

Schweinfurt Middle School
“Learning is a Lifelong Process”
MATH MATTERS

From: Mr. Richman
8th Grade Mathematics

August 25, 2008

Dear Parent or Guardian:

My name is Steve Richman, and I am your child’s math teacher this year. I am very happy to have your child in class and look forward to an exciting year filled with much learning. My goal is to help your child learn and enjoy math. To have a successful year, I need your cooperation and support. Please read the following information with your child, sign the last page of this document, and **have your child return the signed acknowledgement to me for a 10 point bonus grade.**

There are no excuses for not being prepared for and participating in class. **I expect each child to bring their homework, paper, pencil, etc. each day** and will notify you when they do not have required materials. Encourage your child to have their books, paper, and pencils every class and to do their homework. Expect your child to bring math work home at every day he/she has math class. **I assign homework nearly every class.** With block scheduling, I only see students every other day. This means that study and review at home is very important.

I have attached three documents. The first is the “Success Code” (class rules) that I expect your child to follow in my class. The second is a class policies sheet and lists class procedures for assignments, attendance, homework, and grading. Ensuring your child follows these procedures will lead to increased understanding of the mathematical concepts we are learning in class, better test results, and improved grades. The third is a course syllabus.

When we meet for conferences, I will provide you a detailed analysis of your child’s grades. Additionally, I will provide grade updates using Gradespeed. If you have any questions, please **contact** me at school, **09721804301** or by e-mail. My **e-mail** address is **steve.richman@eu.dodea.edu**.

Thank you for your cooperation.

Respectfully,

Steve Richman

3 Atch:
Success Code
Student Policies
Course Syllabus

Schweinfurt Middle School
“Learning is a Lifelong Process”
MATH MATTERS

Mr. Richman—Math 7/8
Choose to be Responsible
STUDENT SUCCESS CODE

1. Bring textbook, pencil and paper to class EVERY DAY.
2. Be in your seat when the tardy bell rings. Have materials ready at the bell—pencils sharpened!
3. Do your own work! Do not copy someone else's work.
4. Raise your hand and wait for acknowledgement before speaking during class work or getting out of your seat.
5. When I am talking—you are not!
6. Keep room neat and clean-pick up all paper from floor and return items to proper location after use.
7. Keep chairs, desks, and table legs on the floor at all times.
8. **Physical contact not allowed between students!**

Consequences if you choose to not be responsible...

First time	Verbal reprimand.
Second time	Verbal Warning.
Third time	D-hall.
Fourth time	Written referral and student sent to office.
Severe disruption:	Student immediately sent to office.

Expectations

1. Be on time to class with a minimal amount of absences.
2. Be prepared- book, pencil, paper, and homework assignment.
3. Be attentive in class.
4. Attempt all math homework each night.

Do these things and you will be successful in math and enjoy class.

Schweinfurt Middle School
“Learning is a Lifelong Process”
MATH MATTERS

Student Policies-Math Class

Classwork Policy: It is very important that you be present every day. If you miss a class for any reason, you miss demonstrations, explanations, sample problems, and experiences that just cannot be made up by "reading the book" or asking someone, "What did I miss?"

- Leaving the room during class will normally not be allowed. It will not be allowed during class lecture time. Nor will it be allowed during the first or last 10 minutes of class. Take care of personal grooming and restroom requirements promptly between classes. Leaving class to go to the restroom during class time will only be considered in an emergency.
- If I give you to permission to leave, you must have a pass with you and you are responsible for any work missed while you are out of the room.

Homework Policy: I believe homework is a valuable learning tool and is a reinforcement of material presented in class and strengthens skills learned.

