

2018 International Conference Professional Development Day 1, Session 1: Overview

Information, Resources, and Strategies for the Classroom

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GED® Test: Mathematical Reasoning Performance Level Descriptors What Your Score Means: Level 1 — Below Passing

Test-takers who score at this level typically have a **limited but developing** proficiency in demonstrating skills in the following categories: number sense and computation, geometric measurement, data analysis and statistics, and algebraic expressions and functions.

Test-takers at the Below Passing level typically demonstrate the following skills:

Quantitative Problem Solving with Rational Numbers

- Apply number properties involving multiples and factors at a limited and inconsistent level
- Solve real-world problems using rational numbers at a limited and inconsistent level
- Compute unit rates at a limited and inconsistent level

Quantitative Problem Solving in Measurement

- Compute the area and perimeter of triangles and rectangles at a limited and inconsistent level
- Determine side lengths of triangles and rectangles when given area or perimeter at a limited and inconsistent level
- Represent, display, and interpret categorical data in circle and bar graphs
- Represent, display, and interpret categorical data in tables and scatter plots

Algebraic Problem Solving with Expressions and Equations

- Evaluate linear expressions
- Write linear expressions to represent context at a limited and inconsistent level
- Evaluate polynomial expressions at a limited and inconsistent level
- Write rational expressions to represent context at a limited and inconsistent level
- Solve real-world problems involving linear equations at a limited and inconsistent level
- Solve algebraic and real-world problems involving systems of equations

Algebraic Problem Solving with Graphs and Functions

- Locate and plot points in the coordinate plane

- Interpret unit rate as the slope in a proportional relationship at a limited and inconsistent level
- For a linear or nonlinear relationship, sketch graphs and interpret key features of graphs and tables in terms of quantities
- Compare two different proportional relationships, each represented in different ways, at a limited and inconsistent level
- Represent or identify a function in a table or graph as having exactly one output for each input at a limited and inconsistent level
- Evaluate linear and quadratic functions at a limited and inconsistent level

In order to progress to the **Pass/High School Equivalency** level, test-takers need to:

1) continue to **strengthen** the skills listed in the Below Pass level, including:

- Apply number properties involving multiples and factors
- Solve real-world problems using rational numbers
- Compute unit rates
- Compute the area and perimeter of triangles and rectangles
- Determine side lengths of triangles and rectangles when given area or perimeter
- Write linear expressions to represent context
- Evaluate polynomial expressions
- Write rational expressions to represent context
- Solve real-world problems involving linear equations
- Interpret unit rate as the slope in a proportional relationship
- Compare two different proportional relationships, each represented in different ways
- Represent or identify a function in a table or graph as having exactly one output for each input
- Evaluate linear and quadratic functions

and

2) develop the following additional skills:

- Order fractions and decimals, including on a number line
- Simplify numerical expressions with rational exponents
- Identify absolute value of a rational number as its distance from 0 on the number line and determine the distance between two rational numbers on the number line
- Perform computations with rational numbers
- Compute numerical expressions with squares and square roots of positive, rational numbers
- Compute numerical expressions with cubes and cube roots of positive, rational numbers
- Determine when a numerical expression is undefined
- Use scale factors to determine the magnitude of a size change, and convert between actual drawings and scale drawings
- Solve arithmetic and real-world problems involving ratios and proportions a satisfactory level
- Solve multi-step arithmetic and real-world problems involving percents
- Compute the area and circumference of circles
- Determine the radius and diameter of circles when given area or circumference
- Compute the area and perimeter of polygons

- Determine side lengths of polygons when given area or perimeter
- Compute the area and perimeter of composite figures
- Use the Pythagorean theorem to determine unknown side lengths in a right triangle
- Compute volume and surface area of rectangular prisms
- Determine side lengths and height of rectangular prisms when given volume or surface area
- Compute volume and surface area of cylinders
- Determine radius, diameter, and height of cylinders, when given volume or surface area
- Compute volume and surface area of right prisms
- Determine side lengths and height of right prisms when given volume or surface area
- Determine side lengths and height of right pyramids and cones when given volume or surface area
- Compute volume and surface area of spheres
- Determine radius and diameter of spheres when given volume or surface area
- Compute volume and surface area of composite figures
- Represent, display, and interpret categorical data in dot plots, histograms, and box plots
- Calculate the median, mode, and weighted average, and calculate a missing data value, given the average and all the missing data values but one
- Use counting techniques to solve problems and determine combinations and permutations
- Compute with linear expressions
- Write linear expressions to represent context
- Evaluate linear expressions
- Compute with polynomials
- Factor polynomial expressions
- Write polynomial expressions to represent context
- Evaluate rational expressions
- Solve linear equations in one variable
- Write linear equations to represent context
- Solve linear inequalities in one variable
- Identify or graph the solution to a one variable linear inequality on a number line
- Solve real-world problems involving inequalities
- Write linear equations to represent context
- Solve quadratic equations in one variable
- Write quadratic equations to represent context
- Determine the slope of a line from a graph, equation, or table
- Graph two-variable linear equations
- Write the equation of a line with a given slope through a given point
- Write the equation of a line passing through two given distinct points
- Use slope to identify parallel and perpendicular lines and to solve geometric problems
- Compare two different linear or quadratic functions, each represented in different ways

GED[®] Test: Mathematical Reasoning

Performance Level Descriptors

What Your Score Means: Level 2 — Pass/High School Equivalency

Test-takers who score at this level typically have a **satisfactory** proficiency in demonstrating skills in the following categories: number sense and computation, geometric measurement, data analysis and statistics, and algebraic expressions and functions.

Test-takers are generally able to demonstrate knowledge of and ability with the skills identified in the Below Passing level at a satisfactory level as well as the following skills:

Quantitative Problem Solving with Rational Numbers

- Order fractions and decimals, including on a number line
- Apply number properties involving multiples and factors at a satisfactory level
- Simplify numerical expressions with rational exponents at a satisfactory level
- Identify absolute value of a rational number as its distance from 0 on the number line and determine the distance between two rational numbers on the number line, at a satisfactory level
- Perform computations with rational numbers
- Compute numerical expressions with squares and square roots of positive, rational numbers at a satisfactory level
- Compute numerical expressions with cubes and cube roots of positive, rational numbers
- Determine when a numerical expression is undefined at a satisfactory level
- Solve real-world problems using rational numbers at a satisfactory level
- Compute unit rates at a satisfactory level
- Use scale factors to determine the magnitude of a size change, and convert between actual drawings and scale drawings
- Solve arithmetic and real-world problems involving ratios and proportions a satisfactory level
- Solve multi-step arithmetic and real-world problems involving percents

Quantitative Problem Solving in Measurement

- Compute the area and perimeter of triangles and rectangles at a satisfactory level
- Determine side lengths of triangles and rectangles when given area or perimeter at a satisfactory level
- Compute the area and circumference of circles
- Determine the radius and diameter of circles when given area or circumference
- Compute the area and perimeter of polygons

- Determine side lengths of polygons when given area or perimeter
- Compute the area and perimeter of composite figures
- Use the Pythagorean theorem to determine unknown side lengths in a right triangle at a satisfactory level
- Compute volume and surface area of rectangular prisms
- Determine side lengths and height of rectangular prisms when given volume or surface area
- Compute volume and surface area of cylinders at a satisfactory level
- Determine radius, diameter, and height of cylinders, when given volume or surface area, at a satisfactory level
- Compute volume and surface area of right prisms
- Determine side lengths and height of right prisms when given volume or surface area
- Compute volume and surface area of right pyramids and cones
- Determine side lengths, radius, diameter, and height of right pyramids and cones when given volume or surface area
- Compute volume and surface area of spheres
- Determine radius and diameter of spheres when given volume or surface area
- Compute volume and surface area of composite figures at a satisfactory level
- Represent, display, and interpret categorical data in dot plots, histograms, and box plots
- Calculate the median, mode, and weighted average, and calculate a missing data value, given the average and all the missing data values but one
- Use counting techniques to solve problems and determine combinations and permutations at a satisfactory level

Algebraic Problem Solving with Expressions and Equations

- Compute with linear expressions
- Write linear expressions to represent context at a satisfactory level
- Compute with polynomials at a satisfactory level
- Evaluate polynomial expressions at a satisfactory level
- Factor polynomial expressions at a satisfactory level
- Write polynomial expressions to represent context
- Evaluate rational expressions
- Write rational expressions to represent context at a satisfactory level
- Solve linear equations in one variable
- Solve real-world problems involving linear equations at a satisfactory level
- Write linear equations to represent context
- Solve linear inequalities in one variable at a satisfactory level
- Identify or graph the solution to a one variable linear inequality on a number line
- Solve real-world problems involving inequalities at a satisfactory level
- Write linear equations to represent context at a satisfactory level
- Solve quadratic equations in one variable at a satisfactory level
- Write quadratic equations to represent context

Algebraic Problem Solving with Graphs and Functions

- Determine the slope of a line from a graph, equation, or table at a satisfactory level
- Interpret unit rate as the slope in a proportional relationship at a satisfactory level
- Graph two-variable linear equations at a satisfactory level
- Write the equation of a line with a given slope through a given point at a satisfactory level
- Write the equation of a line passing through two given distinct points
- Use slope to identify parallel and perpendicular lines and to solve geometric problems at a satisfactory level
- Compare two different proportional relationships, each represented in different ways, at a satisfactory level
- Represent or identify a function in a table or graph as having exactly one output for each input at a satisfactory level
- Evaluate linear and quadratic functions at a satisfactory level
- Compare two different linear or quadratic functions, each represented in different ways, at a satisfactory level

In order to progress to the **Pass+** level, test-takers need to:

- 1) continue to **strengthen** the skills listed in the Below Pass and the Pass/High School Equivalency levels, including:
 - Simplify numerical expressions with rational exponents
 - Identify absolute value of a rational number as its distance from 0 on the number line and determine the distance between two rational numbers on the number line
 - Compute numerical expressions with squares and square roots of positive, rational numbers
 - Determine when a numerical expression is undefined
 - Solve real-world problems using rational numbers
 - Solve arithmetic and real-world problems involving ratios and proportions
 - Use the Pythagorean theorem to determine unknown side lengths in a right triangle
 - Compute volume and surface area of cylinders
 - Determine radius, diameter, and height of cylinders, when given volume or surface area
 - Compute volume and surface area of composite figures
 - Use counting techniques to solve problems and determine combinations and permutations
 - Compute with polynomials
 - Factor polynomial expressions
 - Solve linear inequalities in one variable
 - Solve real-world problems involving inequalities
 - Write linear inequalities to represent context
 - Solve quadratic equations in one variable
 - Determine the slope of a line from a graph, equation, or table
 - Graph two-variable linear equations
 - Write the equation of a line with a given slope through a given point
 - Use slope to identify parallel and perpendicular lines and to solve geometric problems
 - Compare two different linear or quadratic functions, each represented in different ways

and

2) develop the following skills:

- Use counting techniques to solve problems and determine combinations and permutations
- Compute with rational expressions

GED[®] Test: Mathematical Reasoning

Performance Level Descriptors

What Your Score Means: Level 2 — Skills at Pass+

Test-takers who score at this level typically have a **strong** proficiency in demonstrating skills in the following categories: number sense and computation, geometric measurement, data analysis and statistics, and algebraic expressions and functions.

