

Stanford Achievement Test, 10th Edition (SAT-10)

In the 2004-05 school year, the district implemented the use of SAT-10 (in place of SAT-9). This change was motivated by the fact that the state testing program incorporated SAT-10 into FCAT testing for 3rd – 10th graders in Spring 2005.

In Lee County, all students in Kindergarten, first and second grades participate in SAT-10 testing in reading and math usually given in April of each year over a three or four day period.

Reading

SAT-10 measures important reading components from recognizing sounds and letters to word identification to vocabulary and comprehension skills.

These are the test components for each grade level:

- Kindergarten: Sounds and Letters (25 minutes)
 - Word Reading (25 minutes)
 - Sentence Reading (30 minutes)
- First Grade: Word Study Skills (20 minutes)
 - Word Reading (25 minutes)
 - Sentence Reading (30 minutes)
 - Reading Comprehension (40 minutes)
- Second Grade: Word Study Skills (20 minutes)
 - Reading Vocabulary (20 minutes)
 - Reading Comprehension (40 minutes)

Math

SAT-10 subtests measure math content and processes identified by the National Council of Teachers of Mathematics including number sense and operations, patterns, relationships, and measurement.

These are the test components for each grade level:

- Kindergarten: Total Math (30 minutes)
- First Grade: Problem Solving (50 minutes)
 - Procedures (30 minutes)
- Second Grade: Problem Solving (50 minutes)
 - Procedures (30 minutes)

Reading

Sounds and Letters

Before students can read connected discourse with fluency and good comprehension, they need to develop a variety of prereading skills. The Sounds and Letters subtest measures those important early reading skills that form the basis for constructing meaning with text.

Clusters	Item Numbers
<p>Phonological Awareness Demonstrate the ability to distinguish between auditory likenesses and differences. Demonstrate the ability to match two words that begin with the same sounds or that end with the same sounds.</p>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18
<p>Orthographic Awareness Demonstrate the ability to determine the distinctive characteristics of given visual elements.</p>	19, 20, 21, 22, 23, 24
<p>Alphabetic Principles Demonstrate the ability to recognize letters and match letters with the sounds those letters represent.</p>	25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39,40

Word Reading

As students begin formal reading instruction, they are expected to apply their newly learned decoding skills to the words already existing in their listening/speaking vocabularies. The Word Reading subtest focuses on appropriate word recognition development.

Clusters	Item Numbers
<p>Printed Word to Spoken Word Demonstrate the ability to identify the printed name for a picture of an object after the name has been pronounced.</p>	1,2,3,4,5,6,
<p>Printed Word to Picture Demonstrate the ability to identify the printed name for a picture of an object.</p>	7, 8, 9, 10, 11, 12, 13, 14
<p>Multiple Printed Words to Picture Demonstrate the ability to identify two or more printed words that are associated with a given picture.</p>	15, 16, 17, 18, 19, 20, 21, 22
<p>Dictated Word to Printed Word Demonstrate the ability to identify a printed memorized word that has been pronounced.</p>	23, 24, 25, 26, 27, 28, 29, 30

Sentence Reading

The goal of reading instructions is the development of the reading and thinking skills that enable students to comprehend connected discourse. By the middle of kindergarten, simple sentence structures are generally familiar to most students. The Sentence Reading subtest measures students' ability to comprehend single, simple sentences and two related sentences.

Clusters	Item Numbers
<p>Predictable Text Demonstrate the ability to comprehend printed predictable sentences</p>	1, 2, 3, 4, 5, 6, 7, 8
<p>Onset-Rime Demonstrate the ability to comprehend simple printed sentences with decodable onset-rime.</p>	9, 10, 11, 12, 13, 14, 15, 16, 17, 18
<p>Simple Sentence Demonstrate the ability to comprehend printed simple sentences.</p>	19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30

Mathematics

In the Mathematics subtests, each item is classified first by its mathematical context and then according to the mathematical process it assesses.