- **I give homework almost every class period.** Homework is also used to prepare you for upcoming lessons, quizzes, and exams. To make up missed homework days or weeks later serves little or no purpose. Homework assigned one class period is due the next class period. Homework will be considered late if not turned in at BEGINNING OF CLASS PERIOD on day due or not delivered on DUE DATE for excused absence.
- **All students are required to turn in a paper.** Not doing work is not an option. There will be consequences for students not completing an assignment. Do yourself a favor and do the work when it is assigned.
- **Absences due to illness or approved school functions** do not excuse you from the homework assigned during the absence or from learning the concepts taught during the absence. If possible, get the homework assignment before you are absent and complete the homework before returning to class.
- Missing a class period for whatever reason is no excuse for not finding out what your assignment was that day. I write all homework assignments on the board in the front of the room for each class period.
- Use the buddy system by contacting another student in your class/group to find out what you missed, check the information written on the assignment board once you return to school, or simply ask me.

Schweinfurt Middle School

“Learning is a Lifelong Process”

MATH MATTERS

- For missed tests and homework you are allowed one class period after your return to make up any missing assignments or make arrangements with me to schedule makeup tests.
- Missing a class review is *not* an excuse for not taking an exam.

Grading Policy

Grades are determined by taking the total points earned divided by the total points possible which will give you a percent grade.

GRADING SCALE

90-100	A
80-89	B
70-79	C
60-69	D
0 -59	F

Grades will consist of the following:

- Class opening exercise, “1 st and 10”: 10 points
- Daily class work: 20 points each
- Homework assignments: 20 points each
- Math terminology tests: 100 points
- Chapter tests: 200 points, or 100 points if test covers $\frac{1}{2}$ chapter.

Test bonus points

Each major test may have bonus points built in to the test. For example, there may be 22 problems on the test and the test may be worth 100 points. Each problem may be worth 5 points. Therefore, if every problem is correct, it is possible to make a total grade of 110/100. Likewise, it is possible to miss two problems and still make 100% $(22 - 2) / 20$

Extra Credit

NOTE: Because I offer many opportunities to earn bonus points/extra credit during the grading period, I DO NOT have extra credit work at the end of a grading period solely to bring up grades because you did not do work when assigned or failed to do makeup work during the nine-week period.

Schweinfurt Middle School
“Learning is a Lifelong Process”
MATH MATTERS

Eighth grade mathematics Course Information
Syllabus for 8th grade mathematics

Eighth grade mathematics is designed to be a pre-algebra mathematics class which presents basic concepts of mathematics needed in everyday situations. Pre-Algebra reviews the mathematical concepts and problem solving with whole numbers, decimal numbers, fractions and mixed numbers. Percent, time and measurement are also covered. Students are introduced to algebraic concepts and skills of products and factors, exponents, graphing and solving equations and inequalities, and deductive reasoning.

Objectives in Pre-Algebra

1. To prepare students for Algebra I, Geometry, and Algebra II.
2. To create a secure learning environment.
3. To communicate mathematically by learning the language of Algebra.
4. To develop critical thinking skills.
5. To develop a self-assured and confident math student.

Activities

1. Technology through the use of calculators and computers.
2. Modeling problems and projects.
3. Hands-on activities and investigations using math manipulatives.
4. Lectures.
5. Cooperative learning activities.

To access the online version of the text, use the following web site:

<http://www.msmath3.net>

Once that web page comes up, click on **Online Student Edition**.

Use the name **MAC 304** for the course name

Use the password: **C6enesujak**

Schweinfurt Middle School

“Learning is a Lifelong Process”

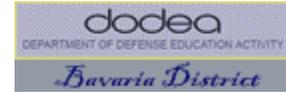
MATH MATTERS



Primary Standards

Bavaria District - DoDEA

Richman, Steve / Math 8 / Grade 8 (Schweinfurt Middle School)



Assessment and Description Benchmark

Statistics

(Week 1, 3 Weeks):

Unit Assessment

Subject & Strand:

Mathematics: M5 Data Analysis & Probability

Standard:

In Grade 8, all students should:

Grade 8, Benchmark: D

M5b: Find, interpret and appropriately use measures of center, quartile, and interquartile range to compare two sets of data

