Sixth Grade Math
Mr. Cary Behrendt

Course Content: Please refer to the attached family letter from the Illinois State Board of Education for an explanation of the 6th grade curriculum.

Students in the advanced class will also study the 6th grade curriculum, but I will add related elements of the 7th grade curriculum, particularly proportionality, percent applications, and probability.

In addition, we work throughout the year in each math class to build study habits and organization skills. As the year progresses, we work on correcting our mistakes, note-taking, paper organization, listening skills, test study, test-taking, and step-by-step solving of more complicated problems. We discuss math ideas and problems often in class, in order to build group dynamics and communication skills. We will also work to incorporate into our routines the Common Core Standards for Mathematical Practice.

Class Routine: Most days we will work in groups so that students can explore together, discuss what they are learning, and learn from each other. During a normal class period of 50 minutes, we often begin with a brief opener, which might be a quick review of a previously-taught concept or skill. It will often be a problem or puzzle designed to generate thought and discussion. This is followed by checking in and correcting homework. Then, we learn new material and reinforce it with examples, practice work, and often an activity. If there is time, students will begin their homework assignment.

Expectations: Our goal every day in math class is to work with each other to get better at understanding and using math. An important ingredient for success in math is to approach class with a positive, cooperative attitude. We will expect to make mistakes as we learn, for some of our best lessons in math will come from learning from our mistakes.

In addition, I expect the following each class day. Students should be on time to class and have the necessary materials on their desks when class begins. Students who want to succeed must be mentally involved in class, listening carefully, questioning what they hear, and asking and answering questions. I expect students to take notes when appropriate in class and to write down assignments accurately. Homework must be done faithfully (every problem completed, showing all work) and brought to class on time to be corrected. I expect students to correct their homework with the goal of finding the correct way to do problems they have wrong. Students must study for tests and quizzes, beginning at least two days before the test. Finally, students must become comfortable asking questions and coming for extra help when needed.

Homework: Students receive math homework regularly including, at times, on weekends. Most assignments are due the next class period. Assignments are worth 1 point each. They are to be done in pencil in the math notebook (unless it is a worksheet). Work must be complete (showing all work in an organized form), done with effort, and brought to class when due in order to receive a grade of 1 point, or 100%. Incomplete or missing assignments or assignments showing no work receive 0 points. If those assignments are completed satisfactorily and turned in by the end of the unit, the student will regain the lost point. Students correct their own work in class from my answer key and are expected to find and attempt to correct mistakes, asking questions when they need help. Through this process, students learn to correct their mistakes and do similar problems correctly the next time.

Extra Help: Help is available in various ways. I am available in my classroom most mornings from 7:30 a.m. to 7:50 a.m. I will usually be available Mondays, Tuesdays, and Wednesdays until at least 3:30 p.m. Peacock Middle School also offers a morning tutorial program from 7:15 a.m. to 7:50 a.m., five days a week, and an afternoon tutorial from 3:00 p.m. to 3:55 p.m. on Mondays, Tuesdays, and Wednesdays.

Grading: The quarter grade is based on a combination of homework, test and quiz scores, and occasional individual or group projects and assessments. Tests are announced approximately a week in advance, and are usually worth between 50 and 100 points; quizzes may be announced or unannounced and are usually worth between 5 and 20 points. A student who earns a quiz or test grade lower than 80% may retake the quiz or test providing (s)he makes an appointment with me for the retake. It must be made up within two weeks of receiving the original grade. If necessary,

a student may retake a quiz or test again to develop a better understanding of the material. The highest possible grade a student can earn on a retaken test or quiz is 80%. Grades are earned throughout the quarter, and at times an extra credit question or challenge is offered. Therefore, I do not offer extra credit at any time during the quarter to help raise grades. I strongly encourage parents to regularly look at grades **with their child** on TeacherEase, our online grading program.

Communication: At a minimum, parents can learn about their child's progress through TeacherEase, checking the assignment notebook, quarterly report cards, and at a parent-teacher conference in November. By now, parents who have an email address registered with Peacock should have received an email on how to access their child's grades online. If you have not received that information, you may go to the District 10 website at http://itascaschools.com/ and click on "Parent Login" along the left border. This takes you to a page where you can request a TeacherEase password. In addition, I attempt to return all tests and quizzes within a week. I will attempt to reach you by phone or e-mail if your child is struggling.

I can be reached by phone (630-773-0335, x2104) or e-mail (cbehrendt@itasca.k12.il.us). Please contact me if you have any questions or concerns.

