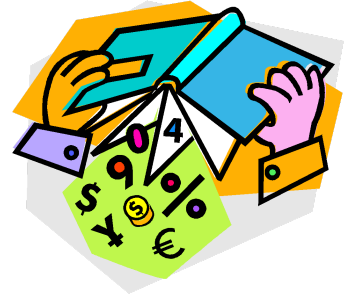




Welcome to Math 7!

Thomas Jefferson Middle School
2021-2022 School Year



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Overview of the Course & Essential Understanding:

The 7th grade math curriculum incorporates various topics from number sense to geometry through inquiry-based exploration, problem solving, and mathematical discussion. In Math 7, students will learn to apply rational numbers (integers, fractions, decimals, and percents) and equations to solve real-world problems, geometric figures, data and statistics. Students will often be asked to consider how mathematics is used to model and describe events and relationships in their lives.

The course requires students to collaborate effectively with others, practice good written and oral communication, think critically, and become active problem solvers. A very important aspect of this course is that students will be using mathematical dialogue throughout the year to discuss, explain, and prove concepts.

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 their communication skills. In keeping with the International Baccalaureate philosophy, a major aim of this course is 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.

Resources

Use Canvas

Materials Needed:

- Pencils, pens, and eraser
- Paper
- Charged iPad (*provided by the school*)
- Headphones or earbuds

Units of Study:

Unit	Timeline	SOL
1. Rational Number Sense, Powers of Ten, and Scientific Notation 2. Algebraic Expressions, Equations, and Inequalities	Quarter 1-2	7.1, 7.2, 7.11, 7.12, 7.13
2. Algebraic Expressions, Equations, and Inequalities (cont) 3. Proportional Reasoning	Quarter 2	7.11, 7.12, 7.13, 7.3, 7.5
4. Slope and Linear Functions 5. Transformations	Quarter 3-4	7.7, 7.10
6. Quadrilaterals 7. Volume, Surface Area, Perimeter, and Circles 8. Probability and Statistics	Quarter 4	7.4, 7.6, 7.8, 7.9

Math IB Assessment Criteria/Objectives

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. The achievement scores within each criterion are not averaged together, but rather are determined by the mode or latest score. Achievement scores are cumulative over the duration of the year. The chart below shows the letter grade equivalencies to Middle Year Programme (MYP) boundaries.

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.

Student work habits are communicated on the report card for each subject in the categories of: citizenship; responsibility; participation; organization; and collaboration using the letters and descriptions below:

Citizenship, Work and Collaboration Comments

G	Takes responsibility for actions and completes work on time.
H	Needs to improve on taking responsibility and completing work on time.
I	Works well with other students.
J	Needs to improve on working with other students.
K	Shows strong organizational skills.
L	Needs to improve organizational skills.
M	Respectfully participates in and contributes to the class.
N	Needs to improve respectfully participating in and contributing to the class.

This course evaluates students using the appropriate IB MYP criteria and rubrics. Scores can range from 1-8, with 8 being the highest a student can achieve.

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. (Please see below.) IB achievement levels (also known as "scores") are reported in Synergy. These achievement levels do not reflect student behavior.

Scoring Rubric for all IB MYP Subjects within a criterion	
8 Point Rubric	
Achievement Levels	Letter Grades
1	E
2	D+
3	C
4	C+
5	B
6	B+
7	A
8	A

Academic Integrity:

Students are expected to adhere to the [TJMS Academic Integrity Policy](#).

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.

Absences

It is extremely important that you attend school regularly. Although you may be able to make up work that you missed, nothing can replace the learning that takes place in the classroom. Occasionally though, you may be sick, so if you should miss a class, keep in mind that you have the responsibility to make up the work that you missed. Please check Canvas - you will find that it is very easy to keep up with all assigned work! **You must complete assignments and tests within the same number of days that you missed.**

Please check your Algebra Canvas to view what you missed the day(s) of your absence. You should also check the "What did I miss?" Binder for hard copies of anything that was passed out in class.

Extra Support

Students should schedule a time to come before school, during lunch, or after school if they are absent, or if they need more help with any particular topic or skill. On Mondays, Tuesdays, and Thursdays weekly study hall in the library is available for students who need additional support in mathematics. Study hall will be after school from 2:30 to 3:30. On Wednesdays, students can also attend Math Clinic for homework help or extra support.

Expectations

Students are expected to be respectful (to each other, themselves and materials), responsible (being prepared, on time, and an active participant) and optimistic. **"Learning is not a spectator sport." ---D. Blocher**

Canvas

Teachers will use Canvas to communicate notes and assignments electronically.

Please don't hesitate to contact us as needed. We are looking forward to teaching your child this school year!