

# K-8 Curriculum Guide 2015-2016

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# KINDERGARTEN CURRICULUM

## **Balanced Literacy in Elementary**

Our approach to literacy uses the *Writer's Workshop* and *Reader's Workshop* models developed by Lucy Calkins at Teacher's College at Columbia University. For spelling, we utilize a Word Study model, which lies at the intersection of receptive and expressive language, using *Fundations* in Kindergarten through 2nd grade (K-2) and *Words their Way* in 1st through 5th grades.

**Reading Instruction** is integrated into various parts of the day, and is focused upon during Reader's Workshop. These periods may include mini-lessons with direct instruction in certain concepts; centers and activities designed to give children the chance to practice those concepts; and several key instructional techniques.

In *independent reading*, students read individually and silently while teachers hold one-on-one conferences. *Guided Reading* is small-group instruction for students who read the same text, while in *literature study*, small groups of students talk in depth about what they have read, and may take turns facilitating the discussion. *Interactive read-alouds* allow students to experience a variety of quality texts in different genres. The teacher pauses at significant points, asks students for comments, and invites brief discussions. In *shared reading*, students learn to predict how a story will progress, increase and develop new vocabulary, discover and implement reading strategies, recognize letters and sounds in the context of the words of the story, and use structural and visual cues to aid them in the reading process.

**Writing Instruction** occurs daily, both during Writer's Workshop and in other subjects. Students are guided through all of the stages of writing, from brainstorming and generating ideas to drafting, revising, editing, and publishing. Writer's Workshop begins with mini-lessons with direct instruction in specific concepts such as word choice and diction, genre studies, sentence structure, and much more. When *independent writing* occurs in a Writer's Workshop, students strengthen their ability to write ideas in sequence, and practice writing strategies taught during mini-lessons. During *writing conferences*, teachers meet one-on-one with students to confer and coach the student writer. In *guided writing*, the teacher works closely with students to provide opportunities to plan and create texts, and apply what they have learned in their compositions. *Interactive (or shared) writing* asks teacher and students to collaborate to produce text, which supports the development of the application of writing strategies, providing models for a variety of writing styles, and models the connections between and among sounds, letters, and words.

**Word Study** is a developmental approach to teaching spelling that allows students to learn the logic and consistencies within our written language system. Students develop a general knowledge of English spelling, including regularities, conventions and patterns, as well as specific knowledge about individual words, addressing the overlapping levels of alphabet, pattern, and meaning that create standard spelling. Teachers assess students' knowledge and skill at various times throughout the year, and determine targeted instructional needs and form flexible student groupings. The K-2 *Fundations* curriculum lays the groundwork for lifelong literacy through foundational skills, emphasizing phonemic awareness, phonics, and word study. The first through fifth grade *Words Their Way* curriculum utilizes the activity of word sorts to engage students in actively searching, comparing, contrasting, analyzing, and constructing their understanding of words and form.

# While engaging in the TBS literacy curriculum, a Kindergarten student develops the following skills and concepts:

## Reading

- Demonstrates comprehension by retelling, dramatizing, and/or discussing books
- Knows uppercase and lowercase letter sounds
- Makes predictions about the story
- Has grade-level awareness of story structure, setting, main idea, and characters when reading or listening to a read aloud

#### Writing

- Demonstrates developmentally appropriate fine motor skills
- Writes with left-to-right directionality
- · Consistently leaves space between words when writing
- Attempts phonetic spelling independently

### Speaking & Listening

- Learns and practices new vocabulary
- Asks clarifying questions
- Participates in group discussions
- Listens respectfully and takes turns speaking
- Articulates relevant ideas clearly

## Math in Elementary

Our framework for math curriculum is drawn from the guidelines provided by the *National Council of Teachers of Mathematics (NCTM)*. At TBS we recognize the five "content" strands of math (number & operations, geometry, measurement, algebra, data analysis & probability) and five "process" strands of math (problem solving, reasoning & proof, communication, connections, and representation).

### Investigations in Numbers, Data and Space (sometimes called TERC)

Aligned with the NCTM curriculum guidelines, TERC provides the basic scope and sequence for our curriculum, and the broad knowledge and skills that we expect students to learn. It is designed to provide math concepts in context, allowing students to share and learn a variety of strategies from and alongside each other.

To meet the complete needs of our student learners for differentiation, remediation, and enrichment, we draw from the following resources, among others:

*Montessori materials* are particularly helpful for kinesthetic and visual learners. They promote individual discovery and mastery.

*Marcy Cook Math materials* provide intriguing problems and build number sense and math vocabulary understanding in a fun way.

*JUMP! Math* breaks procedures into tiny steps that are more manageable for some students, which allows kids to build success and confidence. It also provides many opportunities for teachers to conduct formative assessment.

*Contexts for Learning* provides rich, real-world problem solving explorations.

Our approach to math instruction involves collaboration between the classroom teachers, Curriculum & Instruction Coordinator, Differentiated Instruction Math Specialist, and Learning Support Office.