D

M5c: Find the equation of a line of best fit for data represented as a scatter plot

D

M5d: Describe sampling methods and analyze effects of random versus biased sampling and justify conclusions

D

M5e: Construct convincing and appropriate arguments for a conclusion based on analysis of data presented

D

M5f: Recognize faulty arguments or common errors in data analysis

Interpreting Graphs

(Week 4, 3 Weeks):

Unit Assessment

Subject & Strand:

Mathematics: M2 Algebra

Standard:

In Grade 8, all students should:

Grade 8, Benchmark: D

M2h: model and solve problems using various representations, i.e., graphs, tables, and equations

D

M2i: connect the rate of change to the slope of a line

Probability

(Week 7, 3 Weeks):

Unit Assessment

Subject & Strand:

Mathematics: M5 Data Analysis & Probability

Standard:

In Grade 8, all students should:

Grade 8, Benchmark: D

M5g: Compute the probability of the occurrence of independent and simple dependent events

D

M5h: Distinguish between permutations and combinations.

Solving Equations

(Week 10, 4 Weeks):

Unit Assessment

Subject & Strand:

Mathematics: M1 Numbers and Operations

Standard:

In Grade 8, all students should:

Grade 8, Benchmark: I D

M1d: explain and use the additive and multiplicative identities and the additive and multiplicative inverses

Subject & Strand:

Mathematics: M2 Algebra

Standard:

In Grade 8, all students should:

Grade 8, Benchmark: R

M2a: generalize patterns and sequences by describing

Schweinfurt Middle School

“Learning is a Lifelong Process”

MATH MATTERS

the way to find the nth term.

- I D M2d: use symbolic algebra to represent situations and to solve problems involving linear and nonlinear relationships
- D R M2e: recognize, generate, and justify equivalent forms of algebraic expressions
- I D R M2f: solve linear equations and inequalities

Subject & Strand: Mathematics: M3 Geometry

Standard: In Grade 8, all students should:

Grade 8 , Benchmark: D R M3f: use geometric models to represent and explain numerical and algebraic relationships.

Exponents and Scientific Notation

(Week 14, 3 Weeks):

Unit Assessment

Subject & Strand: Mathematics: M1 Numbers and Operations

Standard: In Grade 8, all students should:

- Grade 8 , Benchmark: I D M1a: explain the meaning of exponents that are negative and zero
- I D M1b: use scientific, exponential and calculator notation to express very large or small numbers
 - I D M1c: expand scientific notation to include negative exponents
 - R M1e: apply order of operations to simplify expressions and perform appropriate operation(s) involving numbers written in exponential notation or radical form

Pythagorean Theorem

(Week 17, 4 Weeks):

Unit Assessment

Subject & Strand: Mathematics: M3 Geometry

Standard: In Grade 8, all students should:

- Grade 8 , Benchmark: D M3b: verify the Pythagorean Theorem
- D M3c: apply the Pythagorean Theorem to determine if a triangle is a right triangle or to find a missing side of a right triangle
 - D M3f: use geometric models to represent and explain numerical and algebraic relationships.

Proportionality, Slope and Rate of Change

(Week 21, 4 Weeks):

Unit Assessment

Subject & Strand: Mathematics: M1 Numbers and Operations

Standard: In Grade 8, all students should:

- Grade 8 , Benchmark: D R M1f: make reasonable estimates and then solve problems that include rational numbers, ratios, and proportions.

Subject & Strand: Mathematics: M2 Algebra

Standard: In Grade 8, all students should:

- Grade 8 , Benchmark: I D M2c: analyze relationships between linear equations and their graphs by connecting the meaning of intercepts and slope to the context of the situation
- I D M2i: connect the rate of change to the slope of a line

Subject & Strand: Mathematics: M3 Geometry

Schweinfurt Middle School

“Learning is a Lifelong Process”

MATH MATTERS

Standard: In Grade 8, all students should:

Grade 8 , Benchmark: R M3a: understand relationships among the angles, side lengths, perimeters, areas, and volumes of similar objects

R M3e: plot ordered pairs of rational numbers on the coordinate plane in all four quadrants

Subject & Strand: Mathematics: M4 Measurement

Standard: In Grade 8, all students should:

Grade 8 , Benchmark: D R M4e: solve simple rate problems.

