Math 6 Syllabus
Thomas Jefferson Middle School
2021-2022 School Year

Amy Yosick (Rm 109)
amy.yosick@apsva.us

Celestino Samaniego (Rm 89)
celestino.samaniego@apsva.us

Nicci Williams (Rm 56)
nicci.williams@apsva.us

Mathieu Bee (Rm 278)
mathieu.bee@apsva.us

Elita Jenks (Rm 278)
elita.jenks@apsva.us

Course Description:
Students will explore the 6th grade math curriculum through IBMYP mathematics, which promotes both inquiry and application. This course helps develop problem solving techniques through collaboration and discussion that extend learning beyond the classroom. Students will consider how mathematics is used to model and describe events and relationships in their lives as the program aims to develop inquiring, knowledgeable, and caring young people. Our math community strives to create a better and more peaceful world through intercultural understanding and respect.

International Baccalaureate Middle Years Program (IBMYP) Focus:
IBMYP math units have been designed to add a global dimension to student learning, connect math to other curricular areas, and allow students to improve communication skills. The International Baccalaureate philosophy challenges the members of the TJMS math community to foster within students an understanding of the interdependence that connects them (in a mathematical sense) with their environment, and a sense of responsibility and understanding toward the world around them. In addition, students will focus on the many ways that the discipline of math touches aspects of their everyday lives. Finally, students will examine mathematical concepts from a variety of perspectives.

Supplies Needed:
- Pencils, pens, and eraser
- Package of loose leaf paper
- Charged iPad
- Earbuds/headphones

Resource Materials: *always charge iPad to 100% the night before (Monday - Thursday)*
- **Canvas** for Students: enroll in Math 6 course
- **Dreambox** school code is **bqt4/9c6a**
- **DESMOS** Test Mode App
- **BrainingCamp** App through **MyAccess@APS**

Units of Study:

Quarter	Units and Durations			
Q1	**UNIT 1** **Integers & Coordinate Plane**			
Q2	**UNIT 2** **Rational Numbers (Operations, Practical Problems, and Comparing)**		**UNIT 3** **Ratios & Proportional Reasoning Equations & Inequalities**	
Q3	**UNIT 3** **Ratios & Proportional Reasoning (continued)**		**UNIT 4** **Equations & Inequalities**	
Q4	**UNIT 5** **Geometry 1: Perimeter, Area, and Circles**	**UNIT 6** **Geometry 2: Polygons & Congruence**	**UNIT 7** **Circle Graphs**	**UNIT 8** **Measures of Center**

Online Gradebook: Parents are expected to **check Synergy at least once a week** via **ParentVue** (https://synergy.gateway.access.apsva.us) to support their child completing outstanding assignments and updated grades. Teachers utilize the gradebook to share feedback on all assignments. Teachers will post on the Canvas Homepage important dates and upcoming assessments.

Report cards are issued four times a year, about every nine weeks. Questions concerning academic performance, grades, or any other matter should be directed to the appropriate teacher. Other matters should be brought to the attention of the teacher/advisor or guidance counselor.

Student grades are based on scores on a number of summative assignments including IB MYP assignments/assessments which are scored using a specific rubric. IB achievement levels (also known as "scores") are reported in Synergy. These achievement levels do not reflect student behavior.

IB MYP Scoring Rubric (8 Point Rubric)								
Achievement Levels	1	2	3	4	5	6	7	8
Letter Grades	E	D+	C	C+	B	B+	A	A

Math IB Assessment Criteria/Objectives:
For IB units, grades are calculated by determining the **IB score** from the IB rubric(found in the student handbook on TJMS webpage) that matches the assessment criteria for the task. Students will receive IB rubrics at the start of each unit of study when applicable. Students are expected to meet the math objectives (to the right) by the end of the program. The maximum score is an 8 for all criteria.

Students are expected to meet the following objectives by the end of the program.

