



***What Your Child  
Will Learn  
In***



***Family Guide 2011 - 2012***

The purpose of this document is to give families an overview of their child's classroom learning experiences throughout the entire school year.

A child's program may differ depending on his or her instructional needs.

## English Literary Archetypes: Literature In The Tragic Mode

- ◆ Examine the conventions of Shakespearean drama.
- ◆ Use a variety of strategies to construct meaning.
- ◆ Compose oral, written and visual presentations that inform, persuade/argue and express personal ideas.

## Literary Forms: Fiction, Fantasy And Science Fiction

- ◆ Distinguish between science fiction and fantasy.
- ◆ Evaluate the effects of fictional elements on reader's interpretation.
- ◆ Use a variety of strategies to construct meaning.
- ◆ Compose oral, written and visual presentations that inform, persuade/argue and express personal ideas.

## Literary Origins: Epics

- ◆ Recognize epics as long, episodic narrative poems that recount the adventures of an historical or mythical hero.
- ◆ Use a variety of strategies for understanding text.
- ◆ Compose oral, written, and visual presentations that inform, persuade/argue and express personal ideas.

## Language

Apply knowledge of grammar concepts and skills to control written language.

- ◆ Combine and expand sentences.
- ◆ Differentiate complete sentences from non-sentences.
- ◆ Compose simple, compound, complex, and compound-complex sentences.

Comprehend and apply standard English usage and capitalization and punctuation.

- ◆ Apply consistent and appropriate use of:
  - ◆ Person, number and case of pronouns.
  - ◆ Pronoun/antecedent agreement.
  - ◆ Faulty adverb, verb and pronoun problems.
  - ◆ Incomplete constructions.
  - ◆ Dangling modifiers.

Compose texts using effective revising and editing strategies.

- ◆ Eliminating redundant and irrelevant words.
- ◆ Clarifying meaning through coordination and subordination, using active voice and placement of antecedents and modifiers.

- ◆ Use of consistent person, number, tense and mood.
- ◆ Vary sentence types and lengths to clarify and extend meaning and to demonstrate style.
- ◆ Employ punctuation for stylistic effect.

## Gifted And Talented (G/T)

Differentiation for students participating in the eighth grade G/T English Program is accomplished through an emphasis on designated G/T objectives that are outlined in the *Howard County Middle School English Essential Curriculum*. G/T English students are expected to work at an accelerated pace, to read and interpret challenging literature independently, and to formulate their own hypotheses about authors' intent and style.

Eighth grade G/T English students read three full-length works for intensive study from the following choices: *Frankenstein* by Mary Shelley, *The Pearl* by John Steinbeck, *The Odyssey*, *Beowulf* and *Related Readings*, and *The Red Badge of Courage* by Stephen Crane. These literary selections are reserved for G/T English because their complex sentence structure, advanced vocabulary, or difficult content present a special reading challenge.

By extending and refining knowledge, creative productions and investigations enable students to apply what they know about literature and composition to the development of original works. G/T English students maintain portfolios to assess and enhance their growth.

## Reading Planning for High School and Beyond

- ◆ Follow systematic research steps using a problem solving framework to make thoughtful and deliberate decisions regarding the scope and sequence for the student's college and career plan.
- ◆ Compose oral, written, and visual presentations that express personal ideas, inform, and persuade.

## Reading Historical Fiction

- ◆ Use before, during, and after reading strategies to comprehend literary text.
- ◆ Analyze important ideas and messages in literary texts.
- ◆ Analyze a variety of self-selected and assigned literary texts [print and non-print] representing diverse cultures, perspectives, ethnicities, and time periods.

- ◆ Read grade-level text with both high accuracy and appropriate pacing, intonation, and expression (fluency).
- ◆ Acquire, understand, and use new vocabulary.
- ◆ Compose oral, written, and visual presentations that express personal ideas, inform, and persuade.

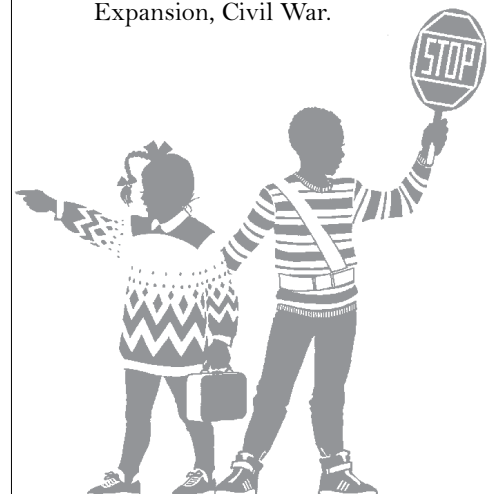
## Reading Informational Text

- ◆ Apply comprehension skills by selecting, reading, and interpreting a variety of print and non-print informational texts, including electronic media.
- ◆ Compose oral, written, and visual presentations that express personal ideas, inform, and persuade.

## The Advanced Reader

This differentiated essential curriculum is designed to meet the needs of grade 8 above level readers. The curriculum includes units on these topics:

- ◆ Shared Inquiry: Connecting to Literature
  - ◆ Critical reading, writing, and discussion
  - ◆ Cross-curricular connections
- ◆ Evaluating Scientific Concepts Through the Study of Informational Texts and Literature
  - ◆ Follow systematic research steps using a problem solving framework to explore issues related to technological advances in force and motion.
  - ◆ Investigate the world of work through an examination of the scientists who made discoveries about force and motion.
- ◆ Connecting the Past to the Present—Reading as a Historian
  - ◆ Industrial Revolution, Westward Expansion, Civil War.



# MATHEMATICS

## Mathematics

In Grade 8, mathematics is taught in three distinct courses. Although the mathematical content of each course is different, the following five areas of instruction are related to the content of each of the different courses:

### Problem Solving

- ◆ Use problem-solving to investigate and understand mathematical content.
- ◆ Formulate problems from situations within and outside mathematics.
- ◆ Develop and apply a wide variety of strategies to solve routine and nonroutine problems.
- ◆ Generalize solutions and strategies to new problem situations.

### Communications

- ◆ Model situations using oral, written, concrete, pictorial, graphical and algebraic methods.
- ◆ Use the skills of reading, listening and viewing to interpret and evaluate mathematical data.
- ◆ Discuss mathematical ideas, make conjectures, and make convincing arguments.