Mr. Cary Behrendt

Dear Families,

Welcome to 6th Grade. This year, we will be using resources from the Illinois State Board of Education Model Mathematics Curriculum. Here are the key topics in mathematics this year:

- Critical Area #1: Students **use reasoning about multiplication and division to solve ratio and rate problems about quantities**. By viewing equivalent ratios and rates a deriving from, and extending pairs of rows (or columns) in the multiplication table, and by analyzing simple drawings that indicate the relative size of quantities, students connect their understanding of multiplication and division with ratios and rates. Thus students expand the scope of problems.
- Critical Area #2: Students **use the meaning of fractions, the meanings of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for dividing fractions make sense**. Students use these operations to solve problems. Students extend their previous understandings of number and the ordering of numbers to the full system of rational numbers, which includes negative rational numbers, and in particular negative integers. They reason about the order and absolute value of rational numbers and about the location of points in all four quadrants of the coordinate plane.
- Critical Area #3: Students **understand the use of variables in mathematical expressions.** They write expressions and equations that correspond to given situations, evaluate expressions, and use expressions and formulas to solve problems. Students understand that expressions in different forms can be equivalent, and they use the properties of operations to rewrite expressions in equivalent forms. Students know that the solutions of an equation are the values of the variable that make the equation true. Students use properties of operations and the idea of maintaining the equality of both sides of operations and the idea of maintaining the equality of both sides of an equation to solve simple one-step equations. Students construct and analyze tables, such as tables of quantities that are in equivalent ration, and they use equations (such as $3x = y$) to describe relationships between quantities.
- Critical Area #4: Building on and reinforcing their understanding of number, students begin to **develop their ability to think statistically.** Students recognize that a data distribution may not have a definite center and that different ways to measure center yield different values. The median measures center in the sense that it is roughly the middle value. The mean measures center in the sense that it is the value that each data point would take on if the total of the data values were redistributed equally, and also in the sense that it is a balance point. Students recognize that a measure of variability (interquartile range or mean absolute deviation) can also be used for summarizing data because two very different sets of data can have the same mean and median yet be distinguished by their variability. Students learn to describe and summarize numerical data sets, identifying clusters, peaks, gaps, and symmetry, considering the context in which the data were collected.

Our curriculum consists of 10 units:

1) **Introduction to Problem Solving and Group Work:** This first unit of the year sets the stage for the problem solving that occurs in every area of our math curriculum. Students begin by learning a five-step problem-solving process that we will refer to often. We learn and practice the basic rules of working in groups, and then apply those skills to The Diagonals Problem, a problem rich in problem-solving strategies.
2) **Number Theory:** This unit focuses on factors, the building blocks of numbers, and on multiples, prime and composite numbers, and exponential notation. Well-applied number theory allows students to take apart and reconstruct numbers, much as one might take apart a ballpoint pen or a car engine and put it back together again.
3) **Fraction and Decimal Operations:** Students will have learned all whole number and decimal operations, and all fraction operations except for division of fractions by fractions by the end of 5th grade. This unit is an opportunity to review these procedures and clarify that fluency is expected by the end of 6th grade.
4) **Ratios, Rates and Percent:** This unit is a study of ratios, rates and percent, where students learn the language or ratios and rates, the concept of unit rates, and use various representations of ratios and rates to solve real world problems. They are also learning to solve percent problems by reasoning about equivalent fractions.
5) **Rational Numbers:** Here, 6th graders are introduced to integers and will represent them with real-world contexts and on number lines. They will develop an understanding of absolute value.
6) **Expressions:** This unit give students an opportunity to apply what they have learned about integers to write, evaluate and interpret algebraic expressions. They will also identify and create equivalent expressions.

7) **Equations & Inequalities:** Students build upon the expression work by having studying various representations of equations and inequalities. They relate these to real-world situations to develop a deeper understanding of equations and inequalities and what they represent.
8) **Geometry:** In grade 6, geometry is addressed in this unit. It is a focus on area, volume and surface area, including drawing polygons in the coordinate plane.
9) **Statistics:** This unit provides a study of statistics, including measures of central tendency, measures of variability and data distribution representations.
10) **Formulas & Graphs:** In this final unit for 6th grade, students synthesize what they have learned about expressions, equations and inequalities, graphing in the coordinate plane, statistics and geometry.

In addition to these Common Core Instructional Standards, there are eight Standards for Mathematical Practice, shown in the table below, which students should develop throughout their study of mathematics. These are the attitudes and strategies that students can use in any area of math to help them succeed.

Figure 1. Common Core Standards for Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning (Common Core Standards Initiative, 2012).

