Mathematics Syllabus – Sky Cluster

Ottoson Middle School 2019-2020

Miss Buckley

room 335 | jbuckley@arlington.k12.ma.us | (781) 316-3745 x 1335

www.770scluster.com | 2019skymath.weebly.com

**Expectations**

I will expect the following from you every day:

1. Respect yourselves, each other, and me.
2. Make mistakes (and correct them). It is the best way to learn.
3. Be on time to class and have all necessary supplies ready.
   1. Upon entering the classroom: take the most direct route to your assigned seat and look at the board for further instruction.
4. Raise your hand to answer questions, make comments, or request to be excused from class. Do not talk when someone else is talking.
5. No food or drink other than water is allowed in the classroom

**Supplies**

All students should bring the following to class every day:

* Textbook (provided by me)
* A notebook specifically for math
* At least two pencils
* A great eraser
* Homework folder
* Graph paper (during certain units)
* Colored pen for correcting (a color **other than** black or blue)
* Calculator: TI-30X IIS is recommended
  + Make sure your name is on it!!
* An open and curious mind

***It is your responsibility to replenish these supplies when they are running low.***

**Homework**

Practice is key to learning anything, and this is ESPECIALLY true in math class. Doing your homework will be crucial to your success.

* You can expect to get homework every night (except long weekends/vacations), but you can also expect it to be fair amounts.
* Homework will be graded for completeness, so you must attempt every problem and show all of your work to receive full credit.
* Homework should take about 30 minutes per night. If you have worked for 30 minutes and not completed an assignment, you can have your parent/guardian sign it and I will count it as complete. You will then need to schedule a time with me to review the assignment.
* Homework will be graded on a scale from 0-3:
  + 0- missing or unsatisfactory
  + 1- partially completed and/or late
  + 2- mostly complete or late
  + 3- complete and on-time
* We will review homework assignments daily. You can (and should) also stay after school or come in before school to ask questions about homework problems that you did not understand.
* In addition to nightly homework assignments, you will receive Basic Skill Review worksheets at the start of each week that will be due every Friday.
  + More information about those sheets can be found on the website.

**Homework assignments may be collected and graded for correctness (as opposed to the usual completeness) without advanced warning. Always do your best.**

Setting up your homework sheet

* Always head the page with your name, the date, your class color, and assignment.
* Always do homework in pencil.
* Show that you have checked your work or explained when appropriate.
* Put a circle or box around your final answer.
* Keep your work neat and organized:
  + Start each problem on a new line.
  + To save paper, you may use the back of the page, but please don’t try to cram in more than is easily legible.
  + It’s a good idea to leave a little extra space in case you want to make a note to yourself when we go over the homework in class and so that I have room to write notes to you if I check the assignment.

**Absences**

​If you are absent, it is your responsibility to identify and make up any work you missed. To figure out what you missed, you should do one or more of the following:

* check the class website
* ask a friend
* check in with me before or after school (NOT during class)
* email me

General Guidelines:

* Sick/unexpected absences: Turn in work within two days of your return for full credit; half credit after that point.
* Planned absence: Turn in work before the day(s) you will be out (ideally!) or within two days of your return for full credit; half credit after that point.
* Missed quizzes/tests: Missed tests and quizzes should be made up the day the student returns. Some situations may warrant changes/extensions to this policy.

**All assignments and assessments that are not turned in or made up by the end of the term will result in a “zero” for a grade**.

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**Missed/Late Assignments**

Assignments that were not completed for reasons other than absence will be given a zero initially and marked "missing" in the grade portal.   
  
If you make up the assignments and turn them in late, they will be graded as follows:

* Turned in the next day: you will receive the majority of the points (i.e., 2 out of 3, 4 out of 5, etc.)
* Turned in within the week: you will receive half credit (i.e., 1.5 out of 3, 2 out of 4, etc.)
* Turned in within more than a week late: you will not receive credit.  
  + In all of these cases, the assignment will be marked "late" in the grade portal.

**Grading**

Tests– 45%        Homework – 15%

Quizzes – 25%         Classwork – 10%

Class participation/readiness – 5%

You will begin each term with 10 points for “class participation/readiness.”

Points will be lost for borrowing supplies (being unprepared) or inappropriate

class behavior. I will always tell you when you have lost a point.

Grading follows the traditional letter grade format:

F: < 60% = Failing. The student has not demonstrated an acceptable level of mastery and needs to see me for extra help.  
   
D = 60 - 69% = Below Average. The student is passing but has demonstrated mastery below the average level for this course. The student should see me for extra help.  
   
C = 70 - 79% = Average. The student has demonstrated an acceptable level of mastery and should be commended.  
   
B = 80 - 89% = Above Average. The student has demonstrated above average work and is deserving of much praise.  
   
A: ≥ 90% = Excellent. The student has mastered the material and has demonstrated extraordinary achievement.

**Extra Help**

I believe that extra help in math is best on a drop-in basis. In other words, if you misunderstood something in class today, you should stay after for 5-10 minutes so we can clarify. This is a quick and easy way to prevent you from falling too far behind.

I am available most days after school (unless I have a meeting) from 2:30-3:00, but often later- always swing by to check or ask me in class if I’ll be around!

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Parent/Guardian signature Date**

**Units of Study - 7th Grade**

1. **Accentuate the Negative (Positive and Negative numbers)**
   1. Adding and subtracting positive and negative numbers
   2. Multiplying and dividing with positive and negative numbers
   3. Absolute value problems
   4. Predicting whether an expression will be positive or negative
   5. Using distributive property to expand expressions

1. **Shapes and Designs (Geometry)**
   1. Naming and properties of polygons
   2. Angles and angle relationships
   3. Triangle relationships
   4. Finding perimeter, circumference, and area
   5. Interior angles sums and exterior angles

1. **Stretching and Shrinking (Similarity)**
   1. Write and simplify ratios
   2. Similar figures and corresponding parts
   3. Relationships between similar figures
   4. Find and use scale factor to find missing sides, perimeter, and area

1. **Comparing and Scaling (Ratios and Proportions)**
   1. Write and solve proportions
   2. Compare and scale mixtures, ratios, and rates
   3. Unit rates
   4. Identify rates and constants of proportionality
   5. Identifying whether a relationship is linear and/or proportional
   6. Write an equation for a situation
   7. Interpret graphs
   8. Measurement conversions
   9. Solve percent problems
   10. Tax, discounts, tips, and commission

1. **Moving Straight Ahead (Linear Relationships and Equations)**
   1. Identify linear relationships
   2. Identify rates and y-intercepts
   3. Slope
   4. Solving equations and inequalities with variables on both sides
   5. Use distributive property and simplifying to solve equations
   6. Writing and solving equations and inequalities to solve word problems
   7. Graphing inequalities

1. **What Do You Expect? (Probability)**
   1. Write probabilities as fractions and percents
   2. Find experimental and theoretical probability
   3. Create counting trees and organized lists
   4. Solve spinner and dice problems
   5. Compound events

1. **Samples and Populations (Statistics)**
   1. Calculate and use measures of center (mean, median, mode)
   2. Calculate and use measures of spread (MAD, range, IQR)
   3. Use samples to make inferences about populations
   4. Create and use line plots and box plots
   5. Capture, re-capture

1. **Filling and Wrapping (3D Geometry)**
   1. Surface area of prisms and cylinders
   2. Volume of prisms, cylinders, cones, and spheres
   3. Scaling surface area and volume