### Connections

- ◆ See mathematics as an integrated whole.
- ◆ Explore mathematics and describe results using graphical, numerical, physical, algebraic and verbal mathematical models or representations.
- ◆ Apply mathematical thinking and modeling to solve problems that arise in other disciplines and in real-life situations.

### Reasoning

- ◆ Recognize and apply inductive and deductive reasoning.
- ◆ Make and investigate mathematical conjectures and arguments.
- ◆ Validate one's own thinking.

### Technology

- ◆ Use appropriate technologies such as calculators, computers and the Internet to explore, compute and apply mathematical concepts in graphical, numerical and algebraic ways.
- ◆ Use technology to support and advance mathematical content.

## Pre-Algebra

In addition to the instructional areas of problem solving, communications, connections, reasoning and technology listed above, the following content areas are developed:

### Number Concepts And Operations

- ◆ Understand numbers, ways of representing numbers, relationships among numbers and number systems.
- ◆ Calculate powers of integers and square roots of perfect squares.
- ◆ Simplify numerical expressions with rational numbers.
- ◆ Use rules of exponents to simplify expressions and apply the concept of powers to scientific notation.
- ◆ Solve authentic problems involving percent.

### Patterns, Functions, Properties And Algebraic Concepts

- ◆ Understand various types of patterns and functional relationships.
- ◆ Evaluate variable expressions using exponents and order of operations.
- ◆ Use symbolic forms to represent and analyze mathematical situations.
- ◆ Translate between verbal and mathematical expressions and sentences.
- ◆ Solve equations in one variable using multiple transformations.
- ◆ Write and solve proportions.
- ◆ Use patterns to complete function tables and to find algebraic relationships.
- ◆ Graph relationships that can be described by linear functions.
- ◆ Solve for the unknown in an inequality.

## Geometry And Measurement

- ◆ Estimate and calculate the circumference and area of a circle.
- ◆ Estimate and calculate the circumference of composite shapes.
- ◆ Estimate and calculate the volume of a cylinder.
- ◆ State and apply angle and line relationships.
- ◆ Execute formal geometric constructions.
- ◆ State and apply the Pythagorean Theorem.
- ◆ Understand attributes, units and systems of measurement.
- ◆ Apply a variety of techniques, tools and formulas for determining measurement.

## Data Analysis, Statistics And Probability

- ◆ Pose questions and collect, organize and represent data to answer those questions.
- ◆ Read, construct and interpret graphs and plots, using technology where appropriate.
- ◆ Analyze the results of a survey or simulation.
- ◆ Express in different forms information from surveys, charts, tables and graphs.
- ◆ Use probabilities to make predictions.
- ◆ Determine probability of independent and dependent events.



# MATHEMATICS

## Algebra I/Data Analysis Functions And Algebra

The student will demonstrate the ability to investigate, interpret and communicate solutions to mathematical and real-world problems using patterns, functions and algebra.

- ◆ Analyze a wide variety of patterns and functional relationships using the language of mathematics and appropriate technology.
- ◆ Recognize, describe and/or extend patterns and functional relationships that are expressed numerically, algebraically and/or geometrically.
- ◆ Represent patterns and/or functional relationships in a table, as a graph and/or by mathematical expression.
  - ◆ Apply addition, subtraction, multiplication and/or division of algebraic expressions to mathematical and real-world situations.
  - ◆ Describe the graph of a non-linear function and discuss its appearance in terms of the basic concepts of maxima and minima, zeros (roots), rate of change, domain and range, and continuity.
- ◆ Model and interpret, real-world situations using the language of mathematics and appropriate technology.
  - ◆ Determine the equation for a line, solve linear equations and/or describe the solutions using numbers, symbols, and/or graphs.
  - ◆ Solve linear inequalities and describe the solutions using numbers, symbols and/or graphs.
- ◆ Solve and describe using numbers, symbols and/or graphs if and where two straight lines intersect.
- ◆ Describe how the graphical model of a non-linear function represents a given problem and estimate the solution.
- ◆ Apply formulas and/or use matrices (arrays of numbers) to solve real-world problems.

## Data Analysis And Probability

The student will demonstrate the ability to apply probability and statistical methods for representing and interpreting data and communicating results, using technology when needed.

- ◆ Collect, organize, analyze and present data.

- ◆ Design and/or conduct an investigation that uses statistical methods to analyze data and communicate results.
- ◆ Use the measures of central tendency and/or variability to make informed conclusions.
- ◆ Calculate theoretical probability or use simulations or statistical inferences from data to estimate the probability of an event.
- ◆ Apply the basic concepts of statistics and probability to predict possible outcomes of real-world situations.
  - ◆ Make informed decisions and predictions based upon the results of simulations and data from research.
  - ◆ Interpret data and/or make predictions by finding and using a line of best fit and by using a given curve of best fit.
  - ◆ Communicate the use and misuse of statistics.

Students taking Algebra I/Data Analysis take the Algebra I/Data Analysis High School Assessment.

## Geometry G/T Geometry, Measurement And Reasoning

The student will demonstrate the ability to solve mathematical and real-world problems using measurement and geometric models and will justify solutions and explain processes used.

- ◆ Represent and analyze two-dimensional and three-dimensional figures using tools and technology when appropriate.
  - ◆ Analyze the properties of geometric figures.
  - ◆ Identify and/or verify properties of geometric figures using the coordinate plane and concepts from algebra.
  - ◆ Use transformations to move figures, create designs and/or demonstrate geometric properties.
  - ◆ Construct and/or draw and/or validate properties of geometric figures using appropriate tools and technology.
- ◆ Apply geometric properties and relationships to solve problems using tools and technology when appropriate.
  - ◆ Identify and/or verify congruent and similar figures and/or apply

- equality or proportionality of their corresponding parts.
- ◆ Solve problems using two-dimensional figures and/or right-triangle trigonometry.
- ◆ Use inductive or deductive reasoning.
- ◆ Apply concepts of measurement using tools and technology when appropriate.
  - ◆ Use algebraic and/or geometric properties to measure indirectly.
  - ◆ Use techniques of measurement to estimate, calculate, and/or compare perimeter, circumference, area, volume and/or surface area of two- and three-dimensional figures and their parts.
- ◆ Contrast geometric properties in Euclidean geometry and non-Euclidean geometry.



# SCIENCE

The Maryland State Department of Education Standards Committee defines science as a “body of knowledge developed through the process of investigating that is combined with thoughtful reflections guided by critical thinking skills. This body of knowledge is dynamic and has a dramatic impact on every aspect of social life.”

