

PIEDMONT MIDDLE SCHOOL

an IB World School Talent Development News

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6th Grade Math

It's hard to believe the first quarter is almost over, where has the time gone? It has been an incredibly successful start to the school year. More than just the core subjects are taught within the first quarter at Piedmont. As 6th graders entering an unfamiliar school, it is very important that school-wide and classroom routines, policies, and procedures are practiced. For many students the rigorous IB program is a new experience as well, and as a 6th grade team, we spent a few days becoming familiar with IB terminology and concepts. Finally, the whole school just wrapped up our 2-week PTSA cookie-dough fundraiser. We are very proud of our 6th grade students whose sales helped contribute to a grand total of over \$43,000 for Piedmont.

Specifically in the core subject of math we have covered a wide range of topics. We began the year focusing on number theory and algebraic reasoning. This means a lot of work with exponents, scientific notation with big and small numbers, order of operations, divisibility, combining like terms, and we are wrapping up 1 and 2 step equations and inequalities. Students were very challenged by the "Four 4's" homework assignment, as well as the infamous "Locker Problem." The solution to this problem involves an in-depth understanding of perfect squares and factors—great classroom conversations ensued and our students' problem solving skills were put to the test.

As teachers, we expanded from the Holt Course 2 math book into the "Prime Time" curriculum. Within this supplementary material we played the Factor Game and Multiple Game to further learn about factors, products, and multiples. Students were taught how to find the prime factorization of a number, and then apply this knowledge to discover the greatest common factor and least common multiple between two, three, and even four numbers. Students are now able to use the Venn diagram graphic organizer (not so commonly used in math) to solve these GCF and LCM problems. Through the use of manipulatives, educational games, and differentiated stations (to name a few) 6th grade math at Piedmont is just as fun as it is challenging.

As the quarter comes to an end, we embark upon creating and interpreting graphs. Students will soon be introduced to our "Graph It!" project which helps them construct graphs of data they have obtained by surveying fellow 6th grade students. The IB Design Cycle and Areas of Interaction are incorporated throughout this 2-week project as well. Overall, it is a very hands-on unit that gives students a chance to express their creativity through mathematics.

Finally, our 6th graders will soon be pros at computing and comparing fractions, decimals, and rational numbers. We are all excited for a second guarter that is just as successful, challenging, and productive as the first.

6th Grade Language Arts

The 6th grade TD students are learning how to be independent, inquisitive, and principled by using their daybook/reader's notebook, asking questions, completing projects and turning work in on time.

The students are learning about Nonfiction Informational Texts. The genre of nonfiction focuses on the theme of identity. What characteristics aid in creating a person's identity? How does culture affect identity? The students were able to use features of their own culture, in addition to the IB Learner profile and character traits to craft an identity map. These maps help express the individuality and uniqueness of each student.

The fundamental concepts used throughout this quarter consist of reading and writing informational texts; discovering author's purpose, perspective and tone; knowing the difference between fact vs. opinion and primary vs. secondary sources; summarizing different viewpoints; exercising organizational patterns; mastering the writing process; using context clues to better understand texts; identifying the importance of word parts/stems and responding to and reflecting on a variety of Literature.

Many of us are now aware of some reading strategies such as; Active Reader and SQ3R. We will use these strategies in all of our classes to answer questions in complete sentences with supporting details while making connections to our lives. In addition, we have been working on writing a biography through the process of gathering information by conducting an interview on an important person in our lives; creating our own nonfiction study. Many projects this quarter are focused on character analysis, which allow the hallways at Piedmont to be busy with creativity.

Soon, we will be able to navigate through different novel studies as a class. Within these novels we will be able to master challenging vocabulary, demonstrate the ability to make connections using text to text, text to self and text to world, evaluate different types of literature, and understand the importance of creating visualizations. Furthermore, the students will be able to find the significance through learning about the many different elements of nonfiction.

The 6 th grade Language Arts teachers are looking forward to the rest of Folk Tales, Fables, Myths, Fairy Tales, story elements, and characterization.	1 st semester focusing on the units of fiction:

Seventh Grade Math

Leaving the 6th grade and becoming a 7th grader can be challenging, but this year's class has already proven they are up for the challenge!

The math curriculum is noticeably similar to the 6th grade objectives, but in 7th grade, students will go much deeper into the skills required to be successful in class, on the EOG's, and in life.

Preparing our students for the 21st Century is one of our main goals, and so, we are going to work extra hard this year to incorporate technology into our curriculum. Students will be using programs such as *Castle Learning* and *Study Island* to continue practicing math skills at school, as well as at home. We will be encouraging students to use these programs on their own, even without a specific assignment from the teachers. In math, practice is the best way to become better! Our whole 7th grade team is working on an IDU (interdisciplinary unit) right now that will have a rigorous math component, combined with the other core classes, to combine the quarter's objectives with 21st century technology.

The Standard Plus classes just completed a Graph Project where students had to search the newspapers, magazines, and internet for various types of graphs and demonstrate that they can not only identify the type of graph, but also relate it to the real world topic it was referring to and read it, interpret it, and predict future outcomes from it. That was the first of many IB-related assignments for them this year.