# While engaging in the TBS math curriculum, a Kindergarten student develops the following skills and concepts:

- Number fluency in counting 0 to 100 verbally
- Recognizes and writes numerals up to 50
- Understands and uses counting strategies
- Classifies objects into categories' counts the objects in each; sorts the categories by amount
- Identifies whether the number of objects in one group is greater than, less than, or equal to another group
- Solves addition & subtraction problems with small numbers
- For any number from 1 to 10, finds the number that makes 10 when added to the given number
- Directly compares two objects to see which object has more of/less of a measurable attribute
- Constructs, describes, and extends repeating patterns
- Recognizes properties of two- and three-dimensional shapes
- Understands length and using linear units
- Demonstrates math thinking with clear writing, pictures, manipulatives, or verbal expression

# **Cultural Studies in Elementary**

Our framework for cultural studies comes from both Montessori curriculum and California state social studies standards. Cultural studies instruction draws from many varied resources, including Great Stories and key experiences from the Montessori curriculum, such as the Needs of People. This provides the opportunity to understand universal commonalities between all cultures, while celebrating the diversity of regions and a knowledge of world geography, earth, and landforms.

Our approach involves an emphasis on practicing the skills and thinking of historians and social scientists, and also interdisciplinary exploration involving literacy, math, art, and science. Students make a variety of trips that increase in scope from Kindergarten through Fifth Grade, starting in the local neighborhood of the school, to investigating the city of Berkeley, native Ohlone sites, Chinatown and the Mission, Gold Country, and Fort Ross.

First/Second and Fourth/Fifth Grade classrooms alternate cultural studies topics from one year to the next, so that all students receive the equivalent of a First/Second or Fourth/Fifth social studies education after two years in the class.

# While engaging in the TBS cultural studies curriculum, a Kindergarten student develops the following skills and concepts:

- Expresses similarities and differences between self, family, school, and community
- Shows respect for and understanding of other cultures
- Recognizes others' perspectives with respect

# Science in Elementary

Our framework for science curricula includes elements from the new Next Generation Science Standards (NGSS), Montessori curriculum, and older California state science standards. Science instruction draws from the following resources, among others:

*Next Generation Science Standards Science & Engineering Practices,* which include asking questions, defining problems, using models, investigating, analyzing data, and designing solutions.

*Montessori pedagogy,* which draws on Great Stories like the *Creation of the Universe* to spark a sense of awe and interest in 1st/2nd grades.

*Causal Patterns in Science* from *Harvard Project Zero*, to address misconceptions, create models, and describe scientific thinking in 4th/5th grades.

*AIMS Education Foundation curriculum,* which provides hands-on learning opportunities such as specific experiments.

*MARE (Marine Activities, Resources & Education)* for studies of marine biology and oceanography in 4th/5th grades.

Our approach to science involves an emphasis on practicing the skills and thinking of scientists and engineers, integrating art with observation, discovery through hands-on activities, explaining thinking by creating models and defending them, and design thinking and building to solve problems. First/Second and Fourth/Fifth Grade classrooms alternate science topics from one year to the next, so that all students receive the equivalent of a First/Second or Fourth/Fifth science education after two years in the class.

# While engaging in the TBS science curriculum, a Kindergarten student develops the following skills and concepts:

- Shows curiosity about the natural world through inquiry
- Makes observations and shares with others
- Makes predictions, hypotheses, and conclusions
- Records information with pictures

# Art in Elementary

In the K-5 Art Studio at TBS, students receive dedicated time for art instruction and art making. They are introduced to art-making processes in two-dimensional and three-dimensional areas that includes painting, drawing, photography, digital technology in art, sculpture, textiles, clay, and mixed media practices. We also use technology in service of viewing images of art and to take virtual visits to see how artists work in their studios. The TBS Art Studio experience offers students time to explore and deepen their skills of understanding materials in a given area. They learn how to "think like an artist", developing 8 studio habits of mind, developed by *Harvard's Project Zero*. By teaching thinking protocols in addition to the process of art making, we believe students learn how to transfer these ways of working and thinking to other areas of inquiry.

## Art Learning Goals for Kindergarten

- Takes risks and opportunities to explore ideas, tools, and materials
- Focuses while in the studio to complete process steps
- Looks more closely at things as an artist

# Spanish in Elementary

The goal of the K-5 Spanish curriculum is to create a space where students feel comfortable taking risks as they work to acquire new language skills. We play games, sing songs, recite poems, tell and act out stories and plays, and explore the traditions and cultures of Spanish-speaking countries. Students learn the language using many different language-acquisition strategies. In Spanish class we study all four elements of literacy (reading, writing, listening, and speaking) and every class provides opportunities to develop oral language and conversational skills. Resources include research-based strategies such as GLAD (Guided Language Acquisition Development), TPR (Total Physical Response), and TPRS (Teaching Proficiency through Reading and Storytelling). We also incorporate art, music and movement to create an interactive classroom that addresses different learning styles.