Test-takers are generally able to demonstrate knowledge of and ability with the skills identified in the Below Passing level and the Pass/High School Equivalency level, as well as the following skills:

Quantitative Problem Solving with Rational Numbers

- Simplify numerical expressions with rational exponents at a strong level
- Identify absolute value of a rational number as its distance from 0 on the number line and determine the distance between two rational numbers on the number line, at a strong level
- Compute numerical expressions with squares and square roots of positive, rational numbers at a strong level
- Determine when a numerical expression is undefined at a strong level
- Solve arithmetic and real-world problems involving ratios and proportions at a strong level

Quantitative Problem Solving in Measurement

- Use the Pythagorean theorem to determine unknown side lengths in a right triangle at a strong level
- Compute volume and surface area of cylinders at a strong level
- Determine radius, diameter, and height of cylinders, when given volume or surface area, at a strong level
- Compute volume and surface area of composite figures at a strong level
- Use counting techniques to solve problems and determine combinations and permutations at a strong level
- Determine the probability of simple and compound events at a strong level

Algebraic Problem Solving with Expressions and Equations

- Compute with polynomials at a strong level
- Factor polynomial expressions at a strong level
- Compute with rational expressions
- Solve linear inequalities in one variable at a strong level

- Solve real-world problems involving inequalities at a strong level
- Write linear inequalities to represent context at a strong level
- Solve quadratic equations in one variable at a strong level

Algebraic Problem Solving with Graphs and Functions

- Determine the slope of a line from a graph, equation, or table at a strong level
- Graph two-variable linear equations at a strong level
- Write the equation of a line with a given slope through a given point at a strong level
- Use slope to identify parallel and perpendicular lines and to solve geometric problems at a strong level
- Compare two different linear or quadratic functions, each represented in different ways, at a strong level

In order to progress to **Pass++**, test-takers need to continue to **strengthen** the skills listed in the GED® College Ready level, including:

- Compute volume and surface area of composite figures
- Use counting techniques to solve problems and determine combinations and permutations
- Write linear inequalities to represent context
- Solve quadratic equations in one variable
- Graph two-variable linear equations
- Use slope to identify parallel and perpendicular lines and to solve geometric problems
- Compare two different linear or quadratic functions, each represented in different ways

GED[®] Test: Mathematical Reasoning

Performance Level Descriptors

What Your Score Means: Level 2 — Skills at Pass++

Test-takers are generally able to demonstrate knowledge of and ability with the skills identified in the previous levels as well as the following skills:

Quantitative Problem Solving in Measurement

- Compute volume and surface area of composite figures at an outstanding level
- Use counting techniques to solve problems and determine combinations and permutations at an outstanding level
- Determine the probability of simple and compound events at an outstanding level

Algebraic Problem Solving with Expressions and Equations

- Write linear inequalities to represent context at an outstanding level
- Solve quadratic equations in one variable at an outstanding level

Algebraic Problem Solving with Graphs and Functions

- Graph two-variable linear equations at an outstanding level
- Use slope to identify parallel and perpendicular lines and to solve geometric problems at an outstanding level
- Compare two different linear or quadratic functions, each represented in different ways, at an outstanding level

GED[®] Test: Reasoning Through Language Arts

Performance Level Descriptors

What Your Score Means: Level 1 — Below Passing

Test-takers who score at this level are typically able to comprehend and analyze **simple** passages similar to those found in L.M. Montgomery's *Anne of Green Gables*, Joy Hakim's *A History of US*, and Colin A. Ronan's "Telescopes," and generally demonstrate **limited but developing** proficiency with the following skills:

Analyzing and Creating Text Features and Technique

- Make inferences about plot/sequence of events, characters/people, settings, or ideas in texts at a limited and/or inconsistent level
- Analyze relationships within texts, including how events are important in relation to plot or conflict; how people, ideas, or events are connected, developed, or distinguished; how events contribute to theme or relate to key ideas; or how a setting or context shapes structure and meaning, at a limited and/or inconsistent level
- Analyze the roles that details play in texts at a limited and/or inconsistent level
- Analyze how meaning or tone is affected when one word is replaced with another at a limited and/or inconsistent level
- Analyze the structural relationship between adjacent sections of text at a limited and/or inconsistent level
- Analyze transitional language and determine how it functions in a text at a limited and/or inconsistent level

Using Evidence to Understand, Analyze, and Create Arguments

- Comprehend explicit details and main ideas in a text at a limited and/or inconsistent level
- Summarize details and ideas in a text at a limited and/or inconsistent level
- Make sentence-level inferences about details that support main ideas at a limited and/or inconsistent level
- Determine which details support a main idea at a limited and/or inconsistent level
- Identify a theme, or identify which element(s) in a text support a theme at a limited and/or inconsistent level

Applying Knowledge of English Language Conventions and Usage

- Edit to correct errors involving frequently confused words at a limited and/or inconsistent level

- Edit to correct errors in straightforward subject-verb agreement at a limited and/or inconsistent level
- Edit to eliminate run-on sentences, fused sentences, or sentence fragments at a limited and/or inconsistent level
- Edit to ensure correct use of punctuation at a limited and/or inconsistent level

In order to progress to the **Pass/High School Equivalency** level, test-takers need to:

- 1) **strengthen** the skills listed in the **Below Passing** level and apply them to texts at a **more challenging** level of complexity, such as Sandra Cisneros' "Eleven," John Steinbeck's *Travels With Charley: In Search of America*, and Donald Mackay's *The Building of Manhattan*, with a particular focus on improving the following skills:
 - Make inferences about plot/sequence of events, characters/people, settings, or ideas in texts
 - Analyze the roles that details play in complex literary or informational texts
 - Analyze the structural relationship between adjacent sections of text
 - Comprehend explicit details and main ideas in a text
 - Determine which details support a main idea
 - Edit to ensure correct use of punctuation

and

- 2) **develop** the following additional skills:

- Order sequences of events in texts
- Determine the meaning of words or phrases as they are used in a text, including determining connotative and figurative meanings from context
- Analyze the impact of specific words, phrases, or figurative language in text, with a focus on an author's intent to convey information or construct an argument
- Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of ideas
- Determine an author's point of view or purpose of a text
- Infer an author's implicit as well as explicit purposes based on details in a text
- Analyze how an author uses rhetorical techniques to advance his or her point of view or achieve a specific purpose
- Infer implied main ideas in paragraphs and whole texts
- Draw conclusions or make generalizations that require synthesis of multiple main ideas in text
- Edit to eliminate dangling or misplaced modifiers or illogical word order
- Edit to correct errors in subject-verb or pronoun-antecedent agreement in more complicated situations
- Edit to ensure effective use of transitional words, conjunctive adverbs, and other words and phrases that support logic and clarity
- Edit to ensure correct use of capitalization

GED[®] Test: Reasoning Through Language Arts

Performance Level Descriptors

What Your Score Means: Level 2 — Pass/High School Equivalency

Test-takers who score at this level are typically able to demonstrate satisfactory proficiency with the skills identified in the Below Passing level as well as to comprehend and analyze **challenging** passages similar to Sandra Cisneros' "Eleven," John Steinbeck's *Travels With Charley: In Search of America*, and Donald Mackay's *The Building of Manhattan*. Test-takers who score in this performance level are typically able to demonstrate the following skills:

Analyzing and Creating Text Features and Technique

- Order sequences of events in texts at a satisfactory level
- Make inferences about plot/sequence of events, characters/people, settings, or ideas in texts at a satisfactory level
- Analyze relationships within texts, including how events are important in relation to plot or conflict; how people, ideas, or events are connected, developed, or distinguished; how events contribute to theme or relate to key idea; or how a setting or context shapes structure and meaning
- Analyze the roles that details play in complex literary or informational texts at a satisfactory level
- Determine the meaning of words and phrases as they are used in a text, including determining connotative and figurative meanings from context
- Analyze how meaning or tone is affected when one word is replaced with another, at a satisfactory level
- Analyze the impact of specific words, phrases, or figurative language in text, with a focus on an author's intent to convey information or construct an argument
- Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of ideas
- Analyze the structural relationship between adjacent sections of text at a satisfactory level
- Analyze transitional language or signal words and determine how they refine meaning, emphasize certain ideas, or reinforce an author's purpose, at a satisfactory level
- Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author's purpose

- Determine an author's point of view or purpose in texts, at a satisfactory level
- Infer an author's implicit as well as explicit purposes based on details in a text, at a satisfactory level
- Analyze how an author uses rhetorical techniques to advance his or her point of view or achieve a specific purpose

Using Evidence to Understand, Analyze, and Create Arguments

- Comprehend explicit details and main ideas in a text at a satisfactory level
- Summarize details and ideas in text at a satisfactory level
- Make sentence-level inferences about details that support main ideas at a satisfactory level
- Infer implied main ideas in paragraphs and whole texts at a satisfactory level
- Determine which details support a main idea at a satisfactory level
- Identify a theme, or identify which element(s) in a text support a theme at a satisfactory level
- Make evidence-based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations, at a satisfactory level
- Draw conclusions or make generalizations that require synthesis of multiple main ideas at a satisfactory level
- Identify specific pieces of evidence an author uses in support of claims or conclusions at a satisfactory level
- Evaluate the relevance and sufficiency of evidence offered in support of a claim at a satisfactory level

Applying Knowledge of English Language Conventions and Usage

- Edit to correct errors involving frequently confused words at a satisfactory level
- Edit to correct errors in pronoun usage at a satisfactory level
- Edit to eliminate dangling or misplaced modifiers or illogical word order at a satisfactory level
- Edit to correct errors in subject-verb or pronoun-antecedent agreement in more complicated situations at a satisfactory level
- Edit to eliminate wordiness or awkward sentence construction at a satisfactory level
- Edit to ensure effective use of transitional words, conjunctive adverbs, and other words and phrases that support logic and clarity, at a satisfactory level
- Edit to ensure correct use of capitalization at a satisfactory level
- Edit to eliminate run-on sentences, fused sentences, or sentence fragments at a satisfactory level
- Edit to ensure correct use of apostrophes with possessive nouns at a satisfactory level
- Edit to ensure correct use of punctuation at a satisfactory level

In order to progress to the **Pass+** level, test-takers need to:

- 1) continue to **strengthen** the skills listed in the Below Passing and Pass/High School Equivalency levels and apply them to **complex** texts, such as Chinua Achebe's *Things Fall Apart*, Martin Luther King Jr.'s "Letter from Birmingham Jail," and Euclid's *Elements*, with a particular focus on improving the following skills:
 - Infer relationships between ideas in a text

- Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author's purpose
- Identify specific pieces of evidence an author uses in support of claims or conclusions
- Evaluate the relevance and sufficiency of evidence offered in support of a claim
- Edit to eliminate wordiness or awkward sentence construction

and

2) develop the following additional skills:

- Analyze how an author distinguishes his or her position or responds to conflicting viewpoints
- Compare two passages that present related ideas or themes in different genres or formats in order to evaluate differences in scope, purpose, emphasis, intended audience, or overall impact
- Delineate the specific steps of an argument the author puts forward, including how the argument's claims build on one another
- Distinguish claims that are supported by reasons and evidence from claims that are not
- Assess whether the reasoning is valid; identify fallacious reasoning in an argument and evaluate its impact
- Identify an underlying premise or assumption in an argument and evaluate the logical support and evidence provided
- Edit to eliminate non-standard or informal usage
- Edit to ensure parallelism and proper subordination and coordination

GED® Test: Reasoning Through Language Arts

Performance Level Descriptors

What Your Score Means: Level 2 — Skills at Pass+

Test-takers who score at this performance level are typically able to analyze complex passages similar to Chinua Achebe's *Things Fall Apart*, Martin Luther King Jr.'s "Letter from Birmingham Jail," and Euclid's *Elements*, as well as demonstrating strong abilities in the skills identified in the Pass/High School Equivalency level, including the following:

Analyzing and Creating Text Features and Technique

- Analyze the impact of specific words, phrases, or figurative language in texts, with a focus on an author's intent to convey information or construct an argument, at a strong level
- Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author's purpose, at a strong level
- Determine an author's point of view or purpose in texts, at a strong level
- Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and responds to conflicting evidence or viewpoints, at a strong level
- Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats, at a strong level

Using Evidence to Understand, Analyze, and Create Arguments

- Make evidence-based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations, at a strong level
- Delineate the specific steps of an argument the author puts forward, including how the argument's claims build on one another, at a strong level
- Compare two passages that present related ideas or themes in different genres or formats in order to evaluate differences in scope, purpose, emphasis, intended audience, or overall impact, at a strong level
- Identify specific pieces of evidence an author uses in support of claims or conclusions, at a strong level
- Evaluate the relevance and sufficiency of evidence offered in support of a claim, at a strong level
- Distinguish claims that are supported by reasons and evidence from claims that are not, at a strong level

- Assess whether reasoning is valid; identify fallacious reasoning in an argument and evaluate its impact, at a strong level
- Identify an underlying premise or assumption in an argument and evaluate the support, at a strong level

Applying Knowledge of English Language Conventions and Usage

- Edit to eliminate non-standard or informal usage, at a strong level
- Edit to ensure parallelism and proper subordination and coordination, at a strong level
- Edit to eliminate wordiness or awkward sentence construction, at a strong level
- Edit to ensure correct use of apostrophes with possessive nouns, at a strong level

In order to progress to Pass++, test-takers need to:

- 1) continue to **develop** the skills listed in the previous performance levels and apply them to even more complex texts, such as Toni Morrison's *The Bluest Eye*, Thomas Jefferson's *The Declaration of Independence*, and Malcolm Gladwell's *The Tipping Point: How Little Things Can Make a Big Difference*, with a particular focus on strengthening the following skills:
 - Infer relationships between ideas in a text (e.g., an implicit cause and effect, parallel, or contrasting relationship)
 - Analyze how data or quantitative and/or visual information extends, clarifies, or contradicts information in text, or determine how data supports an author's argument
 - Compare two argumentative passages on the same topic that present opposing claims (either main or supporting claims) and analyze how each text emphasizes different evidence or advances a different interpretation of facts

GED® Test: Reasoning Through Language Arts

Performance Level Descriptors

What Your Score Means: Level 2 — Skills at Pass++

Test-takers who score at this level are typically able to comprehend and analyze complex passages similar to that of Toni Morrison's *The Bluest Eye*, Thomas Jefferson's *The Declaration of Independence*, and Malcolm Gladwell's *The Tipping Point: How Little Things Can Make a Big Difference* and generally demonstrate outstanding proficiency with the skills identified in the previous performance levels, including the following:

Analyzing and Creating Text Features and Technique

- Infer relationships between ideas in a text (e.g., an implicit cause and effect, parallel, or contrasting relationship) at an outstanding level
- Infer an author's implicit as well as explicit purposes based on details in text at an outstanding level
- Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats at an outstanding level
- Compare two passages in similar or closely related genres that share ideas or themes, focusing on similarities and/or differences in perspective, tone, style, structure, purpose, or impact at an outstanding level

Using Evidence to Understand, Analyze, and Create Arguments

- Infer implied main ideas in paragraphs or whole texts at an outstanding level
- Analyze how data or quantitative and/or visual information extends, clarifies, or contradicts information in text, or determine how data supports an author's argument, at an outstanding level
- Identify an underlying premise or assumption in an argument and evaluate the logical support and evidence provided, at an outstanding level
- Compare two argumentative passages on the same topic that present opposing claims (either main or supporting claims) and analyze how each text emphasizes different evidence or advances a different interpretation of facts, at an outstanding level

Applying Knowledge of English Language Conventions and Usage

- Edit to correct errors in subject-verb or pronoun antecedent agreement in more complicated situations (e.g., with compound subjects, interceding phrases, or collective nouns) at an outstanding level
- Edit to eliminate wordiness or awkward sentence construction at an outstanding level

GED® Test: Science

Performance Level Descriptors

What Your Score Means: Level 1 — Below Passing

Test-takers who score at this level typically have a **limited but developing proficiency** demonstrating the skills in the following categories: examining scientific text, understanding and applying scientific methods and concepts, and interpreting scientific data using numeric reasoning.

Test-takers at the Below Passing level typically demonstrate the following skills:

Analyze Scientific and Technical Arguments, Evidence, and Text-Based Information

- Cite specific textual evidence to support a finding or conclusion at a limited and/or inconsistent level

Applying Scientific Processes and Procedural Concepts

- Identify and refine hypotheses for scientific investigations at a limited and/or inconsistent level
- Reason from data or evidence to a conclusion at a limited and/or inconsistent level
- Identify the strength and weaknesses of one or more scientific investigations (i.e. experimental or observational) designs at a limited and/or inconsistent level

Reasoning Quantitatively and Interpreting Data in Scientific Contexts

- Describe a data set statistically at a limited and/or inconsistent level
- Understand and explain non-textual scientific presentations at a limited and/or inconsistent level
- Express scientific information or findings numerically or symbolically at a limited and/or inconsistent level
- Express scientific information or findings visually at a limited and/or inconsistent level

In order to progress to the **Pass/High School Equivalency** level, test-takers need to:

1) continue to **strengthen** the skills listed in the Below Passing Level, including:

- Cite specific textual evidence to support a finding or conclusion

- Express scientific information or findings verbally
- Identify and refine hypotheses for scientific investigations
- Understand and explain non-textual scientific presentations

and

2) **develop** the following additional skills:

- Understand and explain textual scientific presentations
- Identify possible sources of error and alter the design of an investigation to ameliorate that error
- Identify and interpret independent and dependent variables in scientific investigations
- Understand and apply scientific models, theories, and processes
- Apply formulas from scientific theories

GED[®] Test: Science

Performance Level Descriptors

What Your Score Means: Level 2 — Pass/High School Equivalency

Test-takers who score at this level typically have a **satisfactory** proficiency in demonstrating skills in the following categories: examining scientific text, understanding and applying scientific methods and concepts, and interpreting scientific data using numeric reasoning.

Test-takers are generally able to demonstrate knowledge of and ability with the skills identified in the Below Passing level at a satisfactory level as well as the following skills:

Analyze Scientific and Technical Arguments, Evidence, and Text-Based Information

- Understand and explain textual scientific presentations at a satisfactory level
- Express scientific information or findings verbally at a satisfactory level
- Determine the meaning of symbols, terms, and phrases as they are used in scientific presentations at a satisfactory level
- Reconcile multiple findings, conclusions, or theories at a satisfactory level

Applying Scientific Processes and Procedural Concepts

- Make a prediction based on data or evidence at a satisfactory level
- Identify possible sources of error and alter the design of an investigation to ameliorate that error at a satisfactory level
- Identify and interpret independent and dependent variables in scientific investigations at a satisfactory level
- Understand and apply scientific models, theories, and processes at a satisfactory level
- Design a scientific investigation at a satisfactory level
- Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence at a satisfactory level

Reasoning Quantitatively and Interpreting Data in Scientific Contexts

- Apply formulas from scientific theories at a satisfactory level
- Determine the probability of events at a satisfactory level
- Use counting and permutations to solve scientific problems at a satisfactory level

(continued) In order to progress to Pass+, test-takers need to continue to **strengthen** the skills listed in the Below Passing level and the skills listed in the Pass/High School Equivalency level, including:

- Understand and apply scientific models, theories, and processes
- Design a scientific investigation
- Apply formulas from scientific theories
- Determine probability of events
- Identify possible sources of error and alter the design of an investigation to ameliorate that error
- Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence
- Reconcile multiple findings, conclusions, or theories
- Make a prediction based on data or evidence

GED[®] Test: Science

Performance Level Descriptors

What Your Score Means: Level 2 — Skills at Pass+

Test-takers who score at this level typically have a **strong** proficiency in demonstrating skills in the following categories: examining scientific text, understanding and applying scientific methods and concepts, and interpreting scientific data using numeric reasoning.

Test-takers are generally able to demonstrate strong knowledge of and ability with the skills identified in the Below Passing and the Pass/High School Equivalency levels, including:

Analyze Scientific and Technical Arguments, Evidence, and Text-Based Information

- Reconcile multiple findings, conclusions, or theories at a strong level

Applying Scientific Processes and Procedural Concepts

- Apply formulas from scientific theories at a strong level
- Identify possible sources of error and alter the design of an investigation to ameliorate that error at a strong level
- Make a prediction based on data or evidence at a strong level
- Design a scientific investigation at a strong level
- Understand and apply scientific models, theories, and processes at a strong level
- Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence at a strong level

Reasoning Quantitatively and Interpreting Data in Scientific Contexts

- Determine probability of events at a strong level

In order to progress to the Pass++ level, test-takers need to continue to **strengthen** the skills listed in the previous levels including:

- Reconcile multiple findings, conclusions, or theories
- Design a scientific investigation
- Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence
- Understand and apply scientific models, theories, and processes
- Determine probability of events

GED[®] Test: Science

Performance Level Descriptors

What Your Score Means: Level 2 — Skills at Pass++

Test-takers who score at this level typically have an **outstanding** proficiency in demonstrating skills in the following categories: examining scientific text, understanding and applying scientific methods and concepts, and interpreting scientific data using numeric reasoning.

Test-takers are generally able to demonstrate knowledge of and ability with the skills identified in the previous levels, plus the following:

Analyze Scientific and Technical Arguments, Evidence, and Text-Based Information

- Reconcile multiple findings, conclusions, or theories at an outstanding level

Applying Scientific Processes and Procedural Concepts

- Design a scientific investigation at an outstanding level
- Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence at an outstanding level
- Understand and apply scientific models, theories, and processes at an outstanding level

Reasoning Quantitatively and Interpreting Data in Scientific Contexts

- Determine probability of events at an outstanding level

GED[®] Test: Social Studies

Performance Level Descriptors

What Your Score Means: Level 1 — Below Passing

Test-takers who score at this level typically have a **limited but developing** proficiency in demonstrating skills in the following categories: analyzing and creating text features in a social studies context, applying social studies concepts to the analysis and construction of arguments, and reasoning quantitatively and interpreting data in social studies contexts.