The *Honors* math classes are currently working on expressions, equations, integers, and exponents. It is not just enough to solve the problems. Students are being asked to find the errors in problems, make statements true by inputting their own math symbols, and work backwards from an answer to create the question—like in Jeopardy! Soon, students will begin an Honors math IB project that is sure to help them (and their classmates) practice the material taught in a creative, fun way. Be on the lookout for it and locate a continuity tester!

All of us math teachers will be using class data to help us guide our instruction. We will differentiate class assignments as needed to be sure your child is getting the best instruction we can offer them. At various times throughout the year, we will regroup our classes to remediate certain topics and enrich in others. We are a strong team that will do what we can to be sure your child is successful.

As the quarter comes to an end, it is important for our math students to remain organized in math class so they can keep up with the demands of being a 7th grader at Piedmont. The math lessons your child receives will be exciting and challenging, and at times, quite complex. We look forward to a great year!

~The 7th grade Math Team~ Mrs. Gorman, Ms. Hetrick, Mrs. Davis, and Ms. Peterson

Seventh Grade Language Arts

In seventh grade we have been working on several items to meet the needs of our talent development students. In first quarter students have been developing independent rubrics for assessment. They have also been using higher level vocabulary workshop practice. We are studying Latin and Greek roots and identifying new words that originate from these roots. These new words are incorporated into weekly writing assignments. Additionally students have been keeping assessment reflections to track and analyze their growth in reading.

Eighth Grade Language Arts

Eighth grade TD students are being challenged in Language Arts in numerous ways. Students are challenged to read 40 books over the course of the year. We stress that students read daily, and we help them achieve that goal by beginning class with ten minutes of silent reading. Students are encouraged to choose books at their independent reading level. Teachers have frequent conversations and conference with students to ensure that they are selecting books that will help them grow as readers.

Over the course of the year, students will explore identity through a variety of lenses. We begin our study first quarter by exploring friendship and how friends impact our identity. Students read a variety of texts—short stories, personal narratives, non-fiction pieces—to gather information about friendship. They also read The Outsiders, by S.E. Hinton. Students reflect on their own experiences with friendship while writing a personal narrative. Through the writing process (design cycle), students also identify what makes a strong personal narrative.

During the first quarter we begin our year-long multi-genre projects. Students will research a topic over the course of the year and create pieces in different genres. Through the research and creation process, students will understand their topic at a deeper level and become an expert in that area. In addition to our studies within the school, we also extend our learning outside of the classroom. In conjunction with our annual trip to Cherokee, North Carolina, students practice their research and creative thinking skills by creating a Native American Cultural Museum at Piedmont. Students choose their area of research based on their interests, and then create an artifact to represent their findings and teach their classmates. Then we travel to Cherokee to add to our knowledge—both about Native American Culture and museum etiquette. Students go to Cherokee with a new found appreciation for museums because they have created one of their own.

The eighth grade Language Arts team looks forward to a challenging and rewarding year!

Eighth Grade Math

Our Algebra students started off the year with a bang! All new material was introduced as we started in the middle of the Algebra book with Chapter 8 – Polynomials. Students learned how to classify polynomials, multiply and divide monomials with exponents, as well as add, subtract and multiply polynomials. Students used a new acronym FOIL to multiply two binomials. Students completed an IB assessment in which they observed the relationships between various special FOIL problems. They were to draw conclusions and determine a formula that could be used every time they saw a problem like these.

Our Standard Plus students just completed a unit on the Real Numbers. Students completed a project on where Rational Numbers would be used in a real world situation – jobs! Students answered 4 questions, each on a different occupation. Students then created a poster from their questions with pictures and more facts about the occupation which they found on the internet.

All students are studying their math units using tiered lessons. As they begin the class work, students choose what level to work out problems based on their own determination of their knowledge of the subject or were placed in a level based on pre-assessment data. Students have the option to move within different tiers as they become more comfortable with the material being taught. Each lesson has Enrichment pieces to also enhance the lessons for students with advanced knowledge.



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Piedmont ... You Know ... We Care!

Mission Statement

Piedmont exists to inspire in its students a passion for learning and a commitment to personal integrity and academic excellence. Students demonstrate self-confidence and creativity, are open-minded and inquisitive, and display a sense of social responsibility and global awareness.

What is Talent Development?

The **Talent Development Program** for gifted services is based on consultation and collaboration between the talent development and classroom teachers. They work together to meet the needs of the high achieving student.

Program Benefits

- Gifted education and general education are related, connected and integrated.
- Out of class sessions are scheduled when needed most.
- The pace of learning is enhanced.
- High achieving students receive more challenging tasks within the classroom.
- Classroom and TD teachers work together to maximize student learning.

Did vou know?

- Research on the TD Program indicates that students receive at least three times the amount of services using this model compared to the old pullout, once a week program.
- The TD model is most effective when high achieving students are flexibly grouped together based on their instructional needs.
- Every school has a Talent Development teacher.
- The TD teacher at your child's school can tell you how they work with your child and your child's teacher.

TALENT DEVELOPMENT TEAM

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