## Spanish Learning Goals for Kindergarten

- Makes connections between primary language and Spanish
- Applies oral language skills introduced in class
- Demonstrates curiosity about Spanish language and culture

# Music in Elementary

The music program at TBS is rooted in the Orff-Schulwerk, an approach to music instruction that celebrates children's inherently playful nature through movement, rhythmic speech, singing, pitched percussion (xylophones, metallophones and glockenspiels), and unpitched percussion (body percussion and drums). Students have the opportunity to sing, dance, play instruments, improvise, and compose every time they come to music class. They explore traditional and contemporary music as well as pieces drawn from the Orff-Schulwerk primary source volumes. *"Elemental music is never just music. It is bound up with movement, dance, and speech, and so it is a form of music in which one must participate, in which one is involved not as a listener but as a co-performer."* -Carl Orff

### Music Learning Goals for Kindergarten

- Keeps a steady beat
- Uses proper technique on barred and unpitched percussion instruments
- Contributes ideas in improvisation activities
- Takes care of the instruments

## Movement in K-2

In the K-2 movement program, children engage in movement explorations, somatic practices and dynamic group games which integrate motor, cognitive, and social-emotional learning. Clarifying how students physically create and influence their actions, children discover how they can participate in the formation of their behaviors and learning. These kinds of experiential explorations and practices are joyful and fun. They spark creativity and imagination, empower self-growth, and encourage lifelong learning.

#### Movement Learning Goals for Kindergarten

- Explores and invents movement possibilities
- Creates and shapes physical expression
- Engages in whole body listening
- Regulates personal space within group

# Physical Education in K-2

The K-2 physical education (PE) program focuses primarily on motor development and the student's advancement in building a relationship with fitness and physical activity. With those components at the core of the program students also receive enrichment in social and emotional learning and practicing what it means to be a good teammate or classmate. The three areas of focus for motor development are locomotor skills, stability skills, and manipulative skills. Students are assessed prior to each unit and at the conclusion of each, and also receive formative assessment on stations days. Stations allow students to work on their personal fitness and unit specific skills while bridging together all units to be covered throughout the year. By focusing on these concepts students better prepare themselves for the 3rd-8th grade PE program, which takes those skills and transfers them into team games and activities that require a foundation of refined motor skills and development.

### Physical Education Learning Goals for Kindergarten

- Walking
- Running
- Galloping
- Jumping
- Hopping
- Skipping
- Landing
- Balance
- Rotation
- Throwing

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# While engaging in the TBS literacy curriculum, a First or Second Grade student develops the following skills and concepts:

### Reading

- Reads grade appropriate sight words with speed, accuracy and consistency
- Decodes unfamiliar words using blends, digraphs and dipthongs and letter sounds
- Recognizes individual words in unfamiliar contexts
- Problem solves unknown words by applying learned strategies
- Reads with grade appropriate fluency and phrasing
- Makes self-corrections by monitoring contexts
- Retells stories with key details/events including: components of story structure, setting and character names
- Makes text-to-text, to-self, and to-world connections and comparisons
- Makes predictions about stories
- Uses inferencing to deepen understanding at a grade appropriate level
- Applies text features to locate information in books
- Selects and independently reads "just right" books

#### Writing

- Writes all letters clearly and legibly
- Uses writing tools independently to support writing
- Uses phonetic "invented" spelling independently
- Writes sight words with correct spelling using memory or word wall
- Uses conventional spelling for grade-level, high-frequency words
- Uses and edits for final punctuation
- Uses and edits for appropriate letter case
- Adds detail such as five senses, onomatopoeia, character emotion, dialogue, etc.
- Includes descriptive language
- · Writes on various topics in multiple styles
- Generates ideas independently
- Organizes & expresses ideas clearly
- Recognizes & uses basic parts of speech in writing and verbally
- Uses correct subject-verb agreement
- Writes a complete sentence

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- Learns and practices new vocabulary
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### First Grade

#### Number & Operations

- Accurately counts objects
- Accurately counts on from a given number verbally
- Number fluency in counting 0 to 100 verbally
- Recognizes numerals up to 50
- Understands that the digits of a two-digit number represent amounts of tens and ones

#### Geometry & Measurement

- Describes, identifies, compares, and sorts 2-D & 3-D shapes by attributes
- Recognizes coin money by names and values
- Reads and writes time in hours and half-hours
- Understands length and measures with linear units

#### Algebraic Thinking & Data Analysis

- Constructs, describes, and extends repeating patterns
- Accurately writes number sentences
- Utilizes and recognizes basic symbols of math operation (+, -, =, <, >)
- Contributes to and reads data from graphs

#### Process

• Demonstrates math thinking with writing, pictures, manipulatives, or verbal expression