Test-takers at the Below Passing level typically demonstrate the following skills:

Analyzing and Creating Text Features in a Social Studies Context

- Determine the details of what is explicitly stated in primary and secondary sources and make logical inferences or valid claims based on evidence at a limited and/or inconsistent level
- Determine the central ideas or information of a primary or secondary source document, corroborating or challenging conclusions with evidence at a limited and/or inconsistent level
- At a limited or inconsistent level, determine the meaning of words and phrases as they are used in context, including vocabulary that describes historical, political, social, geographic, and economic aspects of social studies
- Distinguish between fact and opinion in a primary or secondary source document at a limited and/or inconsistent level

Applying Social Studies Concepts to the Analysis and Construction of Arguments

- At a limited and/or inconsistent level, cite or identify specific evidence to support inferences or analyses of primary and secondary sources, attending to the precise details of explanations or descriptions of a process, event, or concept
- Describe people, places, environments, processes, and events, and the connections between and among them at a limited and/or inconsistent level
- At a limited and/or inconsistent level, analyze cause-and-effect relationships and multiple causation, including the importance of natural and societal processes, the individual, and the influence of ideas

Reasoning Quantitatively and Interpreting Data in Social Studies Contexts

- Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text at a limited and/or inconsistent level
- At a limited and/or inconsistent level, analyze information presented in a variety of maps, graphic organizers, tables, and charts; and in a variety of visual sources such as artifacts, photographs, political cartoons
- Translate quantitative information expressed in words in a text into visual form (e.g. table or chart); translate information expressed visually or mathematically into words at a limited and/or inconsistent level
- Interpret, use, and create graphs including proper labeling. Predict trends within a reasonable limit, based on the data, at a limited and/or inconsistent level.
- Represent data on two variables (dependent and independent) on a graph; analyze and communicate how the variables are related at a limited and/or inconsistent level
- Distinguish between causation and correlation at a limited and/or inconsistent level
- Calculate the mean, median, mode, and range of a data set, at a limited and/or inconsistent level

In order to progress to the **Pass/High School Equivalency** level, test-takers need to:

- 1) continue to **strengthen** the skills listed in the Below Passing level, including:
 - Determine the central ideas or information of a primary or secondary source document, corroborating or challenging conclusions with evidence
 - Cite or identify specific evidence to support inferences or analyses of primary and secondary sources, attending to the precise details of explanations or descriptions of a process, event, or concept
 - Describe people, places, environments, processes, and events, and the connections between and among them
 - Analyze cause-and-effect relationships and multiple causation, including the importance of natural and societal processes, the individual, and the influence of ideas
 - Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text
 - Analyze information presented in a variety of maps, graphic organizers, tables, and charts; and in a variety of visual sources such as artifacts, photographs, political cartoons
 - Interpret, use, and create graphs including proper labeling. Predict trends within a reasonable limit, based on the data.
 - Translate quantitative information expressed in words in a text into visual form (e.g., table or chart); translate information expressed visually or mathematically into words

and

- 2) **develop** the following additional skills:
 - Identify aspects of a historical document that reveal an author's point of view or purpose
 - Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources
 - Identify the chronological structure of a historical narrative and sequence steps in a process
 - Compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions

- Identify instances of bias and propagandizing
- Analyze how a historical context shapes an author's point of view

GED® Test: Social Studies

Performance Level Descriptors

What Your Score Means: Level 2 — Pass/High School Equivalency

Test-takers who score at this level typically have a **satisfactory** proficiency in demonstrating skills in the following categories: analyzing and creating text features in a social studies context, applying social studies concepts to the analysis and construction of arguments, and reasoning quantitatively and interpreting data in social studies contexts.

Test-takers are generally able to demonstrate knowledge of and ability with the skills identified in the Below Passing level at a satisfactory level, as well as the following skills:

Analyzing and Creating Text Features in a Social Studies Context

- Identify aspects of a historical document that reveal an author's point of view or purpose at a satisfactory level
- Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources at a satisfactory level

Applying Social Studies Concepts to the Analysis and Construction of Arguments

- Identify the chronological structure of a historical narrative and sequence steps in a process at a satisfactory level
- At a satisfactory level, compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions
- Identify instances of bias or propagandizing at a satisfactory level
- Analyze how a historical context shapes an author's point of view at a satisfactory level

In order to progress to the **Pass+** level, test-takers need to continue to **strengthen** the skills listed in the Below Passing and the Pass/High School Equivalency levels, including:

- Identify aspects of a historical document that reveal an author's point of view or purpose
- Describe people, places, environments, processes, and events, and the connections between and among them
- Identify the chronological structure of a historical narrative and sequence steps in a process
- Analyze cause-and-effect relationships and multiple causation, including the importance of natural and societal processes, the individual, and the influence of ideas

- Compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions
- Analyze how a historical context shapes an author's point of view
- Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text
- Translate quantitative information expressed in words in a text into visual form (e.g., table or chart); translate information expressed visually or mathematically into words
- Represent data on two variables (dependent and independent) on a graph; analyze and communicate how the variables are related
- Distinguish between correlation and causation

GED[®] Test: Social Studies

Performance Level Descriptors

What Your Score Means: Level 2 — Skills at Pass+

Test-takers who score at this level typically have a **strong** proficiency in demonstrating skills in the following categories: analyzing and creating text features in a social studies context, applying social studies concepts to the analysis and construction of arguments, and reasoning quantitatively and interpreting data in social studies contexts.

Test-takers are generally able to demonstrate strong knowledge of and ability with the skills identified in the Below Passing and the Pass/High School Equivalency levels, including:

Analyzing and Creating Text Features in a Social Studies Context

- Determine how authors reveal their points of view or purposes in historical documents at a strong level
- Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources at a strong level

Applying Social Studies Concepts to the Analysis and Construction of Arguments

- Identify the chronological structure of a historical narrative and sequence steps in a process at a strong level
- At a strong level, analyze cause-and-effect relationships and multiple causation, including the importance of natural and societal processes, the individual, and the influence of ideas
- At a strong level, compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions at a strong level
- Analyze how a historical context shapes an author's point of view at a strong level

Reasoning Quantitatively and Interpreting Data in Social Studies Contexts

- Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text at a strong level
- Represent data on two variables (dependent and independent) on a graph; analyze and communicate how the variables are related at a strong level
- Distinguish between correlation and causation at a strong level

In order to progress to the Pass++ level, test-takers need to continue to **strengthen** the skills listed in the Below Passing and the Pass/High School Equivalency levels, including:

- Determine the central ideas or information of a primary or secondary source document, corroborating or challenging conclusions with evidence
- Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources
- Analyze cause-and-effect relationships and multiple causation, including the importance of natural and societal processes, the individual, and the influence of ideas
- Compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions
- Analyze how a historical context shapes an author's point of view
- Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text
- Translate quantitative information expressed in words in a text into visual form (e.g., table or chart); translate information expressed visually or mathematically into words

GED[®] Test: Social Studies Performance Level Descriptors What Your Score Means: Level 2 — Skills at Pass ++

Test-takers who score at this level typically have an **outstanding** proficiency in demonstrating skills in the following categories: analyzing and creating text features in a social studies context, applying social studies concepts to the analysis and construction of arguments, and reasoning quantitatively and interpreting data in social studies contexts.

Test-takers are generally able to demonstrate outstanding knowledge of and ability with the skills identified in the previous levels including:

Analyzing and Creating Text Features in a Social Studies Context

- Determine the central ideas or information of a primary or secondary source document, corroborating or challenging conclusions with evidence at an outstanding level
- Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources at an outstanding level

Applying Social Studies Concepts to the Analysis and Construction of Arguments

- At an outstanding level, analyze cause-and-effect relationships and multiple causation, including the importance of natural and societal processes, the individual, and the influence of ideas
- At an outstanding level, compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions
- Analyze how a historical context shapes an author's point of view at an outstanding level

Reasoning Quantitatively and Interpreting Data in Social Studies Contexts

- Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text at an outstanding level

- Translate quantitative information expressed in words in a text into visual form (e.g., table or chart); translate information expressed visually or mathematically into words at an outstanding level

High Impact Indicators

All of the indicators listed in the GED® Assessment Target indicators describe the critical thinking skills essential to test-taker success in college, career training, and the workforce. However, those we are highlighting in the **High Impact Indicators** may be useful for educators to emphasize in their instruction.

We selected the following skills as High Impact Indicators because:

- They represent particular **foundational skills** that are the basis for the development of other skills covered in the GED® Assessment Targets and have **broad usefulness** that can be applied in multiple contexts.
- They are a **good fit for classroom instruction** because they are not complicated but are important for students to know and use.
- GED® testing data suggests that **educators may not be currently focusing on these skills** in their GED® test preparation.

While focused classroom instruction on these High Impact Indicators may quickly and positively impact your students' test performance, **educators should note that the High Impact Indicators are not more important than the rest of the indicators.** Proficiency with all of the indicators is essential for test-takers to perform well on the GED® test.

Reasoning Through Language Arts – High Impact Indicators

Indicator	What to look for in student work: Students' work shows they have...
R.3.1: Order sequences of events in texts. <i>Primarily measured with literary texts.</i>	<ul style="list-style-type: none"> • located a single, discrete event or plot point in texts. • identified chronological and non-chronological sequences of events within texts. • described the progression from one event to the next in a text. • re-ordered events presented in non-chronological order in texts into chronological order. • re-ordered events provided in chronological order texts into a different order (e.g. cause-and-effect, etc.) in order to determine the text's meaning.

<p>R.4.1/L.4.1: Determine the meaning of words and phrases as they are used in a text, including determining connotative and figurative meanings from context.</p> <p><i>Measured with both informational and literary texts.</i></p>	<ul style="list-style-type: none"> • identified what a word means, specific to the sentence(s) that provides its context. • distinguished between denotative and connotative meanings of a word. • distinguished between denotative and figurative meanings of a word. • distinguished between connotative and figurative meanings of a word. • explained how context shapes or lends meaning to a specific word.
<p>R.5.3: Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author's purpose.</p> <p><i>Measured with both informational and literary texts.</i></p>	<ul style="list-style-type: none"> • identified transitional words or phrases within texts. • explained the function of transitional language as it is used in a specific text. • explained why specific transitional word(s) were used to convey meaning. • explained the structural relationship between two clauses or phrases in terms of their transitions. • explained how structural cues within a text serve an author's purpose.
<p>R.8.3: Evaluate the relevance and sufficiency of evidence offered in support of a claim.</p> <p><i>Primarily measured with informational texts.</i></p>	<ul style="list-style-type: none"> • explained how a particular piece of evidence is relevant to a point an author is making. • explained how a particular piece or pieces of evidence are sufficient to justify an author's singular point or overall message. • distinguished between irrelevant and relevant evidence. • distinguished between an idea that has sufficient evidence to support it and one that does not. • distinguished between explanation and evidence. • distinguished between reasoning and evidence. • made judgments on either the relevance or sufficiency (or both) of single and multiple pieces of evidence.
<p>R.8.6: Identify an underlying premise or assumption in an argument and evaluate the logical support and evidence provided.</p> <p><i>Primarily measured with informational texts.</i></p>	<ul style="list-style-type: none"> • identified explicit premises and assumptions inherent to an argument in a text. • Identified implicit premises and assumptions inherent to an argument in a text. • explained what, if any, of an author's biases and assumptions are observable within a text. • made judgments on whether any implicit premises or assumptions of an argument are justified (fully or partially) by evidence that is explicitly provided in the text.