The Howard County Public School System science program is grounded in this vision of science. Throughout the middle school science program, the concepts of science are taught in conjunction with science skills and processes in order to help students develop a deeper and richer understanding of scientific facts and principles.

In Grade 8 science, students will explain the composition, structure, and interactions of matter in order to support the predictability of structure and energy transformations. Students will also explain the interactions of matter and energy and the energy transformations that occur.

## Skills And Processes Of Science

Throughout middle school, students will refine the strategies for collecting, organizing and presenting data. They will work on identifying and applying the elements of scientific investigation.

Each year, the students will have many opportunities to apply and practice all of the listed science skills and processes across the concept areas. During each unit of instruction, students are expected to demonstrate the ability to use the following processes:

- ◆ Use proper safety procedures when conducting an investigation.
- ◆ Design, analyze or carry out simple investigations and formulate appropriate conclusions based on data obtained or provided.
- ◆ Review data from a simple experiment, summarize the data and construct a logical argument about the cause-and-effect relationships in the experimentation.
- ◆ Verify the idea that there is no fixed set of steps all scientists follow. Scientific investigations usually involve the collection of relevant

evidence, the use of logical reasoning, and the application of imagination in devising hypotheses and explanations to make sense of the collected evidence.

- ◆ Develop explanations that explicitly link data from investigations conducted, selected readings and, when appropriate, contributions from historical discoveries.
- ◆ Explain that complex systems require control mechanisms.
- ◆ Analyze, design, assemble and troubleshoot complex systems.
- ◆ Analyze the value and the limitations of different types of models in explaining real things and processes.

## Forces And Motion

- ◆ Develop an explanation of motion using the relationships among time, distance, velocity, and acceleration.
- ◆ Identify and relate formal ideas (Newton’s Laws) about the interaction of force and motion to real world experiences.
- ◆ Recognize and explain that every object exerts gravitational force on every other object.
- ◆ Recognize and explain that energy can neither be created nor destroyed; rather it changes form or is transferred through the action of forces.
- ◆ Describe and cite evidence that heat can be transferred by conduction, convection and radiation.
- ◆ Identify and explain that heat energy is a product of the conversion of one form of energy to another.

## Energy And Waves

- ◆ Cite evidence supporting that electrical energy can be produced from a variety of energy sources and can itself be transformed into almost any other form of energy.
- ◆ Identify and describe magnetic fields and their relationship to electric current.
- ◆ Identify and describe the relationships among the various properties of waves.
- ◆ Provide evidence to demonstrate the relationship among the properties of waves using sound.
- ◆ Investigate and cite the rules that govern behaviors of light.

## Basic Chemistry

- ◆ Cite evidence to support the fact that some substances can be separated into the original substances from which they were made.
- ◆ Compare compounds and mixtures based on data from investigations and research.
- ◆ Cite evidence and give examples of chemical properties of substances.
- ◆ Provide evidence to support the fact that common substances have the ability to change into new substances.
- ◆ Provide evidence and examples illustrating that many substances can exist as a solid, liquid, or gas depending on temperature.
- ◆ Describe how the motion of atoms and molecules in solids, liquids, and gases changes as heat energy is increased or decreased.
- ◆ Cite evidence to support the fact that all matter is made up of atoms, which are far too small to see directly through a microscope.
- ◆ Provide evidence to explain how compounds are produced. (i.e., no electron transfer).
- ◆ Provide evidence to support the fact that the idea of atoms explains conservation of matter.

## Advanced Chemistry

- ◆ Predict reactions using groupings of matter (i.e., metals/metalloids/nonmetals, reactive/nonreactive).
- ◆ Describe that elements combine in whole number ratios to form other substances called compounds (e.g., H<sub>2</sub>O, CO<sub>2</sub>, CO).
- ◆ Explain that matter cannot be created or destroyed but instead can be changed from one form into another.
- ◆ Identify that nuclear fission and fusion are alternate forms of energy.

## Gifted And Talented (G/T) Science Program

Students participating in eighth grade G/T science receive a differentiated program. Differentiation occurs when teachers preassess the students' knowledge and use curriculum compacting to accelerate the pace of instruction and increase the depth of learning.

In addition, a major goal of the middle school G/T science program is to provide an opportunity for students to do original scientific research. G/T students will complete the eighth grade portion of the gifted and talented research unit, which includes the following:

- ◆ Use the revised experimental design to conduct the research project.
- ◆ Evaluate the experimental data using appropriate descriptive statistics.
- ◆ Write the results and conclusion section of the research paper.
- ◆ Organize the scientific research paper using an appropriate format.
- ◆ Present the scientific research project to an authentic audience.

## Health

### Social And Emotional Health

- ◆ Compare sources of stress and their effects on health.
- ◆ Construct healthy strategies for managing stress.
- ◆ Examine the effects of unmanaged distress to include depression and suicide.
- ◆ Develop a personal health goal and track progress toward achievement.

### Tobacco, Alcohol And Other Drugs

- ◆ Distinguish between healthy and unhealthy use of prescription and over-the-counter drugs.
- ◆ Analyze the consequences of drug abuse.
- ◆ Demonstrate skills that promote a personal commitment to remain drug free.

### Safety, First Aid And Injury Prevention

- ◆ Critique strategies to avoid or handle unsafe situations.
  - ◆ Cite sources of conflict and other barriers to effective communication.

- ◆ Choose conflict resolution skills to prevent violence.
- ◆ Assess safe practices for potentially dangerous household products.
- ◆ Summarize strategies for the prevention and intervention of child abuse.
- ◆ Describe strategies for prevention and intervention of harassment, to include sexual harassment.

### Family Life And Human Sexuality

- ◆ Describe components of sexuality to include biological, psychological, cultural, and ethical.
- ◆ Explore issues related to dating relationships.
- ◆ Explain the consequences of adolescent sexual intercourse.
- ◆ Describe various contraceptives and their effectiveness in reducing the risk of pregnancy.
- ◆ Describe prevention, symptoms, and treatment of sexually transmitted infections to include HIV/AIDS.
- ◆ Apply skills that encourage a personal commitment to abstinence from sexual intercourse.
- ◆ Validate reasons why abstinence from sexual intercourse is a healthy, safe, and responsible decision for adolescents.

## Music

### Perceiving and Responding: Aesthetic Education

Students will demonstrate the ability to perceive, perform, and respond to music.