### Second Grade

#### Number & Operations

- Reads and writes 3-digit whole numbers
- Understands place value and orders whole numbers up to 1000
- Represents & solves problems involving addition & subtraction
- Knows single-digit addition combinations
- Knows subtraction combinations up to 20
- Uses repeated addition to perform multiplication
- Understands fractions as equal parts of an area or group
- Can represent and recognize a part as a fraction
- Performs division by partitioning groups into equal shares

#### **Geometry & Measurement**

- Describes, identifies, compares, and sorts 2-D and 3-D shapes by attributes
- Accurately measures length and width using standard units
- Reads & writes time to the nearest 15 minutes
- Solves problems involving coins and paper currency

### Algebraic Thinking & Data Analysis

- Identifies the rule needed to extend or complete a pattern.
- Utilizes and recognizes basic symbols of math operation (+, -, x, ÷, =, <, >)
- Collects, organizes, and presents data with pictographs and bar graphs

#### Process

- Explains mathematical thinking using equations, diagrams & words
- Applies effective strategies and appropriate operations to word problems

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### While engaging in the TBS cultural studies curriculum, a First or Second Grade student:

- Develops a sense of time, from geological to personal
- Reads a calendar to identify year, month, week, days, and dates
- Identifies basic land and water forms and applies to maps and local environment
- Creates maps and models
- Shows respect for traditions and cultures not one's own

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# While engaging in the TBS science curriculum, a First or Second Grade student develops the following skills and concepts:

- Makes observations and shares with others
- Uses tools to gather scientific information
- Uses pictures and words to explain scientific thinking
- Understands the relative motions of the sun and earth, and uses them to explain the seasons
- Observes and articulates properties of states of matter
- Understands that water can be in different forms in different places on earth
- Understands that a day and year varies depending on the planet's revolution and rotation
- Uses design thinking for problem solving

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# Movement in K-2

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## Physical Education Learning Goals for First and Second Grade

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# While engaging in the TBS literacy curriculum, a Third Grade student develops the following skills and concepts:

## Reading

- Reads out loud with fluency and expression
- Independently chooses and reads books from a variety of genres
- Uses phonetic understanding to decode words (rereads for understanding)
- Uses varied strategies for determining meaning of unfamiliar words
- Shows understanding of story elements
- Accurately summarizes, including character names and main ideas of a text
- Actively engages in text by making text-self, text-text, and text-world connections
- Uses informational texts in pursuit of questions and/or research
- Draws inferences, conclusions, and generalizations from texts
- Describes characters and how they have changed throughout the story
- Makes reasonable predictions based on details from the text

## Writing

- Generates ideas independently
- Organizes and expresses ideas clearly
- Effectively uses an editing checklist to self-edit/partner edit writing pieces
- Uses appropriate capitalization & punctuation
- Applies phonetic knowledge when spelling
- Uses conventional spelling for grade level high-frequency words
- Identifies pertinent details when note-taking
- Understands the structure of an expository essay
- In an opinion writing piece, effectively introduces topic, states opinion, and creates structure that lists reasons
- In informational writing, effectively introduces topic, and groups related information together in a paragraph
- Develops and supports topic with facts, definitions, details, and examples
- Understands the structure of a letter
- Accurately identifies and uses nouns, verbs, pronouns, adjectives, and adverbs
- Independently produces complex sentences in context

## Speaking and Listening

- · Learns and practices new vocabulary
- Asks clarifying questions
- Participates in group discussions
- Listens respectfully and actively
- Articulates relevant ideas clearly

# Math in Elementary

Our framework for math curriculum is drawn from the guidelines provided by the *National Council of Teachers of Mathematics (NCTM)*. At TBS we recognize the five "content" strands of math (number & operations, geometry, measurement, algebra, data analysis & probability) and five "process" strands of math (problem solving, reasoning & proof, communication, connections, and representation).

## Investigations in Numbers, Data and Space (sometimes called TERC)

Aligned with the NCTM curriculum guidelines, TERC provides the basic scope and sequence for our curriculum, and the broad knowledge and skills that we expect students to learn. It is designed to provide

math concepts in context, allowing students to share and learn a variety of strategies from and alongside each other.

To meet the complete needs of our student learners for differentiation, remediation, and enrichment, we draw from the following resources, among others:

*Montessori materials* are particularly helpful for kinesthetic and visual learners. They promote individual discovery and mastery.

*Marcy Cook Math materials* provide intriguing problems and build number sense and math vocabulary understanding in a fun way.

*JUMP! Math* breaks procedures into tiny steps that are more manageable for some students, which allows kids to build success and confidence. It also provides many opportunities for teachers to conduct formative assessment.

*Contexts for Learning* provides rich, real-world problem solving explorations.

Our approach to math instruction involves collaboration between the classroom teachers, Curriculum & Instruction Coordinator, Differentiated Instruction Math Specialist, and Learning Support Office.

