

**NJ-CCSS AREA:
MATHEMATICS & ENGLISH LANGUAGE ARTS**

North Brunswick Township Public Schools

SAT PREP

Acknowledgements

Thomas Lukacs, Teacher

Diane M. Galella, Supervisor of Mathematics and Science

Date:New

Revision May 2012

Board Adoption_____

New Jersey - Common Core State Standards for Mathematics & English Language Arts

Unit 1:

Grade: 10 - 12

Date: May 2012

NJ-CCSS Domain Essential Questions		NJ-CCSS Cluster.Standard Standards for Mathematical Practice		
<p>A-APR Arithmetic with Polynomials and Rational Expressions A-CED Creating Equations S-ID Interpreting Categorical and Quantitative Data RI Reading for Informational Text</p> <p>What are the parts of an SAT Test I? How is the test scored? How can I improve my individual score?</p>		<p>Math: A-APR 1,6,7; A-CED1,2,3,4; S-ID.1 English LA: 9-10.RI.1-3</p> <p>SMP.1 Make sense of problems and persevere in solving them. SMP.2 Reason abstractly and quantitatively. SMP.3 Construct viable arguments and critique the reasoning of others. SMP.4 Model with mathematics. SMP.5 Use appropriate tools strategically. SMP.6 Attend to precision. SMP.7 Look for and make use of structure. SMP.8 Look for and express regularity in repeated reasoning <Specific Standard Identifier></p>		
Skills/Objectives SWBAT...	Instructional Strategies Activities/ Materials /Technology Interdisciplinary Connections Cultural Diversity	Modifications ESL / Special Education Academic Support/G&T Differentiated Instruction	Assessments Formative Summative Benchmarks	Pacing
<p>Obj. 1.1 Identify 3 parts of SAT test Obj. 1.2 Determine the scoring criteria for each Obj. 1.3 Develop a strategy for improving the score thru educated guessing Obj. 1.4 Determine his/ her own base score Obj. 1.5 Answer single and double blank questions in reading comprehension exercises Obj. 1.6 Improve vocabulary thru practice exercises that assess student skill</p>	<ul style="list-style-type: none"> • Classroom discussion • Teacher presentation • Textbook reading (for instructions and sample problems • Worksheets • Practice problems • ETS booklets + online materials for PSAT and SAT activities • scoring criteria for both PSAT and SAT • Baron’s text to illustrate types of fill-in the blank questions • First complete test <p><u>Materials/Technology/Resources:</u> Calculators, Study Island software, Kaplan PSAT, SAT software</p> <p><u>Interdisciplinary Connections:</u> Reading/ English to properly process instructions</p>	<ul style="list-style-type: none"> • Assignment modification • Previewing materials • KWL strategies • Graphic organizers • Highlighting/and underlining • Cue cards • Simulations • “Stations/centers • Small group instruction • Pair-share 	<p><u>Formative:</u></p> <ul style="list-style-type: none"> • In class practice problems • Board work • Do Now prompts • Class work • Homework • Problem solving activities • Think and Discuss • Open-ended questions • Study Island assignments • Practice SAT 	14 days

