom Cards, and Edulastic.

Course Requirements

- iReady is the main curriculum for this class.
- Calculators are provided in the classroom but are not always necessary to complete assignments.
- Internet access is needed for certain class assignments and projects. Time will be given in class to complete these assignments but may be worked on at home as well. Internet access at home is useful but not required.

Course Structure

Lessons will be delivered through discussions and practice. Students will be expected to work in pairs, groups, or individually during lessons.

Part 2: Student Learning Outcomes

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.

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.

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 the 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.
- Understanding 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: Proportional Relationships: Rates, Ratios, and Circles

- Unit Rates
- Equivalent Ratios
- Scale Factor
- Circumference

Unit 2: Rational Number Operations - Adding and Subtracting

- Adding and subtracting rational numbers rules
- Subtracting rational numbers rules
- Apply operational rules for adding and subtracting to real world scenarios

-Fall Break-

2nd 9 Weeks

Unit 3: Rational Number Operations - Multiplying and Dividing

- Multiplying and dividing rational numbers rules
- Apply operational rules for multiplying and dividing to real world scenarios
- Definition of rational numbers
- Terminating and Repeating Decimals
- Determine that rational numbers can be expressed as a ratio of two integers

Unit 4: Algebraic Thinking: Expressions, Equations, and Inequalities

- Combine like expressions
- Solve single step equations
- Solve two-step equations
- Solve multi-step equations
- Solve single, two-step, and multi-step inequalities

-Christmas Break-

3rd 9 weeks

Unit 5: Proportional Reasoning: Percents and Statistical Samples

- Ratios and proportional relationships
- Solve multi-step percent problems
- Simple Interest
- Analyze and use proportional relationships to solve problems
- Random samples
- Use random samples to make inferences

Unit 6: Geometry - Solids, Triangles, and Angles

- Adjacent, Vertical, Complimentary, and Supplementary angles
- Similar triangles
- Triangle conditions
- Volume of 3D figures

4th 9 weeks

Unit 7: Probability

- Theoretical probability
- Experimental probability
- Inferences using probability

-Spring Break-

- Review
- **TNReady Test**

Part 4: Grading Policy

Graded Assignments

There will be four different categories for graded assignments:

- **Bellringers** will be given at the beginning of every class period. This will be a weekly grade that will be worth **5%** of your total grade.
- **Classwork/Homework** will be taken for a grade periodically. Not all classwork/homework will be taken for a grade. Some classwork/homework will be participation grades. This category will be worth **30%** of your grade.
- **Quizzes** will be given throughout each unit. Each unit will have 3-4 quizzes. Some classwork/homework assignments will be taken as quiz grades. This category will be worth **25%** of your grade.
- **Tests** will be given at the end of each unit. Tests will be worth **40%** of your grade.

Absence Policy

A student has three days to turn in missing work after an absence. After three days, the work will be considered **late**.

It is the **student's responsibility** to gather late work on the day they return to school. This includes scheduling a time to take a quiz/test if one was missed. Quiz/test makeups may be scheduled before or after school.

*If a student is concerned about the three day deadline, they may discuss a different possible deadline with Mrs. Hooper.

Late Work Policy

A student has three days to turn in late assignments for any reason. The score will be docked **15 points** each day the assignment is late and the student will receive a mark (demerit) for every day the assignment is late.

*After three days the student will receive a **write up** for not completing work.

Grading Scale

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

Part 5: Course Policies

Classroom Rules

1. **Be Respectful** – To yourself, others, and the classroom.
2. **Be Prepared** – Come with materials and a ready-to-learn attitude.
3. **Be Responsible** – Own your work and actions.
4. **Follow Directions** – The first time they're given!
5. **Participate** – Ask questions, contribute to discussions, and engage in group work.
6. **Try Your Best** – Mistakes are part of learning!

Technology

Cell phones are prohibited. They **must** be turned off and placed in a backpack or bag. Not in pockets! Earbuds are also not allowed.

Personal school laptops will be provided. Devices are to be used for **educational purposes only** and as directed by Mrs. Hooper. Accessing games, social media, or other unrelated content is prohibited and will result in disciplinary action and/or loss of laptop privilege.

Calculators are provided for every student. The calculators **do not** go home with students. They must stay in the classroom. Each student is responsible for their provided calculator. Lost or damaged calculators will be expected to be replaced.

Rewards and Consequences

Rewards:

Semester: Each semester the seventh grade will take a field trip. The students who are able to attend are students who:

- have not been suspended (OSS or ISS)
- do not have a write up
- do not have 10 or more marks (demerits) for the semester

Monthly: Each month the seventh graders with no marks will receive a reward decided on by the teachers. This reward may include but is not limited to: ice cream, popcorn/movie lunch, lunch in the classroom, time for games with friends, etc.

Weekly: Each Friday the seventh graders with no marks will have the opportunity to purchase snacks (chips, drinks, etc.).

*The money raised from snack sales will go to class accounts.

Consequences

Students are expected to follow classroom and school rules. If a student chooses not to meet these expectations, they will receive a mark (demerit) as part of our classroom management system. Repeated infractions will lead to further consequences.

1st mark: Loss of privileges. Penalty.

2nd mark: Loss of privileges. Penalty.

3rd mark: Loss of privileges. Penalty. **Write Up**. Parental Contact.

*Each week the mark count starts over.

Syllabus Acknowledgment Form

Dear Families,

Welcome to 7th Grade Math! I'm excited for a year of growth and learning. Please review the **full** syllabus with your child, then sign and return the acknowledgement below to confirm that you both understand and agree to our classroom expectations and policies. Please return this page only. Keep the rest of the syllabus for your records. Thank you for your support!

— Mrs. Hooper

Student Acknowledgment

I have read and understood the expectations for 7th Grade Math. I agree to follow the classroom rules, be responsible for my learning, and do my best this year.

Student Name (Printed): _____

Student Signature: _____

Date: _____

Parental Acknowledgement

I have read and reviewed the 7th Grade Math syllabus with my child. I understand the classroom expectations and agree to support my child in being successful.

Parent/Guardian Name (Printed): _____

Parent/Guardian Signature: _____

Date: _____