Using Algebra with 2-D Geometry

(Week 25, 3 Weeks):

Unit Assessment **Subject & Strand: Mathematics: M3 Geometry**

Standard: In Grade 8, all students should:

Grade 8 , Benchmark: D R M3a: understand relationships among the angles, side lengths, perimeters, areas, and volumes of similar objects

I D M3d: identify and describe angle relationships formed by parallel lines cut by a transversal using appropriate terminology, i.e., alternate interior, alternate exterior, supplementary, vertical angles, corresponding angles, complementary, consecutive interior

Subject & Strand: Mathematics: M4 Measurement

Standard: In Grade 8, all students should:

Grade 8 , Benchmark: D R M4a: describe and demonstrate how perimeter, area, and volume are affected by changes of scale

I D M4d: find the sum of the interior and exterior angles of regular convex polygons with and without the use of a protractor

Functions: Linking Equations & Graphs

(Week 28, 5 Weeks):

Unit Assessment **Subject & Strand: Mathematics: M2 Algebra**

Standard: In Grade 8, all students should:

Grade 8 , Benchmark: I D M2b: identify functions as linear or nonlinear and contrast their properties using tables, graphs, or equations

I D M2c: analyze relationships between linear equations and their graphs by connecting the meaning of intercepts and slope to the context of the situation

D R M2d: use symbolic algebra to represent situations and to solve problems involving linear and nonlinear relationships

I D M2g: represent situations using systems of linear equations and solve graphically

D R M2h: model and solve problems using various representations, i.e., graphs, tables, and equations

D R M2j: analyze changes in linear relationships using graphs

I D M2k: Describe and compare how changes in an equation affect the related graph.

Subject & Strand: Mathematics: M3 Geometry

Standard: In Grade 8, all students should:

Schweinfurt Middle School

“Learning is a Lifelong Process”

MATH MATTERS

Grade 8 , Benchmark: R M3e: plot ordered pairs of rational numbers on the coordinate plane in all four quadrants

Subject & Strand: Mathematics: M5 Data Analysis & Probability

Standard: In Grade 8, all students should:

Grade 8 , Benchmark: I D M5a: Differentiate between discrete and continuous data and appropriate ways to represent each

Volume, **Surface Area &** **Spatial** **Visualization II** *(Week 33, 4 Weeks):*

Unit Assessment

Subject & Strand: Mathematics: M3 Geometry

Standard: In Grade 8, all students should:

Grade 8 , Benchmark: D M3a: understand relationships among the angles, side lengths, perimeters, areas, and volumes of similar objects

Subject & Strand: Mathematics: M4 Measurement

Standard: In Grade 8, all students should:

Grade 8 , Benchmark: D M4a: describe and demonstrate how perimeter, area, and volume are affected by changes of scale

D M4b: develop strategies to determine the surface area and volume of selected prisms, pyramids and cylinders

D M4c: use formulas to a specified level of precision in finding the surface area and volume of prisms, pyramids and cylinders and the volume of spheres and cones

LEGEND: I Introduced D Developed R Reviewed

Schweinfurt Middle School
“Learning is a Lifelong Process”
MATH MATTERS



Acknowledgment, August 23, 2008, Memo to Parents.

My parent/guardian and I have read Mr. Richman’s memo, my Success Code, and the course information sheet. Returning this signed document earns me 10 bonus points. ☺

Student’s Signature _____

Student’s name: _____

Parent’s Signature: _____

Parent’s name: _____

Parent Phone Number _____

Parent Email Address: _____

Date signed: _____