Mathematics Assessment Criteria	**Max Score**
Criterion A: Knowledge & Understanding i. Select appropriate mathematics when solving problems in both familiar and unfamiliar situations ii. Apply the selected mathematics successfully when solving problems iii. Solve problems correctly in a variety of contexts	**8**
Criterion B: Investigating Patterns i. Apply mathematical problem-solving techniques to recognize patterns. ii. Describe patterns as relationships or general rules consistent with correct findings iii. Verify whether the pattern works for other examples.	**8**
Criterion C: Communicating i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements ii. Use different forms of mathematical representation to present information iii. Communicate coherent mathematical lines of reasoning iv. Organize information using a logical structure.	**8**
Criterion D: Applying mathematics in real-life contexts i. Identify relevant elements of authentic real-life situations ii. Select appropriate mathematical strategies when solving authentic real-life situations iii. Apply the selected mathematical strategies successfully to reach a solution iv. Explain the degree of accuracy of a solution v. Describe whether a solution makes sense in the context of the authentic real-life situation.	**8**

Determination of Grades:
The overall Arlington Public Schools letter grade is determined by the mean or average score of a student's final achievement scores (1-8) in all four criteria for each subject area.

APS Grade	Standards Range	IB MYP Boundaries	Alignment of Arlington Public School Grades with MYP Grade Descriptions
A	**7.00-8.00**	**28-32**	Produces high-quality, frequently innovative work. Communicates comprehensive, nuanced understanding of concepts and contexts. Consistently demonstrates sophisticated critical and creative thinking. Frequently transfers knowledge and skills with independence and expertise in a variety of complex classroom and real-world situations. Demonstrates significant growth in the subject area.
B+	**6.00-6.99**	**24-27**	Produces high-quality, occasionally innovative work. Communicates extensive understanding of concepts and contexts. Demonstrates critical and creative thinking, frequently with sophistication. Uses knowledge and skills in familiar and unfamiliar classroom and real-world situations, often with independence. Demonstrates noticeable growth in the subject area.
B	**4.75-5.99**	**19-23**	Produces generally high-quality work. Communicates secure understanding of concepts and context. Demonstrates critical and creative thinking, sometimes with sophistication. Uses knowledge and skills in familiar classroom and real-world situations, and, with support, some unfamiliar real-world situations. Demonstrates noticeable growth in the subject area.
C+	**4.00-4.74**	**16-18**	Produces good quality work. Communicates basic understanding of most concepts and contexts with few misunderstandings and minor gaps. Often demonstrates basic critical and creative thinking. Uses knowledge and skills with some flexibility in familiar classroom situations, but requires support in unfamiliar situations. Demonstrates some growth in the subject area.
C	**2.50-3.99**	**10-15**	Produces work of an acceptable quality. Communicates basic understanding of many concepts and context, with occasionally significant misunderstandings or gaps. Begins to demonstrate some basic critical and creative thinking. Is often inflexible in the use of knowledge and skills, requiring support even in familiar classroom situations. Demonstrates some growth in the subject area.
D+	**2.00-2.49**	**8-9**	Produce work of limited quality. Expresses misunderstandings or significant gaps in understanding for many concepts and context. Infrequently demonstrates critical or creative thinking. Generally inflexible in the use of knowledge and skills, infrequently applying knowledge and skills. Demonstrates marginal growth in the subject area.
D	**1.50 - 1.99**	**6-7**	
E	**0.00-1.49**	**1-5**	Produces work of very limited quality. Conveys many significant misunderstandings or lacks understanding of most concepts and contexts. Rarely demonstrates critical or creative thinking. Very inflexible, rarely using knowledge and skills. Demonstrates inadequate growth in the subject area.

Late/Missing Work Policy:

- Summative assignments are accepted through the end of the quarter.

Retake Policy:

- Students have the opportunity to retake or revise any summative assessment
- If students score below a 3 on any summative assessment, they must schedule a retake or revision.