Science – High Impact Indicators

Indicator	What to look for in student work: Students' work shows they have...
SP.2.b: Identify and refine hypotheses for scientific investigations.	<ul style="list-style-type: none"> • identified a hypothesis for a given scientific investigation. • differentiated between an appropriate hypothesis and a poorly conceived hypothesis. • used a hypothesis to support or challenge a given conclusion. • identified a hypothesis for a given data set. • refined a hypothesis to more appropriately suit a scientific experiment.
SP.2.e: Identify and interpret independent and dependent variables in scientific investigations.	<ul style="list-style-type: none"> • identified the independent variable in a given investigation. • identified the dependent variable in a given investigation. • fully explained the relationship between the independent and dependent variables in a given experiment.
SP.4.a: Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence.	<ul style="list-style-type: none"> • identified and explained why the evidence supports the proposed claim or solution. • identified and explained which piece of data supports or contradicts the given hypothesis. • identified multiple reasons a piece of evidence supports a theory or hypothesis and compare those reasons to each other. • identified which scientific model would be weakened or strengthened by particular evidence. • fully explained why given evidence supports a scientific theory. • fully explained why given evidence challenges a scientific theory.
SP.6.a: Express scientific information or findings visually.	<ul style="list-style-type: none"> • translated information presented verbally or numerically into a visual format • integrated information presented verbally and numerically into a visual format • identified relationships among graphs or diagrams • identified visual representations of scientific processes explained in a given text • completed diagrams to demonstrate understanding of relationships among variables, scientific concepts, or processes
SP.7: Apply formulas from scientific theories.	<ul style="list-style-type: none"> • solved for a variable within a scientific equation • balanced an equation. • identified what changes will result if a variable within a scientific equation increases or decreases. • identified relationships between variables in a scientific formula. • interpreted symbolic representations of information and scientific data.

Social Studies – High Impact Indicators

Indicator	What to look for in student work: Students' work shows they have...
SSP.2.a: Determine the central ideas or information of a primary or secondary source, corroborating or challenging conclusions with evidence.	<ul style="list-style-type: none"> differentiated between the concepts of topic and main idea. identified the topic and/or main idea of a piece of text. identified supporting details for a given main idea. summarized a piece of text. fully explained relevant details in the text that support the main idea. located a single piece of evidence in the text. located multiple pieces of evidence in a text. differentiated between relevant and irrelevant evidence. use evidenced to support or challenge an author's conclusion.
SSP.2.b: Describe people, places, environments, processes, and events, and the connections between and among them.	<ul style="list-style-type: none"> described pertinent elements in the text, including: people, places, environments, processes, and events identified relationships among multiple elements (listed above) in the text. fully explained relationships among the elements.
SSP.3.c: Analyze cause-and-effect relationships and multiple causation, including action by individuals, natural and societal processes, and the influence of ideas.	<ul style="list-style-type: none"> identified (potential or actual) causes for given effects. identified (potential or actual) effects for a given cause. identified examples of cause-effect relationships in texts. fully explained how or why one event or set of circumstances in a cause-effect relationship caused another. fully explained a sequence of causes leading to a given effect. identify multiple causes of a given event or set of circumstances.
SSP.5.c: Analyze how a historical context shapes an author's point of view.	<ul style="list-style-type: none"> identified the author's point of view in a primary source text. identified the major eras in U.S. history relevant to a specific text and identify influential events, figures, and ideas therein. identified context (events, figures, ideas) relevant to the given text. fully explained how the historical context directly relates to the author's point of view.
SSP.8.a: Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources.	<ul style="list-style-type: none"> identified a common topic in multiple sources. described commonalities in treatment of a topic across multiple sources. identified differences in the way the sources treat the topic. fully explained how a given difference in treatment is meaningful to the understanding of the topic itself.

Mathematical Reasoning – High Impact Indicators

Assessment Target	Indicator	What to look for in student work: Students' work shows they have...
Q.1 Apply number sense concepts, including ordering rational numbers, absolute value, multiples, factors, and exponents	<ul style="list-style-type: none"> Q.1.a Order fractions and decimals, including on a number line. Q.1.b Apply number properties involving multiples and factors, such as using the least common multiple, greatest common factor, or distributive property to rewrite numeric expressions. Q.1.c Apply rules of exponents in numerical expressions with rational exponents to write equivalent expressions with rational exponents. Q.1.d Identify absolute value of a rational number as its distance from 0 on the number line and determine the distance between two rational numbers on the number line, including using the absolute value of their difference. 	<ul style="list-style-type: none"> converted fractions to decimals or vice versa in order to compare them, and listed the original numbers in ascending order. identified common factors and calculated the greatest common factor by multiplying common factors, and has also identified common multiples, including least common multiples. selected the appropriate rule(s) of exponents to apply to exponential expressions, and simplified exponential expressions using one or more rules of exponents. identified the location of a rational number on the number line, created absolute value expressions to represent distances on the number line, and simplified absolute value expressions.
Q.3 Calculate and use ratios, percents and scale factors	<ul style="list-style-type: none"> Q.3.a Compute unit rates. Examples include but are not limited to: unit pricing, constant speed, persons per square mile, BTUs per cubic foot. Q.3.b Use scale factors to determine the magnitude of a size change. Convert between actual drawings and scale drawings. Q.3.c Solve multistep, arithmetic, real-world problems using ratios or proportions including those that require converting units of measure. Q.3.d Solve two-step, arithmetic, real world problems involving percents. Examples include but are not limited to: simple interest, tax, markups and markdowns, gratuities and commissions, percent increase and decrease. 	<ul style="list-style-type: none"> identified the relationship between quantities, then divided appropriately to determine the unit rate defined by those quantities. created proportions to model problems involving scale, then calculated measurements using proportional reasoning, and has also calculated measurements using scale factors. created proportions to model real-world problems involving ratios and proportions, and used ratios, proportions, and proportional reasoning to calculate quantities relating to those problems. identified the relationships between quantities (including amount of change) in problems involving percent increase and decrease, and has calculated quantities stemming from those problems, as well as the amount of percent increase or decrease.

<p>Q.4 Calculate dimensions, perimeter, circumference, and area of two-dimensional figures</p> <p>Q.5 Calculate dimensions, surface area, and volume of three-dimensional figures</p>	<ul style="list-style-type: none"> • Q.4.a Compute the area and perimeter of triangles and rectangles. Determine side lengths of triangles and rectangles when given area or perimeter. • Q.4.b Compute the area and circumference of circles. Determine the radius or diameter when given area or circumference • Q.4.c Compute the perimeter of a polygon. Given a geometric formula, compute the area of a polygon. Determine side lengths of the figure when given the perimeter or area. • Q.4.d Compute perimeter and area of 2-D composite geometric figures, which could include circles, given geometric formulas as needed. • Q.4.e Use the Pythagorean theorem to determine unknown side lengths in a right triangle. • Q.5.a When given geometric formulas, compute volume and surface area of rectangular prisms. Solve for side lengths or height, when given volume or surface area. • Q.5.b When given geometric formulas, compute volume and surface area of cylinders. Solve for height, radius, or diameter when given volume or surface area. • Q.5.c When given geometric formulas, compute volume and surface area of right prisms. Solve for side lengths or height, when given volume or surface area. • Q.5.d When given geometric formulas, compute volume and surface area of right pyramids and cones. Solve for side lengths, height, radius, or diameter when given volume or surface area. • Q.5.e When given geometric formulas, compute volume and surface area of spheres. Solve for radius or diameter when given the surface area. • Q.5.f Compute surface area and volume of composite 3-D geometric figures, given geometric formulas as needed. 	<ul style="list-style-type: none"> • identified the dimensions of a geometric figure from a diagram, then substituted the values for those dimensions into the appropriate formula for geometric measurement, then calculated the resulting numerical expression. • calculated the perimeter of polygons. • identified the shapes that comprise a composite figure.
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A.3 Write, manipulate, solve, and graph linear inequalities	<ul style="list-style-type: none"> • A.3.a Solve linear inequalities in one variable with rational number coefficients. • A.3.b Identify or graph the solution to a one variable linear inequality on a number line. • A.3.c Solve real-world problems involving inequalities. • A.3.d Write linear inequalities in one variable to represent context. 	<ul style="list-style-type: none"> • solved inequalities in one variable, using the standard algorithms. • solved a one-variable inequality and identified or created a graph on the number line of the solution . • analyzed the relationship between quantities in a real-world problem, and then created an inequality to model the problem situation. • analyzed the relationship between quantities in a real-world problem, and then solved the problem through algebraic reasoning.
A.7 Compare, represent, and evaluate functions	<ul style="list-style-type: none"> • A.7.a Compare two different proportional relationships represented in different ways. Examples include but are not limited to: compare a distance-time graph to a distance-time equation to determine which of two moving objects has a greater speed. • A.7.b Represent or identify a function in a table or graph as having exactly one output (one element in the range) for each input (each element in the domain). • A.7.c Evaluate linear and quadratic functions for values in their domain when represented using function notation. • A.7.d Compare properties of two linear or quadratic functions each represented in a different way (algebraically, numerically in tables, graphically or by verbal descriptions). Examples include but are not limited to: given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change. 	<ul style="list-style-type: none"> • identified functions and non-functions displayed in graphs and tables, and created functions (graphs/tables). • substitute values for variables in functions and evaluated the resulting numerical expressions. • converted functional representations from one from to another, and compared properties of the functions.

Relationships Between the High Impact Indicators and Other Indicators

The High Impact Indicators are a list of key skills assessed on the GED® test that, if emphasized in instruction, can help instructors make a significant impact on student skills and performance. This document shows the relationship between the High Impact Indicators and other indicators assessed on the GED® test. Adult educators can use this resource to create instructional plans that address the maximum number of skills in the limited time they have available with students. Providing instruction in a single High Impact Indicator area can help students broaden and deepen their skills, enabling them to apply those skills in multiple ways and in a variety of contexts across all of the content areas covered by the GED® test.

Note: High Impact Indicators appear in **BOLD** type.