NJ-CCSS Domain Essential Questions		NJ-CCSS Cluster.Standard Standards for Mathematical Practice		
<p>A-APR Arithmetic with Polynomials and Rational Expressions G-MG Modeling with Geometry G-GPE Expressing Geometric Properties with Equations L Vocabulary Acquisition and Use W Text Types and Purpose W Production and Distribution of Writing</p> <p>How do I move from the PSAT format to the full SAT form?</p>		<p>Math: A-APR 1, 6, 7 G-MG1,2,3 G-GPE4,5,6,7 English LA: 9-10.L4,5,6; 9-10W1-5</p> <p>SMP.1 Make sense of problems and persevere in solving them. SMP.2 Reason abstractly and quantitatively. SMP.3 Construct viable arguments and critique the reasoning of others. SMP.4 Model with mathematics. SMP.5 Use appropriate tools strategically. SMP.6 Attend to precision. SMP.7 Look for and make use of structure. SMP.8 Look for and express regularity in repeated reasoning.</p>		
Skills/Objectives SWBAT...	Instructional Strategies Activities/ Materials /Technology Interdisciplinary Connections Cultural Diversity	Modifications ESL / Special Education Academic Support/G&T Differentiated Instruction	Assessments Formative Summative Benchmarks	Pacing
<p>Obj. 2.1 Improve ones score by using techniques of modified guessing, improved vocabulary, and modified approach to taking test Obj. 2.2 Review grammar skills and apply correct techniques to answering grammar sections Obj. 2.3 Correctly grid in mathematic answers in decimal and fraction forms Obj. 2.4 Solve problems using arithmetic skills; order of operations, exponents, roots, decimals, fractions, per cents, ratios and averages Obj. 2.5 Solve problems involving algebraic concepts: polynomials, inequalities, and equations and word problems</p>	<ul style="list-style-type: none"> Classroom discussion Teacher presentation Textbook reading Worksheets Practice problems practice tests on random guessing with/ without elimination of answers Use of Warners Grammar for practice exercise Barons text grid in sheets and alternate forms for decimal and fractional answers speed tests in math with/ without calculators grading sample essays and each others essays to determine where they fit on the 0 to 6 scale review sheets from Algebra I,II and Geometry text series on basic skills 	<ul style="list-style-type: none"> Assignment modification Daily record-keeping assistance KWL strategies Graphic organizers Mnemonics Highlighting/and underlining Cue cards Games and puzzles Stations/centers Small group instruction Pair-share 	<p><u>Formative:</u></p> <ul style="list-style-type: none"> In class practice problems Board work Do Now prompts Class work Homework Problem solving activities Think and Discuss Open-ended questions Exit prompts Study Island assignments Diagnostic Tests Practice Tests 	14 days

<p>Obj. 2.6 Determine when to use or not use a calculator</p> <p>Obj. 2.7 Choose the correct response for short passage, long passage, and double passage reading comprehension questions</p> <p>Obj. 2.8 Identify the types of questions asked: main ideas, specific details, inferences, tone/attitude, vocabulary in context, techniques</p> <p>Obj. 2.9 Improve vocabulary through additional practice activities</p> <p>Obj. 2.10 Solve problems involving basic geometric concepts</p> <p>Obj. 2.11 Solve problems involving analytic geometry concepts</p> <p>Obj. 2.12 Identify and recognize prefixes, suffixes, and roots that help build vocabulary and identify relationships between common words</p> <p>Obj. 2.13 Practice exercises that emphasize the skill of paragraph improvement through rewriting sentences, use of better modifiers, and completing exercises that put sentences in correct order</p>	<ul style="list-style-type: none"> • discovery of the 10- 12 types of questions asked on reading • comprehension passages • practice exercises from Kaplan, Gruber and other texts that emphasize prefixes and suffixes to determine meanings • 2nd and 3rd complete tests <p><u>Materials/Technology/Resources:</u> Calculators, Study Island software, Kaplan PSAT, SAT software</p> <p><u>Interdisciplinary Connections:</u> Reading/ English to properly process instructions</p>			
---	---	--	--	--