# While engaging in the TBS math curriculum, a Third Grade student develops the following skills and concepts:

#### Number & Operations

- Understands place value and orders whole numbers up to 1000
- Reads and writes whole numbers to 1000
- Fluently adds & subtracts numbers in the range 0-1000
- Understands and uses estimating strategies
- Understands and works with an array model of multiplication
- Understands when to apply multiplication
- Knows single-digit multiplication combinations
- Performs division by partitioning groups into equal shares
- Uses inverse relationship between multiplication and division
- Understands fractions as equal parts of an area or group
- Recognizes equivalent forms of common fractions

#### **Geometry & Measurement**

- Makes inferences regarding the properties of 2-D and 3-D shapes
- Classifies angles as right, acute, or obtuse
- Finds and understands perimeter & area of polygons
- Measures length using standard units
- Reads & writes time to the nearest minute
- Solves problems involving coins and paper currency

#### Algebraic Thinking & Data Analysis

- Identifies the rule needed to extend or complete a pattern
- Utilizes and recognizes basic symbols of math operation (+, -, x, ÷, =, <, >)
- Collects, organizes, and represents data in bar graphs and line plots

#### Process

- Explains mathematical thinking using equations, diagrams, and simple arguments
- Applies effective strategies and appropriate operations to word problems

# **Cultural Studies in Elementary**

Our framework for cultural studies comes from both Montessori curriculum and California state social studies standards. Cultural studies instruction draws from many varied resources, including Great Stories and key experiences from the Montessori curriculum, such as the Needs of People. This provides the opportunity to understand universal commonalities between all cultures, while celebrating the diversity of regions and a knowledge of world geography, earth, and landforms.

Our approach involves an emphasis on practicing the skills and thinking of historians and social scientists, and also interdisciplinary exploration involving literacy, math, art, and science. Students make a variety of trips that increase in scope from Kindergarten through Fifth Grade, starting in the local neighborhood of the school, to investigating the city of Berkeley, native Ohlone sites, Chinatown and the Mission, Gold Country, and Fort Ross.

First/Second and Fourth/Fifth Grade classrooms alternate cultural studies topics from one year to the next, so that all students receive the equivalent of a First/Second or Fourth/Fifth social studies education after two years in the class.

# While engaging in the TBS cultural studies curriculum, a Third Grade student develops the following skills and concepts:

- Understands different types of physical geography
- Recognizes aspects of local maps and landmarks
- Identifies how humans impact the environment in the past and present
- Presents information through tables, charts, maps, and graphs
- Differentiates fact from opinion
- Exhibits orienteering skills
- Compares and contrasts between how local Native Americans lived in the ancient and recent past, and how we live today
- Understands how to organize and create a timeline
- Articulates the structure of local government
- Exhibits understanding of economic concepts and reasoning

## Science in Elementary

Our framework for science curricula includes elements from the new Next Generation Science Standards (NGSS), Montessori curriculum, and older California state science standards. Science instruction draws from the following resources, among others:

*Next Generation Science Standards Science & Engineering Practices,* which include asking questions, defining problems, using models, investigating, analyzing data, and designing solutions.

*Montessori pedagogy,* which draws on Great Stories like the *Creation of the Universe* to spark a sense of awe and interest in 1st/2nd grades.

*Causal Patterns in Science* from *Harvard Project Zero*, to address misconceptions, create models, and describe scientific thinking in 4th/5th grades.

AIMS Education Foundation curriculum, which provides hands-on learning opportunities such as specific experiments.

*MARE (Marine Activities, Resources & Education)* for studies of marine biology and oceanography in 4th/5th grades.

Our approach to science involves an emphasis on practicing the skills and thinking of scientists and engineers, integrating art with observation, discovery through hands-on activities, explaining thinking by creating models and defending them, and design thinking and building to solve problems. First/Second and Fourth/Fifth Grade classrooms alternate science topics from one year to the next, so that all students receive the equivalent of a First/Second or Fourth/Fifth science education after two years in the class.

# While engaging in the TBS science curriculum, a Third Grade student develops the following skills and concepts:

- Actively engages in scientific investigations
- Makes observations and shares with others
- Uses pictures and words to explain scientific thinking
- Uses tools to gather scientific information
- Makes predictions, hypotheses and conclusions
- Understands the parts of a plant
- Demonstrates understanding of plant and animal relationships within a food chain/web
- Recognizes elements of local ecosystems
- Demonstrates understanding of principles of waves, sound, and light
- Demonstrates understanding of the qualities and layers of the atmosphere

## Art in Elementary

In the K-5 Art Studio at TBS, students receive dedicated time for art instruction and art making. They are introduced to art-making processes in two-dimensional and three-dimensional areas that includes painting, drawing, photography, digital technology in art, sculpture, textiles, clay, and mixed media practices. We also use technology in service of viewing images of art and to take virtual visits to see how artists work in their studios. The TBS Art Studio experience offers students time to explore and deepen their skills of understanding materials in a given area. They learn how to "think like an artist", developing 8 studio habits of mind, developed by *Harvard's Project Zero*. By teaching thinking protocols in addition to the process of art making, we believe students learn how to transfer these ways of working and thinking to other areas of inquiry.