Reasoning Through Language Arts – High Impact Indicators

High Impact Indicator	Related Indicators from Other Content Areas		
RLA	Social Studies	Science	Mathematical Reasoning
R.3.1: Order sequences of events in texts. Primarily measured with literary texts.	<p>SSP.3 a. Identify the chronological structure of a historical narrative and sequence steps in a process.</p> <p>SSP.3 b. Analyze in detail how events, processes, and ideas develop and interact in a written document; determine whether earlier events caused later ones or simply preceded them.</p> <p>SSP.3.c: Analyze cause-and-effect relationships and multiple causation, including action by individuals, natural and societal processes, and the influence of ideas.</p> <p>SSP.3 d. Compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions.</p>	<p>SP.3.b Reason from data or evidence to a conclusion</p> <p>SP.3.c Make a prediction based upon data or evidence</p>	<p>MP.1 a. Search for and recognize entry points for solving a problem.</p> <p>MP.1 b. Plan a solution pathway or outline a line of reasoning.</p> <p>MP.1 d. Recognize and identify missing information that is required to solve a problem.</p> <p>MP.1 e. Select the appropriate mathematical technique(s) to use in solving a problem or a line of reasoning.</p> <p>MP.2 c. Recognize the important and salient attributes of a problem.</p> <p>MP.3 a. Build steps of a line of reasoning or solution pathway, based on previous step or givens.</p> <p>MP.3 b. Complete the lines of reasoning of others.</p> <p>MP.3 c. Improve or correct a flawed line of reasoning.</p>

High Impact Indicator	Related Indicators from Other Content Areas		
RLA	Social Studies	Science	Mathematical Reasoning
R.4.1/L.4.1: Determine the meaning of words and phrases as they are used in a text, including determining connotative and figurative meanings from context. Measured with both informational and literary texts.	SSP.4 a. Determine the meaning of words and phrases as they are used in context, including vocabulary that describes historical, political, social, geographic, and economic aspects of social studies.	SP.2.a Identify possible sources of error and alter the design of an investigation to ameliorate that error	MP.1 d. Recognize and identify missing information that is required to solve a problem. MP.1 e. Select the appropriate mathematical technique(s) to use in solving a problem or a line of reasoning. MP.5 c. Identify the information required to evaluate a line of reasoning.
R.5.3: Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author's purpose. Measured with both informational and literary texts.	SSP.3 a. Identify the chronological structure of a historical narrative and sequence steps in a process. SSP.3.c: Analyze cause-and-effect relationships and multiple causation, including action by individuals, natural and societal processes, and the influence of ideas.	SP.2.b: Identify and refine hypotheses for scientific investigations. SP.2.e: Identify and interpret independent and dependent variables in scientific investigations.	MP.1 e. Select the appropriate mathematical technique(s) to use in solving a problem or a line of reasoning. MP.5 c. Identify the information required to evaluate a line of reasoning.

High Impact Indicator	Related Indicators from Other Content Areas		
RLA	Social Studies	Science	Mathematical Reasoning
R.8.3: Evaluate the relevance and sufficiency of evidence offered in support of a claim. Primarily measured with informational texts.	<p>SSP.1 a. Determine the details of what is explicitly stated in primary and secondary sources and make logical inferences or valid claims based on evidence.</p> <p>SSP.2.a: Determine the central ideas or information of a primary or secondary source, corroborating or challenging conclusions with evidence.</p> <p>SSP.3 a. Identify the chronological structure of a historical narrative and sequence steps in a process.</p> <p>SSP.3 b. Analyze in detail how events, processes, and ideas develop and interact in a written document; determine whether earlier events caused later ones or simply preceded them.</p> <p>SSP.3.c: Analyze cause-and-effect relationships and multiple causation, including action by individuals, natural and societal processes, and the influence of ideas.</p> <p>SSP.3 d. Compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions.</p> <p>SSP.7 a. Distinguish among fact, opinion, and reasoned judgment in a primary or secondary source document.</p> <p>SSP.7 b. Distinguish between unsupported claims and informed hypotheses grounded in social studies evidence.</p>	<p>SP.1.a Understand and explain textual scientific presentations</p> <p>SP.2.a Identify possible sources of error and alter the design of an investigation to ameliorate that error</p> <p>SP.2.c Identify the strength and weaknesses of one or more scientific investigation (i.e. experimental or observational) designs</p> <p>SP.4.a Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence</p>	<p>MP.1 d. Recognize and identify missing information that is required to solve a problem.</p> <p>MP.1 e. Select the appropriate mathematical technique(s) to use in solving a problem or a line of reasoning.</p> <p>MP.3 a. Build steps of a line of reasoning or solution pathway, based on previous step or givens.</p> <p>MP.3 b. Complete the lines of reasoning of others.</p> <p>MP.3 c. Improve or correct a flawed line of reasoning.</p> <p>MP.5 a. Recognize flaws in others' reasoning.</p> <p>MP.5 b. Recognize and use counterexamples.</p> <p>MP.5 c. Identify the information required to evaluate a line of reasoning.</p>

High Impact Indicator	Related Indicators from Other Content Areas		
RLA	Social Studies	Science	Mathematical Reasoning
<p>R.8.6: Identify an underlying premise or assumption in an argument and evaluate the logical support and evidence provided. Primarily measured with informational texts.</p>	<p>SSP.1 a. Determine the details of what is explicitly stated in primary and secondary sources and make logical inferences or valid claims based on evidence.</p> <p>SSP.2.a: Determine the central ideas or information of a primary or secondary source, corroborating or challenging conclusions with evidence.</p> <p>SSP.3 a. Identify the chronological structure of a historical narrative and sequence steps in a process.</p> <p>SSP.3 b. Analyze in detail how events, processes, and ideas develop and interact in a written document; determine whether earlier events caused later ones or simply preceded them.</p> <p>SSP.3.c: Analyze cause-and-effect relationships and multiple causation, including action by individuals, natural and societal processes, and the influence of ideas.</p> <p>SSP.3 d. Compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions.</p> <p>SSP.7 a. Distinguish among fact, opinion, and reasoned judgment in a primary or secondary source document.</p> <p>SSP.7 b. Distinguish between unsupported claims and informed hypotheses grounded in social studies evidence.</p>	<p>SP.1.a Understand and explain textual scientific presentations</p> <p>SP.2.a Identify possible sources of error and alter the design of an investigation to ameliorate that error</p> <p>SP.2.c Identify the strength and weaknesses of one or more scientific investigation (i.e. experimental or observational) designs</p> <p>SP.4.a Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence</p>	<p>MP.1 d. Recognize and identify missing information that is required to solve a problem.</p> <p>MP.1 e. Select the appropriate mathematical technique(s) to use in solving a problem or a line of reasoning.</p> <p>MP.3 a. Build steps of a line of reasoning or solution pathway, based on previous step or givens.</p> <p>MP.3 b. Complete the lines of reasoning of others.</p> <p>MP.3 c. Improve or correct a flawed line of reasoning.</p> <p>MP.5 a. Recognize flaws in others' reasoning.</p> <p>MP.5 b. Recognize and use counterexamples.</p> <p>MP.5 c. Identify the information required to evaluate a line of reasoning.</p>

Mathematical Reasoning – High Impact Indicators

High Impact Indicator	Related Indicators from Other Content Areas		
Mathematical Reasoning	Social Studies	Science	RLA
Q.1 Apply number sense concepts, including ordering rational numbers, absolute value, multiples, factors, and exponents	<p>SSP.6 a. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.</p> <p>SSP.6 b. Analyze information presented in a variety of maps, graphic organizers, tables, and charts; and in a variety of visual sources such as artifacts, photographs, political cartoons.</p> <p>SSP.11 a. Calculate the mean, median, mode, and range of a dataset.</p>	<p>SP.1.b Determine the meaning of symbols, terms and phrases as they are used in scientific</p> <p>SP.6.b Express scientific information or findings numerically or symbolically.</p> <p>SP.7.b Apply formulas from scientific theories</p> <p>SP.8.a Describe a data set statistically</p> <p>SP.8.b Use counting and permutations to solve scientific problems</p> <p>SP.8.c Determine the probability of events</p>	
Q.3 Calculate and use ratios, percents and scale factors	<p>SSP.6 a. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.</p> <p>SSP.6 b. Analyze information presented in a variety of maps, graphic organizers, tables, and charts; and in a variety of visual sources such as artifacts, photographs, political cartoons.</p> <p>SSP.11 a. Calculate the mean, median, mode, and range of a dataset.</p>	<p>SP.6.b Express scientific information or findings numerically or symbolically.</p> <p>SP.7.b Apply formulas from scientific theories</p> <p>SP.8.a Describe a data set statistically</p> <p>SP.8.b Use counting and permutations to solve scientific problems</p> <p>SP.8.c Determine the probability of events</p>	
Q.4 Calculate dimensions, perimeter, circumference, and area of two-dimensional figures and Q.5 Calculate Dimensions, surface area, and volume of three-dimensional figures		<p>SP.6.b Express scientific information or findings numerically or symbolically.</p>	
A.3 Write, manipulate, solve, and graph linear inequalities			
A.7 Compare, represent, and evaluate functions			

Science – High Impact Indicators

High Impact Indicator	Related Indicators from Other Content Areas		
Science	Social Studies	Mathematical Reasoning	RLA
SP.2.b: Identify and refine hypotheses for scientific investigations.	<p>SSP.2.a: Determine the central ideas or information of a primary or secondary source, corroborating or challenging conclusions with evidence.</p> <p>SSP.2.b: Describe people, places, environments, processes, and events, and the connections between and among them.</p> <p>SSP.1 b. Cite or identify specific evidence to support inferences or analyses of primary and secondary sources, attending to the precise details of explanations or descriptions of a process, event, or concept.</p> <p>SSP.7 b. Distinguish between unsupported claims and informed hypotheses grounded in social studies evidence.</p> <p>SSP.10 c. Distinguish between correlation and causation.</p>	<p>MP.1 e. Select the appropriate mathematical technique(s) to use in solving a problem or a line of reasoning.</p> <p>MP.3 b. Complete the lines of reasoning of others.</p> <p>MP.3 c. Improve or correct a flawed line of reasoning.</p> <p>MP.5 a. Recognize flaws in others' reasoning.</p> <p>MP.5 b. Recognize and use counterexamples.</p> <p>MP.5 c. Identify the information required to evaluate a line of reasoning.</p>	<p>R.2.7 Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.</p> <p>R.2.8 Draw conclusions or make generalizations that require synthesis of multiple main ideas in text.</p> <p>R.5.1 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.</p> <p>R.5.2 Analyze the structural relationship between adjacent sections of text (e.g., how one paragraph develops or refines a key concept or how one idea is distinguished from another).</p> <p>R.5.3: Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author's purpose. Measured with both informational and literary texts.</p> <p>R.5.4 Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author's purpose.</p>

