



Maria Montessori Academy Junior High  
2016-2017

**Real Life Applications of Mathematics – Syllabus**

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**Course Description:** Math is a language of logic, numbers and science. The principles learned in the classroom while abstract are used all across the world in everyday life. In this course, students will discover the uses of math all around them and explore the uniqueness of mankind's logical invention as it appeals to their own interests and hobbies. Some areas the class will explore, but not limited to, are: history, music, cooking, and computers.

**Course Expectations:** Students are expected to come to class on-time with a positive attitude and a willingness to discover new concepts in their expanding mathematical world. The majority of the work for this course will take place in the classroom and time will be provided for the students to ask assistance in a timely manner for additional instructing and/or demonstration. This course will be directed by the teacher through a lot of the units of exploration while others will allow the child to have choice of assignments to expand their knowledge of a unit.

**Textbooks and Materials:**

*Textbook:* This class does not have textbook, but we will be reading from What If? By Randall Munroe and other texts as needed. None of these books will be required by the student and copies of the pages will be provided, if necessary.

*Materials:*

- Three-ring binder with additional notebook paper (Does not have to be exclusive to this class).

**Grading Plan:**

- This course does not have grade standards issued by the Utah State Department of Education.
- To keep with the grading practice of MMA this course will grade students work on an individualized standards rubric for each unit.

What the Student Knows	Score	Traditional Letter Grade
<b>Exceeds Proficiency:</b> In addition to Score 85, the student <u>uses inferences and applications that go beyond</u> what was explicitly taught in class.	95	A+
In addition to Score 85 performance, <u>partial success</u> at inferences and applications that go beyond what was directly explicitly in class.	90	A



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<b>Meets Proficiency:</b> No major errors or omissions regarding any of the information and/or processes (simple or complex) that were explicitly taught.	85	B+
No major errors or omissions regarding the simpler details and process and partial knowledge of the more complex ideas and processes.	80	B
<b>Approaching Proficiency:</b> No major errors or omissions regarding the simpler details and processes but major errors or omissions regarding the more complex ideas and processes.	75	C+
Partial knowledge of the simpler details and processes but major errors or omissions regarding the more complex ideas and procedures.	70	C
<b>Developing Proficiency:</b> With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.	65	D+
With help, a partial understanding of some of the simpler details and processes but not the more complex ideas and processes.	60	D
Even with help, no understanding or skill demonstrated.	59	F

### Course Policies:

Student Work: Student work will consist of a balance of in-class activities, assignments and assessments. Each unit's in-class assignments and homework can vary depending on the individual unit and the student's choice of projects for assessments.

Late Work: Life can be quite demanding at times for students and families alike and as such time can be limited in quantities for even important things like school work and homework. I have found great success in student independence and accountable when students are allowed to take the additional time they need to complete assignments and grasp a concept they find challenging without being penalized for pursuing additional knowledge. *Students who have not completed in-class assignments or homework by the suggested deadline for the assignment can still turn in the assignment for credit with no penalties from it being late.* However, the final deadline for all assignments is **the last day of the quarter**. No assignments will be accepted after that day.

Portfolio: Students will select one piece of evidence of learning per cycle to add to their on-going Jr High portfolio.

Group Activities: There will be occasional group activities, but most work will be done individually or in small groups of 2-3 peers.

Homework Expectations: Homework will vary depending of the unit and assignments will be posted on the class blog.



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Extra Credit: Extra credit will not be offered this year with the new SBG system. With the multiple opportunities to demonstrate their understanding of content standards and the ability for the students to retake assessments, additional work to get credit outside the standard based system would be unnecessary.

Absences: This class will function as a workshop on a typical day. New information and skills are going to always being presented in class; as such, student attendance is vital. When a student misses a class, they are missing most of their time in which to demonstrate mastery of the learning standards. When possible, please notify the teacher in advance of absences so that preparations can be made to help you stay current with your work. If you unexpectedly miss class, it is your responsibility to meet with the teacher immediately upon your return to class to make a plan to be current with your work.

Citizenship Grade: The grace and courtesy you use toward your environment, classmates, and teachers will be factored into your citizenship grade.

**Class Rules:** Respect the environment and allow others to work. If the right to learn is being intruded upon, a verbal warning will be given so that the student is made aware of the behavior. If the behavior continues, the student will be asked to stay after class or after school in order to review the expectation. If more support is needed a letter will be sent home identifying the behavior in question, which will need to be signed by a parent and returned the next day. Unreturned letters will warrant a phone call home.

### **Class Materials:**

All students will need the following: See above for required class room materials.

Donations of the following items are much appreciated:

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**I have read and understand the rules for \_\_\_\_\_ class.**

**Parent/Guardian Signature:**\_\_\_\_\_ **Date:**\_\_\_\_\_

Parent/Guardian's Email Address:\_\_\_\_\_ and/or \_\_\_\_\_

**Student Signature:**\_\_\_\_\_ **Date:**\_\_\_\_\_