Clusters	Item Numbers
<p>Number Sense and Operations Demonstrate understanding of the meaning and use of numbers, the various representations of numbers, number systems, and the relationships between and among numbers. Demonstrate understanding of the meaning of operations, the relationship between operations, and practical settings in which a specific operation or set of operations is appropriate.</p> <p>Patterns, Relationships, and Algebra Describe, complete, continue, and demonstrate understanding of patterns involving numbers, symbols, and geometric figures. Patterns with numbers include those found in lists, function tables, ratios and proportions, and matrices. Demonstrate understanding of elementary algebraic principles as found in the relationships between mathematical situations and algebraic symbolism.</p> <p>Data, Statistics, and Probability Describe, interpret, and make predictions based on the analysis of data presented in a variety of ways, including graphs, plots, tables, and lists. Demonstrate understanding of basic probability concepts.</p> <p>Geometry and Measurement Demonstrate understanding of the characteristics and properties of plane and solid figures, coordinate geometry, and spatial reasoning. Demonstrate understanding of the meaning and use of various measurement systems, the tools of measurement, and the integral role of estimation in measurement.</p>	<p>1,2,3,4,5,6,7,8,9,10,11,12,13, 14,15,16,17,18,19,20,,21,22</p> <p>23,24,25,26</p> <p>27, 28, 29, 30</p> <p>31, 32, 33, 34, 35, 36, 37, 38, 39, 40</p>
<p><u>Process</u></p> <p>Communication and Representation Demonstrate an understanding of the symbols and terms utilized in mathematics, and correctly interpret alternative representations of numbers, expressions, and data.</p> <p>Estimation Apply estimation strategies in problem solving and determine the reasonableness of results.</p> <p>Mathematical Connections Demonstrate an understanding of the interrelatedness of mathematical concepts, procedures, and processes both among different mathematical topics and with other content areas.</p> <p>Reasoning and Problem Solving Demonstrate the ability to apply inductive, deductive, or spatial reasoning and to make valid inferences and draw valid conclusions. Demonstrate the ability to apply strategies to solve conventional and nonroutine problems.</p>	<p>1, 2, 3, 6, 8, 10, 11, 12, 14, 20, 28, 31</p> <p>37,38,39</p> <p>7, 9, 15, 17, 22, 23, 24, 25, 27, 29, 30, 32, 33, 34, 36, 40</p> <p>4, 5, 13, 16, 18, 19, 21, 26, 35</p>

Primary 1 - Item Classification by Cluster

Word Study Skills

Before students can read connected discourse with fluency and good comprehension, they need to develop a variety of prereading skills. The Word Study Skills subtest measures those important early reading skills that form the basis for constructing meaning with text.

Clusters	Item Numbers
<p>Structural Analysis Demonstrate the ability to recognize within words the structural elements required for decoding.</p>	1,2,3,4,5,6,7, 8, 9, 10, 11, 12
<p>Phonetic Analysis-Consonant Sounds Demonstrate the ability to relate consonant sounds to their most common spellings.</p>	13, 15, 16, 18, 20, 21, 25, 26, 28
<p>Phonetic Analysis-Vowel Sounds Demonstrate the ability to relate vowel sounds to their most common spellings.</p>	14, 17, 19, 22, 23, 24, 27, 29, 30

Word Reading

As students begin formal reading instruction, they are expected to apply their newly learned decoding skills to the words already existing in their listening/speaking vocabularies. The Word Reading subtest focuses on appropriate word recognition development.

Clusters	Item Numbers
<p>Multiple Printed Words to Picture Demonstrate the ability to identify two or more printed words that are associated with a given picture.</p>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30

Sentence Reading

The goal of reading instruction is the development of the reading and thinking skills that enable students to comprehend connected discourse. By the middle of kindergarten, simple sentence structures are generally familiar to most students. The Sentence Reading subtest measures students' ability to comprehend single, simple sentences and two related sentences.