- ◆ Evaluate application of the elements of music and characteristics of musical sounds as they are used in a variety of genres and styles representative of world cultures.
- ◆ Develop the skills needed in the performance of music in general, vocal, and instrumental settings.
- ◆ Respond to music through movement.
- ◆ Read standard notation and apply it to the performance of music.

### Historical, Cultural, and Social Context

Students will demonstrate an understanding of music as an essential aspect of history and human experience.

- ◆ Describe how musical expression reflects social, political, and ethical issues.

- ◆ Determine factors that influence musicians in specific historical eras and places.
- ◆ Identify and explain the relationship of music to dance, theatre, the visual arts, and other disciplines.
- ◆ Identify and distinguish between and among significant styles and genres in music history representative of world cultures.

### Creative Expression and Production

Students will demonstrate the ability to organize musical ideas and sounds creatively.

- ◆ Explore musical ideas through simple improvisations.
- ◆ Preserve musical ideas through simple compositions and arrangements.

### Aesthetics and Criticism

Students will demonstrate the ability to make aesthetic judgments.

- ◆ Evaluate selected musical compositions using established criteria.
- ◆ Formulate, apply, and communicate criteria for evaluating personal performances and the performances of others.



# SOCIAL STUDIES

## Overview

This is the first part of a two-year program in United States History. This program provides opportunities for students to develop an understanding of historical skills, concepts, and content related to the history of our nation. This course also provides valuable background information to prepare students for American Government in Grade 10. There are countywide local assessments administered quarterly.

## Social Studies Skills

These skills and others are embedded throughout our curriculum.

- ◆ Map reading, construction and interpretation
- ◆ Spatial analysis and interpretation
- ◆ Historical thinking skills
- ◆ Problem solving/critical thinking
- ◆ Roles, rights and responsibilities of citizenship
- ◆ Strategic reading of social studies text
- ◆ Economic decision-making
- ◆ Explanatory and argument writing
- ◆ Information literacy
- ◆ Analysis and evaluation of primary and secondary sources
- ◆ Data analysis and interpretation.

## Course Content

There are four units in eighth grade social studies. What follows is a summary of some of the key objectives.

### The Road To Independence

- ◆ Understand the historical background, as well as political and social changes that led to the American Revolution.
- ◆ Topics of study include:
  - ◆ Regional differences among the original 13 colonies.
  - ◆ French and Indian War.
  - ◆ Differing viewpoints toward and responses to British colonial policies.
  - ◆ Major events and significant individuals of the American Revolution.

### Forging A New Nation

- ◆ Understanding the development of the federal government as a result of the U.S. Constitution, the philosophy of government that emerged during the Federalist Period, and the significant events and forces that shaped the new republic. Topics of study include:

- ◆ Strengths and weaknesses of the Articles of Confederation.
- ◆ Content and structure of the U.S. Constitution.
- ◆ Principles of government.
- ◆ Differences in interpretation of the Constitution.
- ◆ Contemporary events that show the evolution of the Constitution.

### Growth Of A Nation

- ◆ Understand the early foundations of the federal government, the causes and consequences of the War of 1812, the growth of nationalism, a changing American economy, and causes and consequences of territorial expansion.
- ◆ Topics of study include:
  - ◆ Accomplishments of the Washington administration.
  - ◆ Beginnings of political parties.
  - ◆ Marshall's Supreme Court decisions.
  - ◆ Impact of Louisiana Purchase.
  - ◆ American foreign policy.
  - ◆ Events of the War of 1812.
  - ◆ Impact of the Monroe Doctrine on foreign policy.
  - ◆ Social, political, and geographic factors leading to the Industrial Revolution.
  - ◆ Growing differences between the North and South.
  - ◆ Impact of Jackson's policies on economic and social development of America.
  - ◆ Concept of Manifest Destiny.
  - ◆ Mexican war.
  - ◆ Growing conflicts over slavery and political compromises.

### A Union In Disunion

- ◆ Understand the issues and events that led the nation to separation and to the Civil War, the effects of the war on the American people, and the significant economic, social and political consequences of the war.
- ◆ Topics of study include:
  - ◆ Cultural and political contributions of free African Americans.
  - ◆ Different cultures and economies of the North and South.
  - ◆ Various points of view about the issue of slavery.
  - ◆ Violent conflicts over slavery and other issues.

- ◆ Election of Lincoln and secession by southern states.
- ◆ Strengths and weaknesses of the North and South.
- ◆ Contributions of various individuals and groups to the war.
- ◆ Major battles and their outcomes.
- ◆ Purposes and effects of the Emancipation Proclamation.
- ◆ Lincoln's and Johnson's plans for Reconstruction.
- ◆ Amendments to the Constitution to reflect the abolition of slavery.
- ◆ Participation of African Americans in public offices.
- ◆ Strategies used to impede civil rights of African Americans.

### Gifted and Talented (G/T)

Specific gifted and talented objectives for social studies are included in the Essential Curriculum Documents for Grades 6-8. There are two "G/T Inquiries" that are grounded in the content of particular units. These required inquiries are broad questions that are used as springboards for classroom research and problem-solving activities in the G/T classes.

### Special Programs

The Office of Secondary Social Studies supports several special programs available for middle school students. The *History Day Competition* is a local, state, and national competition that promotes historical inquiry, knowledge, and understanding among secondary school students. History Day encourages the development of research skills, the analysis and interpretation of primary and secondary source materials, and the opportunity for creative expression. HCPSS sponsors a large regional competition each year that includes up to 300 students from our public and private schools. This program is typically integrated as a part of the curricular program, but is dependent upon school interest. The *Black Saga Competition* is a statewide competition that challenges student knowledge about the African American experience. Middle and elementary schools from across the state compete for prizes and awards. This event is very dependent upon school interest and community support, as it is an extracurricular program.

## School Counseling

### Academic Development

- ◆ Identify interests, personal learning styles, academic strengths and difficulties in order to succeed in the learning process.
- ◆ Develop positive organizational, time management, study, test taking and planning skills to achieve school success.
- ◆ Evaluate the benefits of regular attendance and positive behaviors to ensure school success.
- ◆ Utilize a variety of strategies and resources helpful in making a successful transition from elementary to middle school, grade to grade, middle to high school, and between comprehensive and alternative schools.
- ◆ Explore special programs, academic options, and extracurricular opportunities in order to enhance learning and personal growth.
- ◆ Explain the relationship between academic skills and the world of work.