Our sequence of units has been carefully planned to prepare our students for success on the PARCC assessments, which will be given during the Spring of this school year. Students will practice many skills and concepts by revisiting them in daily routines and stations throughout the school year. We are looking forward to a wonderful experience in 6th Grade.

F.E. Peacock Middle School

6th Grade

Language Arts/Reading

Miss Kate Andrade
kandrade@itasca.k12.il.us
630-773-0335 ext. 2210

Miss Samantha Yanni
syanni@itasca.k12.il.us
630-773-0335 ext. 2213

Classroom Texts

Spelling Connections, Zaner-Bloser

Number the Stars, Lois Lowry

Maniac Magee, Jerry Spinelli

Walk Two Moons, Sharon Creech

Stargirl, Jerry Spinelli

Daily Required Materials

Pen/Pencil
Paper
Highlighter
Folder
Homework
Sticky Notes
Text

Language Arts Grade Breakdown

50% Literature Circles/Reading

40% Writing/Spelling/Grammar

10% Class Participation and Common Time Curriculum

****All percentages are approximate and are not weighted****

Classroom Expectations

All students are expected to follow the school rules that were listed both in the Peacock Middle School Handbook, and the 6th Grade Team rules. However, there are a few extra guidelines to remember for our Language Arts classes.

Be Respectful:

- Raise your hand and do not shout out answers or interrupt classmates
- Do not misuse or damage any classroom property, such as: textbooks, computers, desks, etc.
- Allow your classmates the right to their own opinions or ideas.
- Group work time is for work—abstain from excessive socializing
- Follow the directions of the staff members.

Be Responsible:

- Turn in your work on time- late or missing work will receive a deduction.
- Come to class prepared with books and materials.
- Come to class on time and be prepared to work.
- Use appropriate language in class and on homework.

Be Proud:

- Help yourself—ask questions, get clarification, etc.
- Help your classmates.
- Support your classmates

Please note that this semester scope is an approximation. Given that every class is unique, areas of this scope may overlap due to the needs of the students.*

First Semester Overview- Introduction of Skills

Spelling

- Spelling will be a weekly part of the Language Arts Curriculum. Every Friday, the students will be pre-tested, and then will be given the book and/or supplemental assignments (including, but not limited to the spelling contract), which are due every Thursday. The test will be given each week on Fridays.

Grammar

- The grammar curriculum will also be continuous throughout the semester, with the main focus being on parts of speech, subject/verbs, types of verbs, conjugation and verb tenses. These skills will also incorporate the weekly spelling words.
- There will be an initial focus on proper sentence structure and types, such as independent and dependent clauses, run-ons and fragments, types of sentences and types of phrases.
- The mechanics that will be addressed first semester include but are not limited to the proper use of periods, commas, semicolons, comma/conjunctions, parentheses, quotation marks, ellipses, and dashes.

Reading and Literature

- *Literature Circles*-During the first semester, we will be reading Number the Stars by Lois Lowry and Maniac Magee by Jerry Spinelli. The students will learn basic and complex literary elements, as well as reading strategies for comprehension.

    - Literary Elements: Plot structure, character analysis, setting, point of view, theme, figurative language.
    - Reading Strategies: Annotating/text marking, previewing, visualizing, reading for information, and citation.
    - Application and extension of Literary Elements and Reading Strategies, as well as full-length reading skills.
    - Small group work will be emphasized with Literature Circles, as well as extensive characterization and focus on setting.

- *Selected Non-Fiction*-The students will be reading and analyzing non-fiction and informative reading throughout the semester. The essential functions that they will

be focusing on will be audience, purpose, tone, organization and form. These non-fiction texts will directly correlate with each of the literature circle novels.

Writing

- *6+1 Writing Traits*: Program to focus on improving students' writing through seven domains-Ideas, Voice, Word Choice, Sentence Fluency, Organization, Conventions, and Presentation.
- *Argumentative/Persuasive Writing*-emphasis on Organization, Word Choice, and Sentence Fluency
- *Narrative Fiction Writing*-emphasis on Ideas, Word Choice, and Voice
- *Expository Writing- PARCC Extended Response Practice*-Emphasis on Sentence Fluency, Organization, Conventions, and Presentation

Second Semester Overview- Application of Skills

Spelling

- Spelling will continue be a weekly part of the Language Arts Curriculum.
- Students will be given a goal of achieving three 100% on spelling test for three consecutive weeks. Once a student meets this goal, he/she will be exempt from contracts and shall complete the Champion Challenge page that correlates with the weekly unit.