Clusters	Item Numbers
<p>Predictable Text Demonstrate the ability to comprehend printed predictable sentences.</p>	1,2,3,4,5
<p>Onset-Rime Demonstrate the ability to comprehend simple printed sentences with decodable onset-rime.</p>	6, 7, 8, 9, 10, 11, 12, 13, 14, 15
<p>Two Simple Sentences Demonstrate the ability to comprehend two related printed sentences.</p>	16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30

Primary 1 - Item Classification by Cluster

Reading Comprehension

The goal of reading instruction is the development of the reading and thinking skills that enable students to comprehend connected discourse. The Reading Comprehension subtest employs three different formats, each involving increasingly larger pieces of conceptually appropriate text. The reading selections, reflecting literature-based curricula in most classrooms today, include a variety of topics and diverse cultural themes that will appeal to students of varying backgrounds, experiential levels, and interests.

Clusters/Subclusters	Item Numbers
<p><i>Two-Sentence Stories</i> Demonstrate comprehension of a two-sentence story by identifying the picture described by the story.</p>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
<p><i>Cloze</i> Demonstrate comprehension of explicit and implicit information in short reading selections by completing sentences presented in modified doze format.</p>	11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22
<p><i>Short Passages with Questions</i> Demonstrate comprehension of explicit and implicit information in short reading selections by answering questions about the passages.</p>	
<p>Literary Demonstrate the ability to construct meaning with material typically read for enjoyment.</p>	23, 24, 25, 32, 33, 34
<p>Informational Demonstrate the ability to construct meaning with material typically found in grade-appropriate textbooks and other sources of information.</p>	26, 27, 28, 38, 39, 40
<p>Functional Demonstrate the ability to construct meaning with material typically encountered in everyday-life situations.</p>	29, 30, 31, 35, 36, 37
<p><u>Process</u></p>	
<p>Initial Understanding Demonstrate the ability to comprehend explicitly stated relationships in a variety of reading selections.</p>	23, 24, 26, 27, 31, 34
<p>Interpretation Demonstrate the ability to form an interpretation of a variety of reading selections based on explicit and implicit information in the selections.</p>	28, 29, 30, 35, 37, 38, 39, 40
<p>Critical Analysis and Strategies Demonstrate the ability to identify characteristics of genre and identify unknown words in context.</p>	25, 32, 33, 36

Mathematics

Mathematics Problem Solving

The National Council of Teachers of Mathematics has provided the educational community with a foundation of mathematical content and tightly interwoven processes from which to build optimal and appropriate curricular opportunities for all students. The Mathematics Problem Solving subtest is an assessment of student proficiency that builds on this comprehensive foundation and reflects the reality that mathematics and problem solving are integral parts of everyday life. In the Mathematics Problem Solving subtest, each item is classified first according to its mathematics content and then according to the mathematics process it assesses.

Clusters	Item Numbers
<p><i>Number Sense and Operations</i></p> <p>Demonstrate understanding of the meaning and use of numbers, the various representations of numbers, number systems, and the relationships between and among numbers. Demonstrate understanding of the meaning of operations, the relationship between operations, and the practical settings in which a specific operation or set of operations is appropriate.</p>	<p>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24</p>
<p><i>Patterns, Relationships, and Algebra</i></p> <p>Describe, complete, continue, and demonstrate understanding of patterns involving numbers, symbols, and geometric figures. Patterns with numbers include those found in lists, function tables, ratios and proportions, and matrices. Demonstrate understanding of elementary algebraic principles as found in the relationships between mathematical situations and algebraic symbolism.</p>	<p>25, 26, 27, 28</p>
<p><i>Data, Statistics, and Probability</i></p> <p>Describe, interpret, and make predictions based on the analysis of data presented in a variety of ways, including graphs, plots, tables, and lists. Demonstrate understanding of basic probability concepts.</p>	<p>29, 30, 31, 32</p>
<p><i>Geometry and Measurement</i></p> <p>Demonstrate understanding of the characteristics and properties of plane and solid figures, coordinate geometry, and spatial reasoning. Demonstrate understanding of the meaning and use of various measurement systems, the tools of measurement, and the integral role of estimation in measurement.</p>	<p>33, 34, 35, 36, 37, 38, 39, 40, 41, 42</p>