### Career Development

- ◆ Locate, evaluate and interpret career information.
- ◆ Identify effective steps in decision-making and how to apply them to education, career and life choices.
- ◆ Investigate requirements and options to develop a four-year plan of study for high school.
- ◆ Identify personal qualities and behaviors needed to secure and maintain employment.
- ◆ Identify stereotypes, biases and discriminatory behaviors that may limit opportunities in the workplace.

### Personal/Social Development

- ◆ Express feelings in order to more accurately:
  - ◆ understand one's feelings and the feelings of others.
  - ◆ communicate one's needs.
  - ◆ communicate assertively.
- ◆ Develop coping skills in order to adapt to change, make positive transitions and effectively handle stress.

- ◆ Employ essential social skills needed to experience positive working relationships and work cooperatively in groups.
- ◆ Develop alternative ways to handle conflicts in order to avoid aggressive behaviors.
- ◆ Show respect for physical, academic and cultural differences among peers and adults in order to learn and work effectively with others.

## Physical Education

- ◆ Analyze and adapt components of the principle to adjust levels of physical activity.
- ◆ Explain the benefits of physical activity.
- ◆ Apply Newton's Laws of Motion to optimize movement and minimize injury.
- ◆ Recognize the relationship between effort and improvement.
- ◆ Recognize how individuals progress through learning stages at various rates.
- ◆ Assess and analyze individual flexibility.
- ◆ Develop fundamental movement skills and apply them to a variety of physical education and daily life activities.



# WORLD LANGUAGES (FRENCH OR SPANISH)

## Communicate in French Interpersonal

- ✦ Talk about animals and describe their colors.
- ✦ Talk about where things are located.
- ✦ Identify parts of the body.
- ✦ Talk about where one lives and how to get around town.
- ✦ Describe a city, its buildings, and places of interest.
- ✦ Ask for, give and follow directions in a city.
- ✦ Talk about where he or she goes during the week and on the weekend.
- ✦ Talk about future plans.
- ✦ Extend, accept and decline invitations to go places and to do things in town.
- ✦ Describe his or her family and how people are related.
- ✦ Identify articles of clothing and describe what others are wearing by name and color.
- ✦ Talk about shopping for clothing, and request help in a store.
- ✦ Use the numbers up to 1,000,000.
- ✦ Compare currency and rates of exchange.

## Communicate in Spanish Interpersonal

- ✦ Request and give information about pastimes, leisure activities and sports.
- ✦ Say how often and when something occurs.
- ✦ Extend, accept and decline invitations.
- ✦ Talk about future plans.
- ✦ Identify and describe family members and request and give information about how people are related.
- ✦ Share descriptions of residences and their furnishings.
- ✦ Obtain and provide information about household activities, chores, and errands.
- ✦ Talk about the location of places and request directions.
- ✦ Identify articles of clothing and describe what others are wearing by name and color.
- ✦ Talk about shopping for clothing, and request help in a store.
- ✦ Use the numbers up to 1,000,000.
- ✦ Compare currency and rates of exchange.

## Communicate in French or Spanish Interpretive

- ✦ Comprehend simple daily conversations on familiar topics by using authentic recordings, broadcasts and videos.
- ✦ Determine meaning of words based on context cues, cognates, word derivatives, and use of other resources.
- ✦ Use before, during, and after strategies to gain comprehension of both written and spoken language.

## Presentational

- ✦ Apply the writing traits components to compose in a variety of formats.
- ✦ Compose and deliver formal oral presentations in the target language.

## Gain Knowledge and Understanding of Other Cultures

### Practices

Demonstrate knowledge and understanding of another people's way of life and the relationship between their patterns of behavior and the underlying beliefs and values that guide their lives.

### Products

Demonstrate knowledge and understanding of the relationship between the products and beliefs and values of the cultures that use the target language.

## Connect with Other Disciplines and Acquire Information

### Cross-curricular

Reinforce and further knowledge of other disciplines through the world language

### Acquire Information

Apply the Big6™ process to access and use information from sources in the target language.

## Develop Insight Into the Nature of Language and Culture

### Language

Examine elements of the target language and comparable elements in English.

### Culture

Compare concepts of the cultures studied with one's own.

## Participate in Multilingual Communities

- ✦ Use the language both within and beyond the school setting.
- ✦ Use the language for personal enjoyment and enrichment as a life-long learner.



## Technology Education

Students will be expected to participate in designing, fabricating and testing solutions to more detailed design briefs. They will be required to demonstrate technological processes used to achieve the solution to the design brief. Data collected during testing will be analyzed and modifications to the initial solution will be made and re-tested.

### The Nature Of Technology

- ◆ Explain the nature, characteristics and scope of technology.
- ◆ Explain the core concepts of technology.
- ◆ Explain the relationships among technologies and the connections between technology and other fields of study.

### Impacts Of Technology

- ◆ Assess the impacts of products and systems.
- ◆ Describe the cultural, social, economic and political effects of technology.
- ◆ Examine the effects of technology on the environment.

### Engineering Design And Development Process

- ◆ Outline the attributes of design.
- ◆ Examine engineering design.
- ◆ Apply the design process.
- ◆ Select and use tools and equipment correctly and safely.

### Core Technologies, Building Blocks Of The Designed World.

- ◆ Explain the functioning and applications of core technologies applied in common technology systems.
- ◆ Investigate materials technology.

### Major Enterprises That Produce The Goods And Services Of The Designed World

- ◆ Understand information and communication technologies.

## Family And Consumer Sciences

### Food And Nutrition

- ◆ Identify and explain the function and food sources of nutrients in the growth and maintenance of the human body.
- ◆ Identify the sources and function of proteins, complete and incomplete, and apply appropriate food preparation techniques.
- ◆ Discuss the short and long term benefits and risks associated with eating choices.
- ◆ Identify problems that occur from extreme eating behaviors.
- ◆ Analyze a diet record in order to evaluate food choices.
- ◆ Establish criteria for making daily food choices to meet valued outcomes.
- ◆ Differentiate among cafeteria and restaurant menu items that contribute to meeting daily dietary requirements.
- ◆ Identify the components of the USDA nutrition facts label and use nutritional information provided on food labels to plan healthy meals.
- ◆ Research special claims on food labels related to the nutritive value of packaged foods.
- ◆ Explain how cultural diversity impacts food choice and preparation and describe the variety of ways that nutritional needs can be met by preparing a sample of multicultural foods.
- ◆ Select an ethnic/cultural region and describe how the customs, geography, climate, social systems, etc. affect food choices, customs and staples.
- ◆ Demonstrate knowledge of culture through preparation and serving of multicultural foods.

