

## CURRICULUM BY GRADE

# Tenth Grade

Below are the standard courses and curriculum topics for Tenth Grade.

### Reading/Literature 10

- Daily reading of classic literature from our library or yours
- Log and track your progress

### Language Arts 10

- Strengthen, edit, and revise grammar and writing
- Argumentative essays
- Narrative essays
- Creative writing
- Digital presentations
- Improve writing using research, dictionary, and thesaurus
- Cite bibliographic references and sources
- Increase vocabulary and spelling

### Math 10 (Geometry)

- Points, lines, and planes
- Radius, area, circumference and other properties of circles
- Transformations of shapes on the coordinate plane
- Transformations and rigid motion
- Translating circles
- Parallel lines and corresponding angles
- Geometric constructions
- Similar and congruent triangles
- Right triangles and right triangle equations
- Sine, cosine, and tangent
- Similarity of circles
- Inscribed and central angles
- Constructing a tangent to a circle
- Write equations given the center and radius of a circle
- The directrix, focus, & vertex of a parabola
- Use slope to determine if lines are parallel or perpendicular

### History/Social Studies 10

- Turning points after the 1800s that shaped the modern world
- Ancient Greek and Roman philosophy that shaped western ideas
- Comparing the Glorious Revolution to the American Revolution
- World War I
- World War II
- Global advances in economy, information, and technology

### Science 10 (Chemistry)

- Atomic and molecular structure
- Chemical bonds
- Conservation of matter and stoichiometry
- Gases and their properties
- Acids and bases
- Solutions
- Chemical thermodynamics
- Reaction rates
- Chemical equilibrium
- Organic and biochemistry
- Nuclear processes
- Improve investigative and research skills

### Visual/Performing Arts 10

- Dance, music, art
- Drawing (traditional and digital)
- Art projects
- Museum tours

### Physical Education 10

- Calisthenics
- Build stamina and flexibility
- Stretching and calisthenics techniques
- Log and track your progress