NJ-CCSS Domain Essential Questions		NJ-CCSS Cluster.Standard Standards for Mathematical Practice		
F-BF Building Functions G-SRT Similarity, Right Triangles, and Trigonometry S-ID Interpreting Categorical and Quantitative Data What new mathematical skills do I need to learn to master the Algebra II concepts on the test?		Math: F-BF3,4A; G-SRT6,7,8; S-ID.1 SMP.1 Make sense of problems and persevere in solving them. SMP.2 Reason abstractly and quantitatively. SMP.3 Construct viable arguments and critique the reasoning of others. SMP.4 Model with mathematics. SMP.5 Use appropriate tools strategically. SMP.6 Attend to precision. SMP.7 Look for and make use of structure. SMP.8 Look for and express regularity in repeated reasoning		
Skills/Objectives SWBAT...	Instructional Strategies Activities/ Materials /Technology Interdisciplinary Connections Cultural Diversity	Modifications ESL / Special Education Academic Support/G&T Differentiated Instruction	Assessments Formative Summative Benchmarks	Pacing
1) Obj. 3.1 Solve problems involving sequences , sets, absolute value, and rational equations 2) Obj. 3.2 Apply the topics of sequences , sets, absolute value, and rational equations to practical word problems 3) Obj. 3.3 Solve problems using data interpretation, probability, matrices, and special functions 4) Obj. 3.4 Solve problems using radical equations, quadratic equations, and simple trigonometry for applications	<ul style="list-style-type: none"> • Classroom discussion • Teacher presentation • Textbook reading (for instructions and sample problems • Worksheets • Practice problems • Algebra I + II and Geometry worksheets for theoretical topics, discrete math, and analytical geometry • HSPA sheets to quickly re-enforce concepts presentation of new Algebra topics where necessary – radicals, rational equations, right triangle trig, and functional operations • 4th complete test <p><u>Materials/Technology/Resources:</u> Calculators, Study Island software, Kaplan PSAT, SAT software</p>	<ul style="list-style-type: none"> • Previewing materials • KWL strategies • Graphic organizers • Mnemonics • Highlighting/and underlining • Cue cards • Games and puzzles • Stations/centers • Small group instruction • Pair-share 	<p><u>Formative:</u></p> <ul style="list-style-type: none"> • In class practice problems • Do Now prompts • Class work • Homework • Problem solving activities • Open-ended questions • Study Island assignments <ul style="list-style-type: none"> • Diagnostic Tests • Practice Test 	12 days

Unit 4:

Grade: 10 - 12

Date: May 2012

NJ-CCSS Domain Essential Questions		NJ-CCSS Cluster.Standard Standards for Mathematical Practice		
L Vocabulary Acquisition and Use What new vocabulary do I need to improve my scores on the Reading Comprehension section?		English LA: 9-10,11-12.L4-L5,L6		
Skills/Objectives SWBAT...	Instructional Strategies Activities/ Materials /Technology Interdisciplinary Connections Cultural Diversity	Modifications ESL / Special Education Academic Support/G&T Differentiated Instruction	Assessments Formative Summative Benchmarks	Pacing
Obj. 4.1 Completing exercises involving definitions, applications, comparisons, and synonyms for the following areas: Greek myths and history, Roman (Latin) myths and history, Art , Social studies, Literature, Social studies and American History	<u>Materials/Technology/Resources:</u> Study Island software, Kaplan PSAT, SAT software <u>Interdisciplinary Connections:</u> Reading/ English selections to provide model essays and application of vocabulary	<ul style="list-style-type: none"> • Group investigations • Note taking guides • Daily record-keeping assistance • KWL strategies • Graphic organizers • Mnemonics • Highlighting/and underlining • Cue cards • Simulations • Games and puzzles • Stations/centers • Small group instruction • Pair-share 	<u>Formative:</u> <ul style="list-style-type: none"> • In class practice problems • Board work • Do Now prompts • Class work • Homework • Problem solving activities • Think and Discuss • Open-ended questions • Exit prompts • Study Island assignments <ul style="list-style-type: none"> • Diagnostic Tests • Practice Test 	13 days

Unit 5:

Grade: 10 - 12

Date: May 2012

NJ-CCSS Domain Essential Questions		NJ-CCSS Cluster.Standard Standards for Mathematical Practice		
W Text Types and Purposes How do I improve my writing skills to improve my score on the essay in the Writing section?		English LA: 9-10,11-12.W1-W10		
Skills/Objectives SWBAT...	Instructional Strategies Activities/ Materials /Technology Interdisciplinary Connections Cultural Diversity	Modifications ESL / Special Education Academic Support/G&T Differentiated Instruction	Assessments Formative Summative Benchmarks	Pacing
Obj. 5.1 Practice writing 25 minute essays following the “5-6 paragraph cookie cutter model” suggested by ETS Obj 5.2 Holistically grade one’s own essays and those of other students based on samples provide by ETS and other test makers	<ul style="list-style-type: none"> • Writing exercises • Grading exercises • Editing exercises • Improving paragraphs by adding, deleting, or reordering sentences 	<ul style="list-style-type: none"> • Assignment modification • Group investigations • Note taking guides • Daily record-keeping assistance • Previewing materials • KWL strategies • Graphic organizers • Highlighting/and underlining • Cue cards • Games and puzzles • “Think alouds” • Reward systems • Pair-share 	<u>Formative:</u> <ul style="list-style-type: none"> • In class practice problems • Do Now prompts • Class work • Homework • Think and Discuss • Open-ended questions • Study Island assignments • Diagnostic Test • Practice Test 	15 days