### Art Learning Goals for Third Grade

- Takes risks and opportunities to explore ideas, tools, and materials.
- Focuses while in the studio and completes process steps.
- Looks more closely as an artist.

# Spanish in Elementary

The goal of the K-5 Spanish curriculum is to create a space where students feel comfortable taking risks as they work to acquire new language skills. We play games, sing songs, recite poems, tell and act out stories and plays, and explore the traditions and cultures of Spanish-speaking countries. Students learn the language using many different language-acquisition strategies. In Spanish class we study all four elements of literacy (reading, writing, listening, and speaking) and every class provides opportunities to develop oral language and conversational skills. Resources include research-based strategies such as GLAD (Guided Language Acquisition Development), TPR (Total Physical Response), and TPRS (Teaching Proficiency through Reading and Storytelling). We also incorporate art, music and movement to create an interactive classroom that addresses different learning styles.

### Spanish Learning Goals for Third Grade

- Makes connections between primary language and Spanish
- Applies oral language skills introduced in class
- Demonstrates curiosity about Spanish language and culture

## Music in Elementary

The music program at TBS is rooted in the Orff-Schulwerk, an approach to music instruction that celebrates children's inherently playful nature through movement, rhythmic speech, singing, pitched percussion (xylophones, metallophones and glockenspiels), and unpitched percussion (body percussion and drums). Students have the opportunity to sing, dance, play instruments, improvise, and compose every time they come to music class. They explore traditional and contemporary music as well as pieces drawn from the Orff-Schulwerk primary source volumes. *"Elemental music is never just music. It is bound up with movement, dance, and speech, and so it is a form of music in which one must participate, in which one is involved not as a listener but as a co-performer."* -Carl Orff

#### Music Learning Goals for Third Grade

- Accurately plays ostinati on barred and unpitched percussion instruments
- Contributes ideas in improvisation activities
- Demonstrates willingness to sing, make rhythms and engage in movement activities
- Takes care of the instruments

## Physical Education in 3-5

Physical education focuses on developing four physical skills (overhead throwing, catching, striking and running to kick a ball), all of which focus on body mechanics, spatial awareness, and effort/force. In addition, we focus on developing two social skills: teamwork (including listening, questioning, persuading, respecting, helping, sharing, and participating) and sportsmanship (which combine skills of honesty, fairness, respect, and graciousness in winning and losing). The students engage in a variety of fun, athletic, team-building activities that allow for repetition, which helps in

the development of all these skills. On a daily basis the students engage in stretching and calisthenics, to help build a strong foundation for skill development. Dance activities help to promote rhythm and timing, while circus activities enhance balance, timing, hand-eye coordination, flexibility and physical strength.

# Physical Education Learning Goals for Third Grade

- Teamwork
- Sportsmanship
- Catching
- Throwing
- Striking
- Running to kick a ball

## **Balanced Literacy in Elementary**

Our approach to literacy uses the *Writer's Workshop* and *Reader's Workshop* models developed by Lucy Calkins at Teacher's College at Columbia University. For spelling, we utilize a Word Study model, which lies at the intersection of receptive and expressive language, using *Fundations* in Kindergarten through 2nd grade (K-2) and *Words their Way* in 1st through 5th grades.

**Reading Instruction** is integrated into various parts of the day, and is focused upon during Reader's Workshop. These periods may include mini-lessons with direct instruction in certain concepts; centers and activities designed to give children the chance to practice those concepts; and several key instructional techniques.

In *independent reading*, students read individually and silently while teachers hold one-on-one conferences. *Guided Reading* is small-group instruction for students who read the same text, while in *literature study*, small groups of students talk in depth about what they have read, and may take turns facilitating the discussion. *Interactive read-alouds* allow students to experience a variety of quality texts in different genres. The teacher pauses at significant points, asks students for comments, and invites brief discussions. In *shared reading*, students learn to predict how a story will progress, increase and develop new vocabulary, discover and implement reading strategies, recognize letters and sounds in the context of the words of the story, and use structural and visual cues to aid them in the reading process.

**Writing Instruction** occurs daily, both during Writer's Workshop and in other subjects. Students are guided through all of the stages of writing, from brainstorming and generating ideas to drafting, revising, editing, and publishing. Writer's Workshop begins with mini-lessons with direct instruction in specific concepts such as word choice and diction, genre studies, sentence structure, and much more. When *independent writing* occurs in a Writer's Workshop, students strengthen their ability to write ideas in sequence, and practice writing strategies taught during mini-lessons. During *writing conferences*, teachers meet one-on-one with students to confer and coach the student writer. In *guided writing*, the teacher works closely with students to provide opportunities to plan and create texts, and apply what they have learned in their compositions. *Interactive (or shared) writing* asks teacher and students to collaborate to produce text, which supports the development of the application of writing strategies, providing models for a variety of writing styles, and models the connections between and among sounds, letters, and words.