Mathematics

Mathematics Problem Solving

<u>Process</u>	
<p>Communication and Representation Demonstrate an understanding of the symbols and terms utilized in mathematics, and correctly interpret alternative representations of numbers, expressions, and data.</p>	3, 11, 14, 34, 36, 41
<p>Estimation Apply estimation strategies in problem solving and determine the reasonableness of results.</p>	37, 39, 40
<p>Mathematical Connections Demonstrate an understanding of the interrelatedness of mathematical concepts, procedures, and processes both among different mathematical topics and with other content areas.</p>	2, 5, 6, 7, 9, 10, 13, 15, 16, 18, 22, 25, 26, 27, 28, 29, 30, 31, 33, 35, 38, 42
<p>Reasoning and Problem Solving Demonstrate the ability to apply inductive, deductive, or spatial reasoning and to make valid inferences and draw valid conclusions. Demonstrate the ability to apply strategies to solve conventional and nonroutine problems.</p>	1, 4, 8, 12, 17, 19, 20, 21, 23, 24, 32

Mathematics Procedures

It is the goal of mathematics education to develop people who are creative problem solvers. However, the lack of computational fluency can adversely affect the process of problem solving. Individuals who are truly successful in applying mathematics in real-world situations must be fluent in their ability to integrate knowledge of mathematical facts, proficient with mathematical procedures, and possess a fundamental understanding of the concepts of mathematics. The Mathematics Procedures subtest assesses a student's ability to combine and use these three key components of foundational mathematics. In the Mathematics Procedures subtest, each item is classified by its mathematics content and then according to the mathematics process it assesses.

Clusters	Item Numbers
<p>Number Facts</p>	1, 2, 5, 6, 9, 10, 21, 22
<p>Computation with Whole Numbers</p>	3, 4, 7, 8, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 23, 24, 25, 26, 27, 28, 29, 30
<p><u>Process</u></p>	
<p>Computation in Context Demonstrate the ability to solve everyday problems requiring addition and subtraction.</p>	1, 2, 3, 4, 5, 6, 7, 8
<p>Computation with Symbolic Notation Demonstrate the ability to solve addition and subtraction problems represented by the symbols and notation of arithmetic.</p>	9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30

Primary 2— Item Classification by Cluster

Word Study Skills

Before students can read connected discourse with fluency and good comprehension, they need to develop a variety of prereading skills. The Word Study Skills subtest measures those important early reading skills that form the basis for constructing meaning with text.

Clusters	Item Numbers
<i>Structural Analysis</i> Demonstrate the ability to recognize within words the structural elements required for decoding.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
<i>Phonetic Analysis-Consonant Sounds</i> Demonstrate the ability to relate consonant sounds to their most common spellings.	13, 14, 16, 17, 20, 22, 23, 24, 25
<i>Phonetic Analysis-Vowel Sounds</i> Demonstrate the ability to relate vowel sounds to their most common spellings.	15, 18, 19, 21, 26, 27, 28, 29, 30

Reading Vocabulary

The Reading Vocabulary subtest focuses on grade-appropriate reading vocabulary development at each level. Students are assessed on their knowledge of synonyms, their ability to determine which meaning of a multiple-meaning word is appropriate in a given context, and their ability to use context clues in order to assign meaning to an unknown word.