High Impact Indicator	Related Indicators from Other Content Areas		
Science	Social Studies	Mathematical Reasoning	RLA
SP.4.a: Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence.	<p>SSP.1 b. Cite or identify specific evidence to support inferences or analyses of primary and secondary sources, attending to the precise details of explanations or descriptions of a process, event, or concept.</p> <p>SSP.7 a. Distinguish among fact, opinion, and reasoned judgment in a primary or secondary source document.</p> <p>SSP.7 b. Distinguish between unsupported claims and informed hypotheses grounded in social studies evidence.</p> <p>SSP.10 a. Interpret, use, and create graphs (e.g., scatterplot, line, bar, circle) including proper labeling. Predict reasonable trends based on the data (e.g., do not extend trend beyond a reasonable limit).</p> <p>SSP.10 b. Represent data on two variables (dependent and independent) on a graph; analyze and communicate how the variables are related.</p> <p>SSP.10 c. Distinguish between correlation and causation.</p>	<p>MP.1 d. Recognize and identify missing information that is required to solve a problem.</p> <p>MP.3 a. Build steps of a line of reasoning or solution pathway, based on previous step or givens.</p> <p>MP.3 b. Complete the lines of reasoning of others.</p> <p>MP.3 c. Improve or correct a flawed line of reasoning.</p> <p>MP.5 a. Recognize flaws in others' reasoning.</p> <p>MP.5 b. Recognize and use counterexamples.</p> <p>MP.5 c. Identify the information required to evaluate a line of reasoning.</p>	<p>R.8.1 Delineate the specific steps of an argument the author puts forward, including how the argument's claims build on one another.</p> <p>R.8.2 Identify specific pieces of evidence an author uses in support of claims or conclusions.</p> <p>R.8.3: Evaluate the relevance and sufficiency of evidence offered in support of a claim. Primarily measured with informational texts.</p> <p>R.8.4 Distinguish claims that are supported by reasons and evidence from claims that are not.</p> <p>R.8.5 Assess whether the reasoning is valid; identify fallacious reasoning in an argument and evaluate its impact.</p> <p>R.8.6: Identify an underlying premise or assumption in an argument and evaluate the logical support and evidence provided. Primarily measured with informational texts.</p>

High Impact Indicator	Related Indicators from Other Content Areas		
Science	Social Studies	Mathematical Reasoning	RLA
SP.6.a: Express scientific information or findings visually.	<p>SSP.6 a. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.</p> <p>SSP.6 b. Analyze information presented in a variety of maps, graphic organizers, tables, and charts; and in a variety of visual sources such as artifacts, photographs, political cartoons.</p> <p>SSP.6 c. Translate quantitative information expressed in words in a text into visual form (e.g., table or chart); translate information expressed visually or mathematically into words.</p> <p>SSP.10 b. Represent data on two variables (dependent and independent) on a graph; analyze and communicate how the variables are related.</p>	<p>MP.2 a. Represent real world problems algebraically.</p> <p>MP.2 b. Represent real world problems visually.</p> <p>MP.4 c. Display data or algebraic expressions graphically.</p>	<p>R.9.1/R. 7.1 Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline).</p> <p>R.7.2 Analyze how data or quantitative and/or visual information extends, clarifies, or contradicts information in text, or determine how data supports an author's argument.</p> <p>R.7.3 Compare two passages that present related ideas or themes in different genre or formats (e.g., a feature article and an online FAQ or fact sheet) in order to evaluate differences in scope, purpose, emphasis, intended audience, or overall impact when comparing.</p> <p>R.7.4 Compare two passages that present related ideas or themes in different genre or formats in order to synthesize details, draw conclusions, or apply information to new situations.</p> <p>W.2 Produce an extended analytic response in which the writer introduces the idea(s) or claim(s) clearly; creates an organization that logically sequences information; develops the idea(s) or claim(s) thoroughly with well-chosen examples, facts, or details from the text; and maintains a coherent focus.</p>

High Impact Indicator	Related Indicators from Other Content Areas		
Science	Social Studies	Mathematical Reasoning	RLA
SP.7b: Apply formulas from scientific theories.	<p>SSP.6 a. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.</p> <p>SSP.10 a. Interpret, use, and create graphs (e.g., scatterplot, line, bar, circle) including proper labeling. Predict reasonable trends based on the data (e.g., do not extend trend beyond a reasonable limit).</p>	<p>MP.1 e. Select the appropriate mathematical technique(s) to use in solving a problem or a line of reasoning.</p> <p>Q.6.a Represent, display, and interpret categorical data in bar graphs or circle graphs.</p> <p>Q.6.b Represent, display, and interpret data involving one variable plots on the real number line including dot plots, histograms, and box plots.</p> <p>Q.6.c Represent, display, and interpret data involving two variables in tables and the coordinate plane including scatter plots and graphs.</p> <p>Q.8.a Use counting techniques to solve problems and determine combinations and permutations.</p> <p>Q.8.b Determine the probability of simple and compound events.</p>	<p>R.4.2/L.4.2 Analyze how meaning or tone is affected when one word is replaced with another.</p> <p>R.4.3/L.4.3 Analyze the impact of specific words, phrases, or figurative language in text, with a focus on an author's intent to convey information or construct an argument.</p>

Social Studies – High Impact Indicators

High Impact Indicator	Related Indicators from Other Content Areas		
Social Studies	Science	Mathematical Reasoning	RLA
SSP.2.a: Determine the central ideas or information of a primary or secondary source, corroborating or challenging conclusions with evidence.	<p>SP.1.a Understand and explain textual scientific presentations</p> <p>SP.1.b Determine the meaning of symbols, terms and phrases as they are used in scientific</p> <p>SP.2.a Identify possible sources of error and alter the design of an investigation to ameliorate that error</p> <p>SP.2.c Identify the strength and weaknesses of one or more scientific investigation (i.e. experimental or observational) designs</p> <p>SP.3.a Cite specific textual evidence to support a finding or conclusion</p> <p>SP.3.b Reason from data or evidence to a conclusion</p>	<p>MP.1 d. Recognize and identify missing information that is required to solve a problem.</p> <p>MP.3 b. Complete the lines of reasoning of others.</p> <p>MP.5 c. Identify the information required to evaluate a line of reasoning.</p>	<p>R.2.1 Comprehend explicit details and main ideas in text.</p> <p>R.2.3 Make sentence level inferences about details that support main ideas.</p> <p>R.2.5 Determine which detail(s) support(s) a main idea.</p> <p>R.2.7 Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.</p> <p>R.2.8 Draw conclusions or make generalizations that require synthesis of multiple main ideas in text.</p>

High Impact Indicator	Related Indicators from Other Content Areas		
Social Studies	Science	Mathematical Reasoning	RLA
SSP.2.b: Describe people, places, environments, processes, and events, and the connections between and among them.	<p>SP.1.a Understand and explain textual scientific presentations</p> <p>SP.6.c Express scientific information or findings verbally</p>		<p>R.2.1 Comprehend explicit details and main ideas in text.</p> <p>R.2.2 Summarize details and ideas in text.</p> <p>R.2.5 Determine which detail(s) support(s) a main idea.</p> <p>R.2.6 Identify a theme, or identify which element(s) in a text support a theme.</p> <p>R.3.1: Order sequences of events in texts. Primarily measured with literary texts.</p> <p>R.3.2 Make inferences about plot/sequence of events, characters/people, settings, or ideas in texts.</p> <p>R.3.3 Analyze relationships within texts, including how events are important in relation to plot or conflict; how people, ideas, or events are connected, developed, or distinguished; how events contribute to theme or relate to key ideas; or how a setting or context shapes structure and meaning.</p> <p>R.3.4 Infer relationships between ideas in a text (e.g., an implicit cause and effect, parallel, or contrasting relationship).</p> <p>R.3.5 Analyze the roles that details play in complex literary or informational texts.</p>

High Impact Indicator	Related Indicators from Other Content Areas		
Social Studies	Science	Mathematical Reasoning	RLA
SSP.3.c: Analyze cause-and-effect relationships and multiple causation, including action by individuals, natural and societal processes, and the influence of ideas.	<p>SP.3.a Cite specific textual evidence to support a finding or conclusion</p> <p>SP.3.b Reason from data or evidence to a conclusion</p> <p>SP.4.a Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence</p>	<p>MP.1 d. Recognize and identify missing information that is required to solve a problem.</p> <p>MP.3 a. Build steps of a line of reasoning or solution pathway, based on previous step or givens.</p> <p>MP.5 c. Identify the information required to evaluate a line of reasoning.</p>	<p>R.3.1: Order sequences of events in texts. Primarily measured with literary texts.</p> <p>R.3.2 Make inferences about plot/sequence of events, characters/people, settings, or ideas in texts.</p> <p>R.3.3 Analyze relationships within texts, including how events are important in relation to plot or conflict; how people, ideas, or events are connected, developed, or distinguished; how events contribute to theme or relate to key ideas; or how a setting or context shapes structure and meaning.</p> <p>R.3.4 Infer relationships between ideas in a text (e.g., an implicit cause and effect, parallel, or contrasting relationship).</p> <p>R.8.1 Delineate the specific steps of an argument the author puts forward, including how the argument's claims build on one another.</p> <p>R.8.2 Identify specific pieces of evidence an author uses in support of claims or conclusions.</p>

High Impact Indicator	Related Indicators from Other Content Areas		
Social Studies	Science	Mathematical Reasoning	RLA
SSP.5.c: Analyze how a historical context shapes an author's point of view.			<p>R.6.1 Determine an author's point of view or purpose of a text.</p> <p>R.6.2 Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and responds to conflicting evidence or viewpoints.</p> <p>R.6.3 Infer an author's implicit as well as explicit purposes based on details in text.</p> <p>R.6.4 Analyze how an author uses rhetorical techniques to advance his or her point of view or achieve a specific purpose (e.g., analogies, enumerations, repetition and parallelism, juxtaposition of opposites, qualifying statements).</p>

High Impact Indicator	Related Indicators from Other Content Areas		
Social Studies	Science	Mathematical Reasoning	RLA
SSP.8.a: Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources.	<p>SP.5.a Reconcile multiple findings, conclusions or theories.</p> <p>SP.6.a Express scientific information or findings visually</p> <p>SP.6.b Express scientific information or findings numerically or symbolically.</p> <p>SP.6.c Express scientific information or findings verbally</p>	<p>MP.1 d. Recognize and identify missing information that is required to solve a problem.</p> <p>MP.1 e. Select the appropriate mathematical technique(s) to use in solving a problem or a line of reasoning.</p> <p>MP.5 a. Recognize flaws in others' reasoning.</p> <p>MP.5 b. Recognize and use counterexamples.</p> <p>MP.5 c. Identify the information required to evaluate a line of reasoning.</p>	<p>R.9.1/R. 7.1 Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline).</p> <p>R.9.3 Compare two argumentative passages on the same topic that present opposing claims (either main or supporting claims) and analyze how each text emphasizes different evidence or advances a different interpretation of facts.</p> <p>R.7.3 Compare two passages that present related ideas or themes in different genre or formats (e.g., a feature article and an online FAQ or fact sheet) in order to evaluate differences in scope, purpose, emphasis, intended audience, or overall impact when comparing.</p> <p>R.7.4 Compare two passages that present related ideas or themes in different genre or formats in order to synthesize details, draw conclusions, or apply information to new situations.</p> <p>R.8.3: Evaluate the relevance and sufficiency of evidence offered in support of a claim. Primarily measured with informational texts.</p> <p>R.8.4 Distinguish claims that are supported by reasons and evidence from claims that are not.</p> <p>R.8.5 Assess whether the reasoning is valid; identify fallacious reasoning in an argument and evaluate its impact.</p>