**Word Study** is a developmental approach to teaching spelling that allows students to learn the logic and consistencies within our written language system. Students develop a general knowledge of English spelling, including regularities, conventions and patterns, as well as specific knowledge about individual words, addressing the overlapping levels of alphabet, pattern, and meaning that create standard spelling. Teachers assess students' knowledge and skill at various times throughout the year, and determine targeted instructional needs and form flexible student groupings. The K-2 *Fundations* curriculum lays the groundwork for lifelong literacy through foundational skills, emphasizing phonemic awareness, phonics, and word study. The first through fifth grade *Words Their Way* curriculum utilizes the activity of word sorts to engage students in actively searching, comparing, contrasting, analyzing, and constructing their understanding of words and form.

# While engaging in the TBS literacy curriculum, a Fourth or Fifth Grade student develops the following skills and concepts:

### Reading

- Reads grade level text fluently
- Reads aloud with expression
- Demonstrates vocabulary and concept development
- Discerns main idea and concepts presented in text
- Makes connections to text
- Uses evidence from text to make inferences
- Reads expository text for information using text features and organization
- Analyzes and responds to narrative text

## Writing

- Composes with organization and focus
- Employs graphic organizers to plan writing
- Edits and revises
- Uses punctuation correctly
- Uses capitalization correctly
- Spells grade level words correctly
- Writes multiple paragraphs
- Uses descriptive language
- Writes expository compositions in math, science, and cultural studies
- Handwrites neatly
- Types proficiently

# Math in Elementary

Our framework for math curriculum is drawn from the guidelines provided by the *National Council of Teachers of Mathematics (NCTM)*. At TBS we recognize the five "content" strands of math (number & operations, geometry, measurement, algebra, data analysis & probability) and five "process" strands of math (problem solving, reasoning & proof, communication, connections, and representation).

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*Marcy Cook Math materials* provide intriguing problems and build number sense and math vocabulary understanding in a fun way.

*JUMP! Math* breaks procedures into tiny steps that are more manageable for some students, which allows kids to build success and confidence. It also provides many opportunities for teachers to conduct formative assessment.

*Contexts for Learning* provides rich, real-world problem solving explorations.

**Everyday Math** is structured to continuously provide a wide variety of challenging problems to students (whereas Investigations focuses on one concept at a time). This approach can help keep knowledge and skills across all strands of content fresh.

Our approach to math instruction involves collaboration between the classroom teachers, Curriculum & Instruction Coordinator, Differentiated Instruction Math Specialist, and Learning Support Office.

# While engaging in the TBS math curriculum, a Fourth or Fifth Grade student develops the following skills and concepts:

## Fourth Grade

#### Number & Operations

- Reads and writes multi-digit whole numbers to 1,000,000
- Rounds multi-digit whole numbers to any place
- Identifies factors and multiples of a given number from 1-100
- Fluently multiplies and divides within 144
- Solves multiplication problems with two 2-digit numbers
- Understands and works with an array model of multiplication
- Fluently adds and subtracts multi-digit whole numbers
- Understands fractions and decimals as a number on the number line
- Understands the meaning of fractions and decimal fractions as equal parts of an area or a group
- Recognizes and generates equivalent fractions, and explains why they are equivalent
- Uses an algorithm to divide a multi-digit number by a 1-digit divisor

#### Geometry & Measurement

- Describes and classifies two-dimensional figures based on angles (acute, obtuse, right), perpendicular or parallel sides, and number of sides
- Measures angles in degrees using a protractor and reasoning from a 90 degree landmark to find 30, 45, and 90 degree angles
- Finds and understands perimeter and area of polygons
- Chooses appropriate standard units for measurement including yd, ft, in; m, cm, mm; hr, min, sec
- Measures length using standard units
- Measures volume conversions by cup, quart, gallon, and liquid ounces

### Algebraic Thinking & Data Analysis

- Describes the probability of an event using a decimal or fraction
- Represents data with line plots, bar graphs, and tables

#### Process

- Explains mathematical thinking using equations, diagrams, and words
- Applies effective strategies and appropriate operations to word problems

## Fifth Grade

#### **Number & Operations**

- Makes reasonable estimates of a solution using rounding
- Reads and writes multi-digit whole numbers to 1,000,000
- Adds and subtracts accurately and efficiently
- Examines and uses strategies for subtracting whole numbers
- Knows from memory all multiplication and division facts up to 12s
- Identifies factors and multiples of a given number
- Solves multiplication problems with two three-digit numbers
- Understands and uses the relationship between multiplication and division, place value, and/or algorithms to divide
- Solves long division problems with up to four-digit dividends and two-digit divisors using an algorithm