### Consumer Choice And Financial Literacy

- ◆ Integrate and apply financial knowledge, attitudes, and skills.
- ◆ Analyze the economic impact of government, business and consumer financial decisions.
- ◆ Demonstrate the ability to use money management skills and strategies.

- ◆ Develop financial goals based on personal values.
- ◆ Compare and contrast various types of financial institutions and the services they provide.
- ◆ Align appropriate financial services and products to specified goals.
- ◆ Compare the advantages and disadvantages of credit products and services.
- ◆ Identify sources of credit.
- ◆ Calculate the cost of borrowing.
- ◆ Identify and evaluate interest rates, fees, and other charges associated with borrowing.
- ◆ Compare credit scores and reports.
- ◆ Explain the consequences of not meeting credit obligations.
- ◆ Apply strategies for creating wealth and building assets.
- ◆ Describe the relationship between saving and investing.
- ◆ Explain how to use debt beneficially.
- ◆ Examine strategies that protect income and wealth.
- ◆ Examine the need for and value of various types of insurances within the life cycle.
- ◆ Compare different types of markets.
- ◆ Investigate the purposes, strategies, and effects of various business practices, including sales techniques.
- ◆ Differentiate sources of consumer protection and assistance, including public institutions and private organizations.
- ◆ Demonstrate sewing techniques to maintain clothing and to evaluate the quality of purchased garments.



# ART / GIFTED AND TALENTED (G/T)

## Art

### Apply art concepts and creative thinking strategies to show ways:

- ◆ Drawing combines observational studies with images drawn from imagination, memory, verbal description and experimentation in a composition.
- ◆ Painting uses color theory and painting techniques in an effective composition or design.
- ◆ Printmaking uses techniques and design principles to adapt an image and make a print.
- ◆ Sculpture can be used to make a three-dimensional form that performs a special function.
- ◆ Crafts utilize the formal qualities of art in a personal way.

### Through the art disciplines, students will:

- ◆ Use a sketchbook/journal to review, evaluate and analyze prior work.
- ◆ Establish a sense of light and shadow to simulate the illusion of depth and form.
- ◆ Work in collaboration with peers and others to solve in-class and/or school-wide problems involving compositions, design and techniques.

### When exiting eighth grade, the student works toward proficiency by:

- ◆ Following sequential processes using various media (drawing, painting, printmaking, crafts, sculpture) to solve art problems using art strategies.
- ◆ Recognizing and discussing qualities of the elements of art and principles of design in making aesthetic judgements about works of art.
- ◆ Distinguishing relationships between styles and apply approaches used in cultural exemplars and by master artists.
- ◆ Working in groups to generate, develop and apply ideas in making an artwork.

## Gifted And Talented (G/T)

The G/T Program provides a continuum of services in addition to G/T classes. Middle School G/T resource teachers instruct students who participate in the G/T Writers Guild, Instructional Seminars and Research Investigations.



# LIBRARY MEDIA / EDUCATIONAL TECHNOLOGY

## Library Media

### Inquiry Process

- ◆ Identify information needs.
- ◆ Create, refine, and use criteria to guide the research process.
- ◆ Follow systematic problem-solving using the Big6 process.

### Locate and Evaluate Resources and Sources

- ◆ Identify and use a wide variety of resources.
- ◆ Use the library media center's catalog to locate sources to meet the information need.
- ◆ Evaluate potential sources for the information need.
- ◆ Use text features to select appropriate sources.
- ◆ Identify and follow the district's Acceptable Use Policy and school-based computer use rules.
- ◆ Learn to use safe practices online.

### Find, Generate, Record, and Organize Data/Information

- ◆ Use keywords for finding answers to questions.
- ◆ Utilize effective search strategies for collecting relevant information from sources.
- ◆ Use technology tools to find, record, and organize data/information within sources.
- ◆ Differentiate between fact and opinion.
- ◆ Avoid plagiarism by correctly recording relevant information and keeping track of sources used.
- ◆ Use a variety of formats for recording and organizing data/information.
- ◆ Create a source list using an accepted citation style.
- ◆ Match appropriate format with content to be organized.

### Interpret Recorded Data/Information

- ◆ Identify the main ideas of recorded information.
- ◆ Apply critical thinking and problem-solving strategies.
- ◆ Create new understandings and knowledge related to the information need.

### Share Findings/Conclusions

- ◆ Use a variety of formats to share information learned.
- ◆ Apply fair use, copyright laws, and Creative Commons attributions.
- ◆ Reflect on and provide feedback about the research process and the information product.

### Literature Appreciation and Life-Long Learning

- ◆ Read, listen to, view, and discuss stories that reflect human experiences.
- ◆ Make literature connections to self, to other literature, to multimedia, and to the world.
- ◆ Use libraries for personal or assigned needs.
- ◆ Utilize library circulation procedures and policies to access reading materials.
- ◆ Locate and select literature and/or multimedia in a variety of genres.
- ◆ Recognize the connection between reading and being a lifelong learner.

### Educational Technology Technology Systems

- ◆ Describe technology in appropriate language.
- ◆ Demonstrate fundamental computer operations.
- ◆ Demonstrate proficient use of input and output devices.
- ◆ Manage files by saving them in different formats, organizing files and folders, and saving files to external drives and servers.
- ◆ Explore the nature of assistive technology devices.
- ◆ Practice safe computing.

### Digital Citizenship

- ◆ When researching, list appropriate copyrighted electronic sources.
- ◆ Explain how technology affects the individual and society.
- ◆ Respect information privacy, using and altering information only when authorized.
- ◆ Abide by copyright laws involving software use and Internet files.

### Technology For Learning And Collaboration

- ◆ Improve productivity using appropriate keyboarding techniques.
- ◆ Design and develop desktop publishing products, such as newsletters and brochures, that incorporate text and graphics to prepare and present content-related information.
- ◆ Collect, organize, manipulate and analyze data using appropriate software.
- ◆ Create word processing documents using formatting features such as tabs, margin adjustments, page orientation, justification, columns, headers, footers and page numbers to communicate ideas.
- ◆ Collaborate with peers, experts and others by using telecommunications to investigate curriculum-related problems, issues and information.

