



Grade 11 English Language Arts (ELA) Course Objectives Curriculum

Framework: Common Core Standards (CCS) **Instructional Materials:** HMH

Collections

Program Overview

This detailed guide provides parents and newly admitted students with a comprehensive breakdown of the specific reading and writing skills developed at **Grade 11**. Aligned with the Common Core Standards, our curriculum ensures that students progressively build mastery from early reading foundations to advanced literary analysis, rhetoric, and scholarly writing.

Reading Objectives (Junior English / American Literature):

- Analyze the chronological and thematic evolution of American literary heritage, historical movements, and philosophical shifts from early colonization to modern times.
- Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents for their historical and rhetorical significance.
- Evaluate how an author's choices concerning how to structure specific parts of a text contribute to its overall meaning and aesthetic impact.
- Interpret a wide range of diverse American voices, tracking evolving cultural definitions of identity.

Writing Objectives:

Writing Focus: Story writing (narrative), sharing opinions (opinion/argumentative), and explaining facts (informative/explanatory)

- Produce advanced college-preparatory compositions demonstrating sophisticated sentence variety and stylistic maturity.
- Write rigorous rhetorical analysis essays evaluating how authors achieve their purpose through specific stylistic choices.
- Conduct extensive, properly cited academic research papers utilizing advanced databases and primary sources.

New Generation International Schools
Grade 11 Mathematics – Admission Exam Study Guide

This study guide outlines the core mathematical topics, descriptions, and examples for the Grade 11 admission assessment.

1. Solving Multi-Step Equations & Equations with Variables on Both Sides

- **Description:** Isolating variables across multiple operations and when terms appear on both sides of an equation.
- **Example:** Solving $3x - 5 = x + 7$ to find $x = 6$.

2. Solving Inequalities

- **Description:** Finding solution ranges for expressions using inequality symbols, remembering to reverse the sign when multiplying or dividing by a negative number.
- **Example:** Solving $-2x + 4 < 10$ to get $x > -3$.

3. Solving Systems of Equations

- **Description:** Finding the simultaneous intersection point of multiple linear equations using substitution or elimination methods.
- **Example:** Solving $x + y = 5$ and $x - y = 1$ to find $(3, 2)$.

4. Solving Radical Equations

- **Description:** Isolating the radical expression and squaring both sides to solve for the variable, while checking for extraneous solutions.
- **Example:** Solving $\sqrt{x + 3} = 4$ by squaring both sides to get $x = 13$.

5. Solving Absolute Value Equations

- **Description:** Splitting an absolute value equation into two separate cases (positive and negative outcomes) to find all possible solutions.
- **Example:** Solving $|2x - 1| = 5$ yielding $2x - 1 = 5$ or $2x - 1 = -5$ ($x = 3$ or $x = -2$).

6. Slope, Midpoint, and Distance Formulas

- **Description:** Applying coordinate geometry formulas to find the rate of change, middle coordinate, and length between two points.

- **Example:** Finding the distance between $(0, 0)$ and $(3, 4)$ using $d = \sqrt{(3 - 0)^2 + (4 - 0)^2} = 5$.

7. Equation of a Straight Line

- **Description:** Constructing linear equations using slope-intercept, point-slope, or standard form.
- **Example:** Writing the equation of a line with slope 2 passing through $(1, 3)$ as $y - 3 = 2(x - 1)$ or $y = 2x + 1$.

8. Parallel & Perpendicular Lines

- **Description:** Determining line alignment using identical slopes for parallel lines and negative reciprocal slopes for perpendicular lines.
- **Example:** Finding that a line parallel to $y = -3x + 2$ shares the slope $m = -3$.

9. Graphing Linear Functions

- **Description:** Plotting straight lines on a Cartesian grid using intercepts and slope parameters.
- **Example:** Graphing $y = \frac{1}{2}x - 2$ by identifying the y -intercept $(0, -2)$ and rise-over-run.

10. Forms of Quadratic Functions

- **Description:** Converting between standard form $(ax^2 + bx + c)$, vertex form $(a(x - h)^2 + k)$, and factored form $(a(x - p)(x - q))$.
- **Example:** Identifying the vertex $(h, k) = (2, -1)$ from the vertex form $y = (x - 2)^2 - 1$.

11. Solving Quadratic Equations (Factoring, Graphing, Quadratic Formula)

- **Description:** Finding the roots or x -intercepts of quadratic equations algebraically or graphically.
- **Example:** Solving $x^2 - 9 = 0$ by factoring into $(x - 3)(x + 3) = 0$ to get $x = \pm 3$.

12. Transformations of Quadratic Graphs

- **Description:** Analyzing shifts, reflections, and vertical stretches/compressions relative to the parent function $y = x^2$.
- **Example:** Describing the graph of $y = (x + 4)^2$ as a reflection across the x -axis and a horizontal shift 4 units left.

13. Geometry: Areas & Volumes

- **Description:** Calculating surface areas and volumetric capacities for multi-dimensional geometric shapes and solids.
- **Example:** Finding the volume of a cylinder with radius $r = 3$ and height $h = 5$ as

$$V = \pi r^2 h = 45\pi.$$

14. Lines & Angles Relations

- **Description:** Identifying angle properties formed by transversals, parallel lines, complementary, supplementary, and vertical angles.
- **Example:** Finding the supplement of an angle measuring 70° as $180^\circ - 70^\circ = 110^\circ$.

15. Trigonometry of Right-Angled Triangles (Angles of Elevation & Depression)

- **Description:** Applying sine, cosine, and tangent ratios (SOH-CAH-TOA) to solve right triangles and real-world sighting problems.
- **Example:** Finding $\sin(\theta)$ using $\frac{\text{Opposite}}{\text{Hypotenuse}}$ in a right triangle with legs 3, 4 and hy-

potenuse 5 ($\frac{3}{5}$)