Grammar

- The grammar curriculum will remain constant and will (usually) be assigned on Thursdays. We ask that students continue to apply all the new learned concepts to their writing pieces.
- Stronger emphasis on proper sentence structure, such as varying sentence types, interrupters, series lists, compound/complex sentences, interjections, active/passive voice and sentence fluency (taught concurrently with Writing).
- Stronger emphasis on self and peer editing for proper grammar and sentence usage throughout the utilization of peer conferencing.

Reading and Literature

- *Literature Circles:* During the second semester, we will be reading *Walk Two Moons by Sharon Creech* and *Stargirl* by Jerry Spinelli. We will continue to focus on the application and extension of Literary Elements and Reading Strategies. We will do an in-depth novel analysis and through reading of each of the assigned texts. Additionally, we will continue to use the literature circle process throughout the second semester.
- *Selected Non-Fiction*-The students will continue to read and extend their analysis of non-fiction and informative reading throughout the semester.

Writing

- *6+1 Writing Traits*: Program to focus on improving students' writing through seven domains-Ideas, Voice, Word Choice, Sentence Fluency, Organization, Conventions, and Presentation.
- *Narrative Non-Fiction*- Emphasis on all traits
- *Expository/Research*- Emphasis on all traits, as well as proper bibliography, in-text citations, and the research process.
- *Research Project*- Students will apply research, composition, and presentation techniques in a final project about the Vietnam War using Prezi, cloud-based presentation software.
- *Expository Writing- PARCC Extended Response*

Accelerated Reader

Please note that the Accelerated Reader program has been discontinued here at Peacock. We do encourage, though, 30 minutes of independent reading each night to ensure continued growth in our students.

Life Science
Mrs. Nicole Williams

The Textbook:

In sixth grade students will be studying the following areas of life science: cell structure, genetics, animal and plant classification and behavior, ecology, cycles in nature, ecosystems/biomes, and natural resource use and conservation. To study these topics, they will be using the Prentice Hall *Science Explorer* textbook series. This series contains four "backpack friendly" sized books which will be issued as needed throughout the year, beginning with Environmental Science. Students will receive a username and password that allows them to view their science textbooks online at www.pearsonsuccessnet.com.

This textbook series provides many opportunities for enrichment as well as a fantastic test review site. Before a test, students are encouraged to go to www.PHSchool.com and type in the web code listed on the study guide at the end of each chapter.

Labs/ Experiments:

To complement the textbook series, sixth graders will also be exposed to laboratory experiments and demonstrations this year. Labs will focus on scientific inquiry and follow the Scientific Method. Students will be expected to complete "mini" lab reports to help them learn the pattern of the scientific method. This will begin to prepare them for the challenging task of writing full lab reports from seventh grade through high school. Mini Lab reports will ask students to focus on just a few of the components of a lab report at a time. These include the purpose, hypothesis, materials, procedure, results, and conclusion. While in the Science lab, students will be expected to act appropriately and safely and will be dismissed from the lab with a grade of zero for the activity if engaging in dangerous behavior.

Field Trips:

The students will be participating in the Mighty Acorns program at the Spring Brook Nature Center on one of three days in December, either the 14th, 15th, or 16th. Students and parents will be notified of further information closer to our trip. During their visit, students will spend a great deal of time outdoors and will need to dress accordingly.

Reading Strategies:

In addition to the science curriculum, sixth graders will focus on informational reading strategies and study skills to help them use their textbooks more effectively. Students will have time in class to learn and practice new strategies and are encouraged to continue practicing these strategies when completing assignments at home.

Grading:

Grades are composed of three categories: homework& in-class assignments, tests/ quizzes, and labs/experiments. Assignments in each of the categories will be weighted according to the chart below.

Homework/ In-Class Assignments – 15%
Tests/Quizzes – 40%
Labs/Experiments – 45%

I will not be offering extra credit to students this year. In order to show increased learning, any student may retake a test at any time. If they would like to do so, the following procedure must be followed:

1. Redo all homework assignments from the chapter and turn them in.
2. Set up a review session within 1 week from the date the test was returned to the student.
3. After a review session, set up the test retake date for the next day.

In addition to retaking tests, in order to show growth in learning, students may make corrections to mini labs and earn ½ credit back for each correction made and turned in.

Homework:

Sixth graders will receive science homework almost every night. This homework is given to help reinforce concepts learned in class and should be completed to ensure mastery of information. Homework will be checked for completeness and neatness and points will be given accordingly. As with the Sixth Grade Expectations, late homework will only be accepted for ½ credit the next class period after it is due. After this time, zero credit will be earned. Labs/Experiments will be accepted late with a deduction of 1 point per day.