### Technology For Communication And Expression

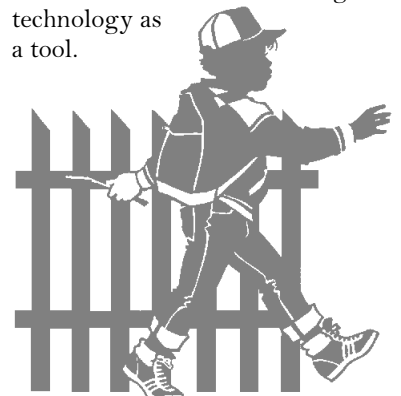
- ◆ Recognize technology's role in telecommunication.
- ◆ Use various media and formats for multiple purposes.
- ◆ Communicate curriculum concepts to design, develop, publish and present multimedia products such as web pages, interactive presentations and digital video products.

### Technology For Information Use And Management

- ◆ Identify, obtain and use information from electronic data sources such as CD-ROM, databases and the Internet.

### Technology For Problem Solving And Decision Making

- ◆ Solve real world problems using technology as a tool.
- ◆ Make informed decisions using technology as a tool.



# HOW TO HELP YOUR CHILD AT HOME

## Writing

- ◆ Encourage your child to write to relatives and friends who may live out of town. Use e-mail.
- ◆ Encourage journal writing as another way to record memorable family events - trips, holidays, weddings, birthdays and other special occasions.
- ◆ Encourage your child to read aloud the papers she/he prepares for school.
- ◆ Be primarily interested in the content rather than the mechanics of their writing.
- ◆ Praise your child's efforts at writing.
- ◆ Ask to see your child's composition folder whenever you visit his or her teacher.

## Mathematics

- ◆ Discuss with your child the mathematics that he/she is learning.
- ◆ Find opportunities to do mathematics every day.
- ◆ Listen to your child explain how he/she approaches and solves mathematics problems.
- ◆ Work on puzzles and other "fun" mathematics problems.
- ◆ Explore the mathematics in books and television shows that you read or view together.
- ◆ Discuss the mathematics found in the media (newspaper articles, news reports, magazines).
- ◆ Use computers and calculators, as well as pencil and paper, to solve problems.
- ◆ Discuss with your child why (or why not) an answer to a mathematics problem is reasonable.
- ◆ Help your child review memorized facts.
- ◆ Make mistakes a part of learning.
- ◆ Have a positive attitude toward mathematics.
- ◆ For web resources go to [www.hcps.org](http://www.hcps.org) and look at math resources in the section "For Students."

## Science

- ◆ Have your child discuss the science concepts that were studied in class that day.
- ◆ Use print material such as newspapers and magazines to identify and study recent developments in science and technology.

- ◆ Encourage your child to watch scientific programming and discuss the topics presented.
- ◆ Visit local museums to study past and recent scientific discoveries. Discuss how this information has impacted human life.
- ◆ Have your child discuss a scientific problem and apply the scientific method to research the problem.
- ◆ Participate in programs sponsored by local colleges, astronomical groups or government agencies, such as NASA, to study the night sky using telescopes.
- ◆ Have your child list and describe the effects that chemicals, used in everyday life, have on the environment. Brainstorm alternatives to those chemicals that may have a negative impact on the environment.

## Reading

- ◆ Talk about what you and your child are reading.
- ◆ Have books, magazines and newspapers available in the home.
- ◆ Set aside some time each day for reading rather than watching television.
- ◆ Encourage summer reading of high interest materials.
- ◆ Take family visits to the public library.
- ◆ Give your children books as gifts.
- ◆ Use the Internet to research and read information of use to your family.

## Physical Education

- ◆ Encourage your child to participate in at least three different sports, dance or outdoor pursuits sponsored by an organized group or at least informally with peers.
- ◆ Ask your child to explain how to perform an activity that he/she does well and you would like to try.
- ◆ Ask your child to assess your health related fitness condition. You will take the health related fitness test and your child will assess your performance.

## School Counseling

- ◆ Designate an area in your home for your child to complete homework.
- ◆ Review daily and long term assignments with your child.
- ◆ Encourage your child to participate fully in the middle school experience by participating in special programs and extracurricular activities.
- ◆ Praise your child for effort and achievement.
- ◆ Expose your child to career options by discussing careers of family members and friends.
- ◆ Demonstrate how to effectively share feelings.
- ◆ Encourage decision making skills by offering your child choices, when possible and modeling decision-making skills.
- ◆ Assist your child in developing a high school plan.

## Technology Education

- ◆ Take your child to museums that focus on or have areas related to technology.
- ◆ Provide an area where your child can create and experiment with different designs to problem solving activities.
- ◆ Encourage your child to create procedural outlines for solving a problem.
- ◆ Point out different forms of technology used in everyday life.



# HOW TO HELP YOUR CHILD AT HOME

## Family and Consumer Sciences

- ◆ Visit a grocery store and list visible thermometer check points, their readings and locations. Discuss the settings and if they fall in the food safety classifications your child learned in home economics.
- ◆ Help your child check your refrigerator and storage areas (and those of an elderly friend or relative) for food supplies that may have stayed longer than food safety considerations suggest.
- ◆ Assist your child in completing his/her own basic clothing repairs—sewing on buttons, repairing rips, hem, etc.
- ◆ Give your child the responsibility of planning a week's worth of lunches considering nutritional value and cost.
- ◆ Take your child to work with you to learn about the work world.
- ◆ Discuss with your child how you might have used a resume, job applications and interviewing skills to get a job during high school.
- ◆ Encourage your child to think about and explore different career pathways.
- ◆ Visit a bank and discuss the different types of accounts available for personal use.

## Art

- ◆ Set aside an area for artwork to be made, finished for exhibition and displayed.
- ◆ Provide a sketchbook to record and plan artwork, and a variety of materials and tools for your child to use in:
  - ◆ drawing, which can be used to make observational studies of people and objects, such as various graphite pencils, fine point water-based markers and charcoal pencils.
  - ◆ painting, which can be used to show details and mood, such as colored pencils and water-based markers, tempera, watercolor and fine-point brushes.
  - ◆ printmaking, to depict mood and depth, such as linoleum or wood and appropriate carving tools, water-based inks and a variety of papers.