GED® Test Student-facing Skill Descriptions



GED® Science Test *(page 1 of 2)*

Reporting Category	Skill #	Subcategory	Skill
Reading and Writing in Science	1	Claims and evidence in Science	Find evidence from a science reading that supports a finding
	2		Make sense of information that differs between various science sources.
	3	Science vocabulary, terms, and phrases	Understand and explain information from science readings
	4		Understand symbols, terms, and phrases in science
	5		Use scientific words to express science information
Applying Science Concepts	2	Science Investigations	Design a science investigation
	3		Identify and explain independent and dependent variables
	4		Identify and improve hypotheses for science investigations
	5		Identify possible errors in a science investigation and change the design to correct them
	6		Identify the strengths and weaknesses of different types of science investigations
	1	Using evidence to draw conclusions or make predictions	Decide whether conclusions are supported by data
	7		Make conclusions based on data
	8		Make predictions based on data
	9	Science theories and processes	Understand and apply science theories and processes

Reporting Category	Skill #	Subcategory	Skill
Applying Mathematical Reasoning in Science	1	Science formulas and statistics	Apply science formulas (Example: $s = d/t$)
	8		Use statistics to describe science data (Example: determine the range to show the spread of data)
	2	Probability and sampling in Science	Determine the probability or likelihood of something happening
	4		Use a sample to answer science questions (Example: predict what may occur by examining a small part of a larger group)
	5		Use counting to solve science problems
	6		Presenting Science information using numbers, symbols, and graphics
	7		
	3		

GED® Social Studies Test *(page 1 of 2)*

Reporting Category	Skill #	Subcategory	Skill
Reading and Writing in Social Studies	1	Main ideas and details in Social Studies readings	<i>Use details to make inferences or claims</i>
	2		<i>Determine the central ideas of a primary or secondary source</i>
	3	Social Studies vocabulary	<i>Understand social studies terms and phrases</i>
	4	How authors use language in Social Studies	<i>Identify how authors use language, (for example, imagery or facts) to show their points of view or purpose.</i>
	5	Fact versus opinion	<i>Determine the difference between fact and opinion</i>
	6	Claims and evidence in Social Studies	<i>Determine whether a claim is or is not supported by evidence</i>
	7		<i>Compare information that differs between sources.</i>
Applying Social Studies Concepts	1	Making inferences	<i>Determine which evidence supports an inference</i>
	2	Connections between different Social Studies elements (people, events, places, processes, etc.)	<i>Describe the connections between people, places, environments, processes, and events</i>
	3		<i>Put events in order and understand the steps in a process (Example: how a bill becomes a law)</i>
	4		<i>Analyze the relationship of events, processes, and/or ideas (Example: whether earlier events actually caused later ones or simply occurred before them.)</i>
	5		<i>Analyze cause-and-effect relationships.</i>
	6		<i>Make judgments about how different ideas impact an argument.</i>
	8	The effect of different social studies concepts on an argument or point-of-view	<i>Analyze how events and situations shape the author's point of view</i>
	9		<i>Evaluate whether the author's evidence is factual, relevant, and sufficient</i>
	7	Identifying bias in Social Studies readings	<i>Identify bias and propaganda (Example: appealing to a specific group's emotions)</i>

Reporting Category	Skill #	Subcategory	Skill
Applying Mathematical Reasoning in Social Studies	1	Using data presented in visual form, including maps, charts, graphs, and tables	<i>Make sense of information that is presented in different ways (Example: charts, graphs and research data)</i>
	2		<i>Analyze information from maps, tables, charts, photographs, and political cartoons</i>
	3		<i>Expressing text into visual form.(Example: charts, graphs, tables etc)</i>
	4		<i>Interpret, use and create graphs with appropriate labeling, and use the data to predict trends. (Example: predict relationships or trends from scatterplots or line graphs)</i>
	5	Dependent and Independent variables	<i>Analyze and show how dependent and independent variables on a graph are related to each other.</i>
	6	Correlation versus causation	<i>Recognize the difference between correlation and causation between events.</i>
	7	Using statistics in Social Studies	<i>Find the mean, median, mode, and range of a data set</i>

GED® Reasoning Through Language Arts Test *(page 1 of 3)*

Reporting Category	Skill #	Subcategory	Skill
Expressing Meaning	1	Events, plots, characters, settings, and ideas	Put events in order
	2		Make inferences about plots, sequence of events, characters, settings, and ideas in passages
	3		Analyze relationships within passages
	4	Understanding main ideas and details	Determine the relationship between ideas
	5		Analyze how details develop the main idea
	6	Point of view and purpose	Identify the author's point of view and purpose
	7		Determine how the author explains a position and responds to different viewpoints
	8		Infer the author's purpose in the passage when it is not stated
	9	Tone and figurative language	Understand rhetorical techniques
	10		Understand how figurative language affects the meaning of words or phrases
	11		Understand how words affect tone
	12		Understand how the use of words, phrases, or figurative language influences the author's purpose
	13	Organizing ideas	Determine how a section fits into a passage and helps develop the ideas
	14		Analyze how text is organized
	15		Understand the meaning and purpose of transition words
	16		Analyze how the organization of a paragraph or passage supports the author's ideas
	17	Comparing different ways of presenting ideas	Compare ideas presented in different ways
	18		Compare two different texts and how they address scope, purpose, emphasis, audience, and impact
	19		Compare two different passages, focusing on point of view, tone, style, organization, purpose, or impact

Reporting Category	Skill #	Subcategory	Skill
Using Evidence	1	The relationship of Evidence to Main Ideas and Details	Understand main ideas and details
	2		Summarize information from a passage
	3		Identify the relationship between the main idea and details of a passage
	4		Determine the main idea of a passage
	5		Determine which details support a main idea
	6		Identify the theme and supportive elements in fiction and nonfiction
	7	Drawing conclusions, making inferences, and evaluating evidence	Make generalizations based on evidence
	8		Use main ideas to draw conclusions
	9		Describe the steps of an argument
	10		Identify evidence used to support a claim or conclusion
	11		Determine whether evidence is relevant and sufficient
	12		Determine whether a statement is or is not supported
	13		Assess whether an argument is valid
	14		Identify assumptions in an argument and determine if they are supported by the evidence
	15		Analyze two arguments and evaluate the types of evidence used to support each claim
	16	Data, graphs, or pictures as evidence	Analyze how data, graphs, or pictures support the author's claim or argument
	17	Extending your understanding to new situations	Combine information from different sources, draw conclusions, and transfer information to new situations

GED® Reasoning Through Language Arts Test *(page 3 of 3)*



Reporting Category	Skill #	Subcategory	Skill
Grammar and Sentence Structure	1	Word usage	Correct errors with frequently confused words
	2		Correct subject-verb agreement errors
	3		Correct pronoun errors
	4	Sentence structure	Eliminate non-standard English words or phrases
	5		Eliminate dangling or misplaced modifiers
	6		Edit sentences for parallel structure and correct use of conjunctions
	7		Edit for subject-verb and pronoun-antecedent agreement
	8		Eliminate wordiness or awkward sentence structure
	11		Eliminate run-on sentences and sentence fragments
	9	Transition words	Use transitional words and phrases
	10	Capitalization, punctuation, and apostrophes	Use correct capitalization
	12		Use apostrophes with possessive nouns correctly
	13		Use correct punctuation

GED® Mathematical Reasoning Test *(page 1 of 4)*

Reporting Category	Skill #	Skill
Rational Numbers	1	Place fractions and decimals in order
	2	Find multiples and factors (Example: least common multiple, greatest common factor)
	3	Simplify expressions that use exponents [Example: $a^6 \times a^5 = a^{11}$]
	4	Find the distance between numbers on a number line (absolute value)
	5	Compute and solve problems with whole numbers, fractions, and decimals
	6	Find the squares, square roots, cubes, and cube roots of numbers
	7	Know that expressions with a denominator of zero are "undefined" and have no solution
	8	Find unit rates (Examples: miles per hour, dollars per pound)
	9	Use scale factors to convert dimensions between scale drawings and actual objects
	10	Solve multiple-step problems that use ratios, proportions, and percents (Examples: simple interest, percent increase and decrease, gratuities, and commissions)

Reporting Category	Skill #	Skill
Shapes and Measurement	1	Find the side lengths of triangles, rectangles, and polygons when given the area or perimeter
	2	Find the area and perimeter of two-dimensional shapes (Examples: triangles, rectangles, polygons, composite shapes)
	3	Find the area and circumference of a circle and find the radius or diameter of a circle when given the area or circumference
	4	Use the Pythagorean theorem [$a^2 + b^2 = c^2$] to find a side length in a right triangle
	5	Find the volume and surface area of three-dimensional shapes (Examples: rectangular and right prisms, cylinders, right pyramids). Find the side lengths, radius, or diameter of a three-dimensional figure when given the volume or surface area
	6	Explain data from bar graphs, circle graphs, dot plots, histograms, box plots, tables, scatter plots, and coordinate planes
	7	Find the mean, median, mode, and range of a number set. Find a missing value when given an average.
	8	Use counting techniques to solve math problems (Example: count how many different ways objects can be ordered, arranged, or combined)
	9	Find the probability of an event happening (Example: What is the probability of drawing a jack or a king randomly from a deck of cards?)

Reporting Category	Skill #	Skill
Graphs and Functions	1	Locate points and graph linear equations on a coordinate plane
	2	Find the slope of a line from a graph, equation, or table
	3	Determine whether an equation and a graph show the same proportional relationship
	4	Identify features of graphs and tables for linear and nonlinear relationships (Example: rise/run to determine slope; coordinates of points; x/y intercept)
	5	Use the point-slope formula: $y - y_1 = m(x - x_1)$
	6	Use the slope-intercept formula: $y = mx + b$
	7	Use slope to identify whether lines are parallel or perpendicular
	8	Compare functions when shown in different ways (Example: tables, graphs, descriptions, algebraically)
	9	Recognize a function in a table or graph by determining whether or not there is only one output value for each input value
	10	Evaluate a function [Examples: $f(x) = x^2 - 3x$; find $f(-8)$; solve $x^2 + 3x - 28 = 0$]

Reporting Category	Skill #	Skill
Expressions and Equations	1	Solve linear expressions by adding, subtracting, multiplying, expanding, and factoring
	2	Evaluate linear, polynomial, and rational expressions through substitution
	3	Translate words to symbols to write quadratic equations and linear expressions, equations, and inequalities
	4	Add, subtract, multiply, divide, and factor polynomials. [Example: $(x + 8)(x + 4)$; factor $3x^2 - 2x + 12x - 8$]
	5	Write polynomial expressions from written descriptions
	6	Add, subtract, multiply and divide rational expressions
	7	Write an expression from a written description (Example: select the correct expression to solve a word problem)
	8	Use linear equations to solve real-world problems (Example: calculate the fuel efficiency of a car at different speeds)
	9	Use graphing, substitution, or addition to compute a system of two linear equations to solve real-world problems
	10	Solve problems that use inequalities and graph the answer on a number line
	11	Solve quadratic equations with one variable [Example: $3x^2 + 2x - 8 = 0$]