Clusters	Item Numbers
<i>Synonyms</i> Demonstrate the ability to recognize a synonym for a printed word.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18
<i>Multiple-Meaning Words</i> Demonstrate the ability to determine in a given context the meaning of words with multiple meanings.	19, 20, 21, 22, 23, 24
<i>Context Clues</i> Demonstrate the ability to use context clues to assign meaning to an unknown word.	25, 26, 27, 28, 29, 30

Primary 2— Item Classification by Cluster

Reading Comprehension

The goal of reading instruction is the development of the reading and thinking skills that enable students to comprehend connected discourse. The Reading Comprehension subtest is composed of reading selections accompanied by questions about each selection. Some narrative and informational passages were written by award-winning authors of children’s and young people’s literature. The selections themselves, reflecting literature-based curricula in most classrooms today, include a variety of topics and diverse cultural themes that will appeal to students of varying backgrounds, experiential levels, and interests.

Clusters	Item Numbers
<p><i>Literary</i> Demonstrate the ability to construct meaning with material typically read for enjoyment.</p>	9, 10, 11, 12, 13, 22, 23, 24, 25, 26, 37, 38, 39,40
<p><i>Informational</i> Demonstrate the ability to construct meaning with material typically found in grade-appropriate textbooks and other sources of information.</p>	4, 5, 6, 7, 8, 19, 20, 21, 32, 33, 34, 35, 36
<p><i>Functional</i> Demonstrate the ability to construct meaning with material typically encountered in everyday-life situations.</p>	1, 2, 3, 14, 15, 16, 17, 18, 27, 28, 29, 30, 31
<p><u>Process</u></p> <p><i>Initial Understanding</i> Demonstrate the ability to comprehend explicitly stated relationships in a variety of reading selections.</p> <p><i>Interpretation</i> Demonstrate the ability to form an interpretation of a variety of reading selections based on explicit and implicit information in the selections.</p> <p><i>Critical Analysis and Strategies</i> Demonstrate the ability to synthesize and evaluate explicit and implicit information, as well as recognize and apply text factors and reading strategies in a variety of reading selections.</p>	2, 5, 9, 17, 23, 31, 36, 39 4, 6, 10, 11, 12, 15, 16, 18, 20, 21, 25, 28, 29, 30, 33, 34, 37, 38 1, 3, 7, 8, 13, 14, 19, 22, 24, 26, 27, 32, 35, 40

Mathematics

Mathematics Problem Solving

The National Council of Teachers of Mathematics has provided the educational community with a foundation of mathematical content and tightly interwoven processes from which to build optimal and appropriate curricular opportunities for all students. The Mathematics Problem Solving subtest is an assessment of student proficiency that builds on this comprehensive foundation and reflects the reality that mathematics and problem solving are integral parts of everyday life. In the Mathematics Problem Solving subtest, each item is classified first according to its mathematics content and then according to the mathematics process it assesses.

Clusters	Item Numbers
<p><i>Number Sense and Operations</i></p> <p>Demonstrate understanding of the meaning and use of numbers, the various representations of numbers, number systems, and the relationships between and among numbers. Demonstrate understanding of the meaning of operations, the relationship between operations, and the practical settings in which a specific operation or set of operations is appropriate.</p>	<p>1, 2, 3, 4, 5, 6, 7, 8, 9, 10,11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24</p>
<p><i>Patterns, Relationships, and Algebra</i></p> <p>Describe, complete, continue, and demonstrate understanding of patterns involving numbers, symbols, and geometric figures. Patterns with numbers include those found in lists, function tables, ratios and proportions, and matrices. Demonstrate understanding of elementary algebraic principles as found in the relationships between mathematical situations and algebraic symbolism.</p>	<p>25, 26, 27, 28</p>
<p><i>Data, Statistics, and Probability</i></p> <p>Describe, interpret, and make predictions based on the analysis of data presented in a variety of ways, including graphs, plots, tables, and lists. Demonstrate understanding of basic probability concepts.</p>	<p>29, 30, 31, 32, 33,34</p>
<p><i>Geometry and Measurement</i></p> <p>Demonstrate understanding of the characteristics and properties of plane and solid figures, coordinate geometry, and spatial reasoning. Demonstrate understanding of the meaning and use of various measurement systems, the tools of measurement, and the integral role of estimation in measurement.</p>	<p>35, 36, 37, 38, 39, 40, 41,42, 43, 44</p>