Unit 6:

Grade: 10 - 12

Date: May 2012

NJ-CCSS Domain Essential Questions		NJ-CCSS Cluster.Standard Standards for Mathematical Practice		
TEST TAKING STRATEGIES <ul style="list-style-type: none"> How do I improve my overall test taking skills and strategies 				
Skills/Objectives SWBAT...	Instructional Strategies Activities/ Materials /Technology Interdisciplinary Connections Cultural Diversity	Modifications ESL / Special Education Academic Support/G&T Differentiated Instruction	Assessments Formative Summative Benchmarks	Pacing
Obj. 6.1 Identify level 5 questions on all 3 sections and determine when to skip them and when to put in additional time to solve them Obj. 6.2 Work in small groups on multiple tests in each section –discussing how to get the right answers Obj. 6.3 Practice short timed tests to improve speed and accuracy on passages in the reading comprehension section Obj. 6.4 Find and use appropriate free and for cost resources to improve test scores	<ul style="list-style-type: none"> Classroom discussion Teacher presentation Textbook reading (for instructions and sample problems Worksheets Practice problems Baron’s 2400 text complete one on-line test 5th complete test <p><u>Materials/Technology/Resources:</u> Calculators, Study Island software, Kaplan PSAT, SAT software</p> <p><u>Interdisciplinary Connections:</u> Reading/ English to properly apply newly learned skills</p>	<ul style="list-style-type: none"> Group investigations Note taking guides KWL strategies Graphic organizers Mnemonics Cue cards Games and puzzles Stations/centers Small group instruction 	<p><u>Formative:</u></p> <ul style="list-style-type: none"> In class practice problems Board work Do Now prompts Class work Homework Problem solving activities Think and Discuss Open-ended questions Exit prompts Study Island assignments <ul style="list-style-type: none"> Diagnostic Tests Practice Test 	10 days

NORTH BRUNSWICK TOWNSHIP HIGH SCHOOL

(2693) Sat Preparation

Grades (10 - 12)

2.5 Credits - 1 Semester

Prerequisite: Completed Algebra I And Geometry (Or Equivalent)

This general elective semester course will consist of the review of one marking period of verbal skills and one marking period of mathematical concepts covered on the SAT I. Students will study specific content, take practice examinations, and identify their strengths and weaknesses based on their individual results. In addition to specific subject area content, students will be exposed to test-taking strategies and general study skill techniques. It is strongly recommended for students who need to review vocabulary strategies as well as algebraic and geometric concepts. The course may be taken by students who have successfully completed the equivalent of the standard Algebra I and Geometry courses.

Proficiencies:

At the completion of the course, the student should be able to successfully answer questions based on:

1. basic arithmetic operations.
2. basic algebraic operations.
3. use of college level vocabulary in sentence completions.
4. reading comprehension of short and long single passages.
5. reading comprehension of double passages.
6. basic Algebra II concepts including right triangle trig and discrete math.
7. application of arithmetic and algebraic concepts to word problems.
8. interpretation of various representations of data.
9. writing through correction of grammatical errors.
10. writing of a logical, grammatically correct essay using appropriate vocabulary and examples.

Course Requirements:

Students will be expected to:

1. maintain a high level of participation and preparedness, bringing necessary supplies to class daily.
2. attend class regularly with class attendance counting as part of weekly performance grade.
3. complete all assignments
4. successfully accomplish all graded work to include unit tests, quizzes, and reports/ class projects.
5. be cooperative in class and contribute to the growth of the class.

Evaluation Procedures:

Performance Assessments (Based on improvement over initial diagnostic test) (5% = B, 7% = B+, 10% = A, 10% in all categories = A+)	80%
Homework	15%
Classwork/Preparedness	5%