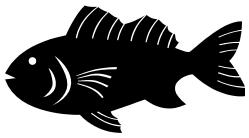
Extra Help:

I am available in my classroom from 7:30 a.m. -7:55 a.m. most days and will be available after school Monday through Wednesday except during track season in the spring. Another option for help offered at Peacock is Tutorial. This program is available from 7:15 a.m. – 7:55 a.m. Monday through Friday and from 3:00 p.m. - 3:55 p.m. on Mondays, Tuesdays, and Wednesdays.

Communication:

I can be reached by email at nwilliams@itasca.k12.il.us
or by telephone at (630) 773-0335 x2110
Please feel free to call or email me at any time with questions or concerns

Thank you and I am excited to have a fantastic year learning with you and your child!

<table>
<tr><td>  </td><td>World History
Holt, Rinehart and Winston
www.go.hrw.com
Curriculum for Mr. Peel's
www.HistoryClassroom.com
6th Grade Social Studies & TAG
Peacock Middle School
www.New.SchoolNotes.com (60143)</td></tr>
<tr><td>  </td><td>Ch. 1 Uncovering the Past
1. Studying History
2. Studying Geography
Skills – Specialized Vocabulary of History, Recognizing Bias.</td></tr>
<tr><td>  </td><td>Ch. 2 The Stone Ages and Early Cultures
1. The First People
2. Early Human Migration
3. Beginnings of Agriculture
Skills – Chronological Order, Identifying Central Issues.</td></tr>
<tr><td>  </td><td>Ch. 3 Mesopotamia and the Fertile Crescent
1. Geography of the Fertile Crescent
2. The Rise of Sumer
3. Sumerian Achievements
4. Later Peoples of the Fertile Crescent
Skills – Main Ideas in Social Studies, Interpreting Physical Maps</td></tr>
<tr><td>  </td><td>Ch. 4 Ancient Egypt and Kush
1. Geography and Ancient Egypt
2. The Old Kingdom
3. The Middle and New Kingdoms
4. Egyptian Achievements
5. Ancient Kush
Skills – Causes and Effects in History,
Assessing Primary and Secondary Sources</td></tr>
<tr><td>  </td><td>Ch. 5 Ancient India
1. Geography of Early India
2. Origins of Hinduism
3. Origins of Buddhism
4. Indian Empires
5. Indian Achievements
Skills – Inferences about History, Interpreting Diagrams</td></tr>
<tr><td>  </td><td>Ch. 6 Ancient China
1. Geography and Early China
2. The Zhou Dynasty and New Ideas
3. The Qin Dynasty
4. The Han Dynasty
5. Han Contacts with Other Cultures
Skills – Summarizing Historical Texts,
Conducting Internet Research</td></tr>
</table>

Peel's Principles: 1. Respect Yourself 2. Respect Other People 3. Respect Other People's Property.

	**Ch. 7 The Hebrews and Judaism** 1. The Early Hebrews 2. Jewish Beliefs and Texts 3. Judaism over the Centuries Skills – Facts and Opinions about the Past, Identifying Short- and Long-Term Effects
	**Ch. 8 Ancient Greece** 1. Geography and Early Greeks 2. Government in Athens 3. Greek Mythology and Literature Skills – Greek Word Origins, Analyzing Costs and Benefits
	**Ch. 9 The Greek World** 1. Greece and Persia 2. Sparta and Athens 3. Alexander the Great 4. Greek Achievements Skills – Comparing and Contrasting Historical Facts, Interpreting Charts and Tables
	**Ch. 10 The Roman World** 1. Geography and the Rise of Rome 2. Government and Society 3. The Late Republic Skills – Outlining and History, Interpreting Culture Maps
	**Ch. 11 Rome and Christianity** 1. From Republic to Empire 2. The Roman Empire and Religion 3. The End of the Empire Skills – Online Research, Interpreting Time Lines
	**Ch. 12 The Islamic World** 1. The Roots of Islam 2. Islamic Beliefs and Practices 3. Islamic Empires 4. Cultural Achievements Skills – Questioning, Understanding Historical Context
	**Ch. 13 Early African Civilizations** 1. Geography and Early Africa 2. The Empire of Ghana 3. Later Empires 4. Historical and Artistic Traditions Skills – Organization of Facts and Information, Interpreting Political Maps
	**Class Rules:** **1. Be Prompt – Make sure that you are seated in the classroom with all needed supplies, listed on the board, ready to begin each lesson.** **2. Be Prepared – Come to class prepared with assignment notebook, spiral notebook, pens, pencils, and homework.** **3. Be Polite – Treat everyone with respect and fairness.**

Grading - Homework & Quizzes 20-25%, Tests 50-60%, Worksheets 20-25%