Mathematics

Mathematics Problem Solving

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Clusters	Item Numbers
<p><i>Number Sense and Operations</i> Demonstrate understanding of the meaning and use of numbers, the various representations of numbers, number systems, and the relationships between and among numbers. Demonstrate understanding of the meaning of operations, the relationship between operations, and the practical settings in which a specific operation or set of operations is appropriate.</p>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
<p><i>Patterns, Relationships, and Algebra</i> Describe, complete, continue, and demonstrate understanding of patterns involving numbers, symbols, and geometric figures. Patterns with numbers include those found in lists, function tables, ratios and proportions, and matrices. Demonstrate understanding of elementary algebraic principles as found in the relationships between mathematical situations and algebraic symbolism.</p>	25, 26, 27, 28
<p><i>Data, Statistics, and Probability</i> Describe, interpret, and make predictions based on the analysis of data presented in a variety of ways, including graphs, plots, tables, and lists. Demonstrate understanding of basic probability concepts.</p>	29, 30, 31, 32, 33,34
<p><i>Geometry and Measurement</i> Demonstrate understanding of the characteristics and properties of plane and solid figures, coordinate geometry, and spatial reasoning. Demonstrate understanding of the meaning and use of various measurement systems, the tools of measurement, and the integral role of estimation in measurement.</p>	35, 36, 37, 38, 39, 40, 41,42, 43, 44

Mathematics

<p><i>Process - Problem Solving</i></p> <p><i>Communication and Representation</i> Demonstrate an understanding of the symbols and terms utilized in mathematics, and correctly interpret alternative representations of numbers, expressions, and data.</p> <p><i>Estimation</i> Apply estimation strategies in problem solving and determine the reasonableness of results.</p> <p><i>Mathematical Connections</i> Demonstrate an understanding of the interrelatedness of mathematical concepts, procedures, and processes both among different mathematical topics and with other content areas.</p> <p><i>Reasoning and Problem Solving</i> Demonstrate the ability to apply inductive, deductive, or spatial reasoning and to make valid inferences and draw valid conclusions. Demonstrate the ability to apply strategies to solve conventional and nonroutine problems.</p>	<p>1, 4, 6, 12, 35, 36</p> <p>41,42, 44</p> <p>2, 7, 8, 9, 10, 11, 14, 19, 22, 23, 25, 26, 27, 28, 29, 30, 32, 33, 37, 38, 39, 43</p> <p>3, 5, 13, 15, 16, 17, 18, 20, 21, 24, 31, 34, 40</p>
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Mathematics Procedures

It is the goal of mathematics education to develop people who are creative problem solvers. However, the lack of computational fluency can adversely affect the process of problem solving. Individuals who are truly successful in applying mathematics in real-world situations must be fluent in their ability to integrate knowledge of mathematical facts, proficient with mathematical procedures, and possess a fundamental understanding of the concepts of mathematics. The Mathematics Procedures subtest assesses a student’s ability to combine and use these three key components of foundational mathematics. In the Mathematics Procedures subtest, each item is classified by its mathematics content and then according to the mathematics process it assesses.

Clusters	Item Numbers
<i>Number Facts</i>	1, 2, 5, 6, 9, 10, 18, 19, 20, 21, 28, 29, 30
<i>Computation with Whole Numbers</i>	3, 4, 7, 8, 11, 12, 13, 14, 15, 16, 17, 22, 23, 24, 25, 26, 27
<i>Process</i>	
<i>Computation in Context</i> Demonstrate the ability to solve everyday problems requiring addition, subtraction, and multiplication.	1, 2, 3, 4, 5, 6, 7, 8
<i>Computation with Symbolic Notation</i> Demonstrate the ability to solve addition, subtraction, and multiplication problems represented by the symbols and notation of arithmetic.	9, 10,11,12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30