

TIA

Curriculum

Grade 8

Language Arts

Reading strategies

- Main idea
- Theme
- Author's purpose and tone
- Text structure
- Literary devices
- Analyzing literature
- Analyzing informational texts
- Comparing texts
- Visual elements

Writing strategies

- Organizing writing
- Developing and supporting arguments
- Persuasive strategies
- Creative techniques
- Active and passive voice
- Editing and revising
- Research skills

Vocabulary

- Prefixes and suffixes
- Greek and Latin roots
- Synonyms and antonyms
- Word choice and usage
- Homophones
- Analogies
- Context clues
- Domain-specific vocabulary
- Reference skills

Grammar and mechanics

- Sentences, fragments, and run-ons
- Phrases and clauses
- Nouns
- Pronouns and antecedents
- Pronoun types
- Verb types
- Subject-verb agreement
- Verb tense and mood
- Adjectives and adverbs
- Prepositions
- Direct and indirect objects
- Conjunctions
- Misplaced modifiers
- Restrictive and nonrestrictive elements
- Commas
- Semicolons, colons, and commas
- Dashes, hyphens, and ellipses
- Capitalization
- Formatting

Mathematics

- Number theory
- Integers
- Operations with integers
- Exponents
- Scientific notation
- Square roots and cube roots
- Rational numbers
- Operations with rational numbers
- Rational and irrational numbers
- Ratios, rates, and proportions
- Proportional relationships
- Percents
- Consumer math
- Units of measurement
- Problem solving
- Coordinate plane
- Two-dimensional figures

- Transformations and congruence
- Transformations and similarity
- Pythagorean theorem
- Three-dimensional figures
- Geometric measurement
- Number sequences
- Expressions and properties
- One-variable equations
- One-variable inequalities
- Linear equations
- Functions
- Systems of linear equations
- Monomials and polynomials
- Data and graphs
- Statistics
- Probability

Science

- Science practices and tools
- Designing experiments
- Engineering practices
- Density
- Atoms and molecules
- Chemical reactions
- Velocity, acceleration, and forces
- Kinetic and potential energy
- Thermal energy
- Particle motion and energy
- Waves
- Solutions
- Classification and scientific names
- Biochemistry
- Cells
- Anatomy and physiology
- Genes to traits
- Adaptations and natural selection
- Fossils
- Plant reproduction
- Photosynthesis
- Ecosystems

- Ecological interactions
- Conservation
- Natural resources and human impacts
- Rocks and minerals
- Plate tectonics
- Topographic maps
- Water cycle
- Weather and climate
- Climate change
- Natural hazards
- Astronomy
- Units and measurement
- Computer and technology

Social Studies

History

Government
The Constitution
The legal system
Citizenship
Early Modern Europe
Age of Exploration
Colonial America
The American Revolution
The Early Republic
The Jacksonian period
The Antebellum period
The Civil War
Reconstruction
Modern U.S. history
Social studies skills

Geography

The Americas: society and environment
The Americas: geography
Europe: society and environment
Europe: geography
Africa: society and environment
Africa: geography

The Middle East: society and environment
Asia: society and environment
Asia: geography
Oceania: geography

Economics

Basic economic principles
Banking and finance
Supply and demand

Health Education

- **Social and Emotional Health**
- **Nutrition and Fitness**
- **Safety, First Aid, and Injury Prevention**
- **Disease Prevention and Control**

Character Building

- **Independence**
- **responsibility**
- **determination**
- **friendship**
- **enthusiasm**
- **self-confidence**
- **gratefulness**
- **respectfulness**
- **listening skills**
- **organization skills**
- **kindness**
- **Conflict Resolution**
- **Empathy**
- **Honesty**

Physical Education

- Soccer
- Basketball
- Volleyball
- Swimming

Music, Dance, Art and Craft