- ◆ sculpture, which moves or performs a function such as soft woods and metals, the tools to shape them with, and the hardware for assembly.
- ◆ crafts, which compare everyday objects from American culture to the culture of others, such as paper, wire and wood.
- ◆ Emphasize observation as a means for recording images in drawing, painting and sculpture, including portraits of family and friends.
- ◆ Make available a variety of resources from which to gather ideas for making artwork such as family photos, objects for still-life, art magazines and the fliers or newsletters published by museums and galleries.
- ◆ Continue to promote the use of artful activities to make family events special.
- ◆ Visit galleries and museums to discuss the plans, subject matter, processes and techniques used by master artists, and ways they reflect the period in which they worked.
- ◆ Share the public library with your child as a source for books which picture master artworks, the preliminary sketches and series of works of a particular subject or place done by artists, and also describe the lives and working methods of artists.

## Health

- ◆ Help your child set realistic goals.
- ◆ Create a list of support people to help family members deal with health issues such as stress and depression.
- ◆ Clearly state your attitudes about tobacco, alcohol and other drug use.
- ◆ Discuss the consequences of the use of tobacco, alcohol and other drugs.
- ◆ Practice decision-making skills with your child by identifying options, choosing the best alternative and considering consequences for decisions.
- ◆ Develop with your child a list of strategies for peacefully resolving conflicts.
- ◆ Monitor your child's use of the Internet.
- ◆ Role-play situations where your child can practice refusing to become involved in risky situations.

- ◆ Use events on television, in the newspaper and in books to elicit conversations on topics related to safety and injury prevention.
- ◆ Discuss family guidelines for dating.
- ◆ Discuss family values regarding sexual behavior.
- ◆ Use events on television, in the newspaper and in books to elicit conversations on topics related to human sexuality.

## Library Media

- ◆ Encourage reading for fun and as a free-time activity.
- ◆ Create an environment rich with books. Middle school students especially enjoy reading paperback books.
- ◆ Read with your child every chance you get – even if it's just part of a newspaper article at the breakfast table.
- ◆ Discuss ideas in books your child reads.
- ◆ Be a role model. Let your child see you read for pleasure.
- ◆ Practice using the Big6 model for problem solving everyday life situations.
- ◆ Obtain a library card for your child, and utilize the library as a resource for information and materials for enjoyment.
- ◆ Encourage your child to participate in age-appropriate activities sponsored by the public library.
- ◆ Encourage your child to utilize online homework help provided by Howard County Library.
- ◆ Look for computer programs that encourage reading.



# HOW TO HELP YOUR CHILD AT HOME

## Music

- ◆ Encourage your child to listen with you to music of all styles.
- ◆ Discuss with your child music heard on radio, television or in live performances, using descriptive words to express preferences.
- ◆ Urge your child to elect instrumental or choral music in school and to take private lessons on an instrument.
- ◆ Provide opportunities for your child to participate in outside musical groups: orchestra, community theatre, or summer camp.
- ◆ Provide a variety of musical materials and tools for your child's use: compact discs and cassette tapes, music computer software, books and periodicals about music and musicians and musical instruments.
- ◆ Encourage your child to follow up on special interests by researching artists, composers and styles of music through use of the Internet, library books, encyclopedias and current music periodicals.
- ◆ Provide opportunities to explore music of various cultures through local festivals and concerts, or while traveling.
- ◆ Share music of your own culture with your child and his or her classmates.
- ◆ Encourage your child to experiment, improvise or compose, using a computer or musical instruments in the home.
- ◆ Share a variety of concert experiences with your child and discuss the selection of music and the effectiveness of the performances.
- ◆ Convey to your child the value you place on music as an integral part of the core school curriculum and a body of studies which contribute to academic success and a rich quality of life.

## Educational Technology

- ◆ Discuss the use and impact of technology in everyday life such as cell phones, PDAs (personal digital assistants), e-mail communication, automatic teller machines and electronic catalogs at the library.
- ◆ Encourage your child to use technology as a research tool for projects when appropriate. For

example, you might help your child search the Internet to locate information about a specific topic. The Howard County Public School System provides online resources to assist students (*World Book Online*, *Student Resource Center Jr.*, *U.S. History*, *CultureGrams* and *SIRS Researcher*). Check with the library media specialist at your school for access information.

- ◆ Encourage your child to use technology as a tool for homework when appropriate. For example, you might work with your child to create a multimedia presentation for a class project.
- ◆ Encourage your child to practice keyboarding skills.
- ◆ Encourage your child to use Software programs appropriate for grade 8: *Microsoft Word*, *Excel* and *Powerpoint*, *Inspiration* and *Mavis Beacon Teaches Typing*.

## Social Studies

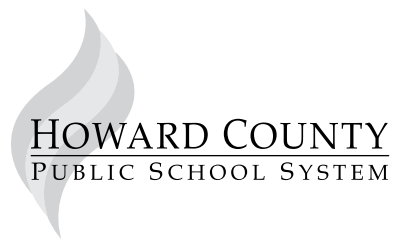
- ◆ Make the daily newspaper and weekly news magazines a part of family reading.
- ◆ Watch news documentaries and specials as a family and discuss the issues that are raised.
- ◆ Visit local government meetings and the courthouse as a family.
- ◆ Visit museums, historical societies and historic sites.
- ◆ Encourage your child to support his/her ideas with data and other forms of evidence.
- ◆ Have your child keep a travel journal when traveling on vacation.
- ◆ Follow along with the map or GPS (global positioning system) device when traveling.
- ◆ Practice map reading and directional skills.

For more detailed information about the social studies curriculum, office, resource links, and special sections designed just for parents and students, visit the social studies website at <http://www.hcpss.org/socst>

## World Languages

- ◆ Encourage your child to practice the new language at home.
- ◆ Have your child teach you or siblings words and phrases in the new language.
- ◆ Encourage your child to communicate with a child from another culture as a penpal.
- ◆ Visit galleries and museums that feature art or artifacts from other cultures.
- ◆ Encourage your child to practice the new language with native speakers of that language in restaurants, department stores and shops.
- ◆ Share travel brochures, videos and travel guides that feature the target culture with your child.
- ◆ Ask your child to share the French or Spanish names of ordinary objects, professionals, actions, family members, animals and foods with you and siblings.
- ◆ Share your own experiences with the target language and target culture with your child.
- ◆ Ask your child to interpret words or phrases from the target language encountered.
- ◆ Make a real or virtual visit to a country where French or Spanish is spoken.
- ◆ Provide opportunities for your child to perform in French or Spanish for family members or neighbors.
- ◆ Encourage your child to practice numbers, days of the week, months, seasons, colors, clothing, geographic names, family names, occupations, and foods in the target language for pronunciation practice.
- ◆ Provide opportunities for your child to listen to age-appropriate music and to watch age-appropriate films from the target culture.





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