- Understands the meaning of fractions and decimal fractions as equal parts of an area or a group
- Compares fractions and decimal fractions using visual or manipulative models
- Converts between fractions, decimals, and percents
- Rounds decimals to any place
- Adds and subtracts fractions with like and unlike denominators
- Adds, subtracts, multiplies, and divides decimals to hundredths
- Finds percents of a number
- Reads large decimal numbers, understands decimal place value

#### Geometry & Measurement

- Identifies and names lines and angles
- Measures angles in degrees
- Finds and understands area and perimeter of polygons
- Finds the volume of rectangular prisms with given dimensions

### Algebraic Thinking & Data Analysis

- Writes simple equations that record calculations with numbers, parentheses, and exponents; uses the order of operations
- Describes the probability of an event using a fraction, decimal, or percent
- Reads and creates bar and line graphs and tables
- Computes mean, median, mode, and range

#### Process

- Explains mathematical thinking using equations, diagrams, and words
- Applies effective strategies and appropriate operations to word problems

# **Cultural Studies in Elementary**

Our framework for cultural studies comes from both Montessori curriculum and California state social studies standards. Cultural studies instruction draws from many varied resources, including Great Stories and key experiences from the Montessori curriculum, such as the Needs of People. This provides the opportunity to understand universal commonalities between all cultures, while celebrating the diversity of regions and a knowledge of world geography, earth, and landforms.

Our approach involves an emphasis on practicing the skills and thinking of historians and social scientists, and also interdisciplinary exploration involving literacy, math, art, and science. Students make a variety of trips that increase in scope from Kindergarten through Fifth Grade, starting in the local neighborhood of the school, to investigating the city of Berkeley, native Ohlone sites, Chinatown and the Mission, Gold Country, and Fort Ross.

First/Second and Fourth/Fifth Grade classrooms alternate cultural studies topics from one year to the next, so that all students receive the equivalent of a First/Second or Fourth/Fifth social studies education after two years in the class.

# While engaging in the TBS cultural studies curriculum, a Fourth or Fifth Grade student develops the following skills and concepts:

- Analyzes and interprets primary and secondary source documents
- Uses reference and technology tools to research and create documents
- Articulates cultural and historical perspectives
- Detects historical bias by thinking critically
- Reads, interprets, and creates different types of maps

## Science in Elementary

Our framework for science curricula includes elements from the new Next Generation Science Standards (NGSS), Montessori curriculum, and older California state science standards. Science instruction draws from the following resources, among others:

*Next Generation Science Standards Science & Engineering Practices,* which include asking questions, defining problems, using models, investigating, analyzing data, and designing solutions.

*Montessori pedagogy,* which draws on Great Stories like the *Creation of the Universe* to spark a sense of awe and interest in 1st/2nd grades.

*Causal Patterns in Science* from *Harvard Project Zero*, to address misconceptions, create models, and describe scientific thinking in 4th/5th grades.

AIMS Education Foundation curriculum, which provides hands-on learning opportunities such as specific experiments.

*MARE (Marine Activities, Resources & Education)* for studies of marine biology and oceanography in 4th/5th grades.

Our approach to science involves an emphasis on practicing the skills and thinking of scientists and engineers, integrating art with observation, discovery through hands-on activities, explaining thinking by creating models and defending them, and design thinking and building to solve problems. First/Second and Fourth/Fifth Grade classrooms alternate science topics from one year to the next, so that all students receive the equivalent of a First/Second or Fourth/Fifth science education after two years in the class.

# While engaging in the TBS science curriculum, a Fourth or Fifth Grade student develops the following skills and concepts:

- Actively participates in inquiry process
- Follows procedural directions for a scientific investigation
- Uses scientific tools
- Records observations
- Draws labeled diagrams
- Reaches conclusions based on scientific evidence
- Makes inferences based on content learning
- Manages materials during investigations
- Understands the properties of matter
- Understands how energy changes form
- Designs and builds systems to solve engineering problems

## Art in Elementary

In the K-5 Art Studio at TBS, students receive dedicated time for art instruction and art making. They are introduced to art-making processes in two-dimensional and three-dimensional areas that

includes painting, drawing, photography, digital technology in art, sculpture, textiles, clay, and mixed media practices. We also use technology in service of viewing images of art and to take virtual visits to see how artists work in their studios. The TBS Art Studio experience offers students time to explore and deepen their skills of understanding materials in a given area. They learn how to "think like an artist", developing 8 studio habits of mind, developed by *Harvard's Project Zero*. By teaching thinking protocols in addition to the process of art making, we believe students learn how to transfer these ways of working and thinking to other areas of inquiry.

## Art Learning Goals for Fourth and Fifth Grade

- Takes risks and opportunities to explore ideas, tools, and materials.
- Focuses while in the studio and completes process steps.
- Looks more closely as an artist.

# Spanish in Elementary

The goal of the K-5 Spanish curriculum is to create a space where students feel comfortable taking risks as they work to acquire new language skills. We play games, sing songs, recite poems, tell and act out stories and plays, and explore the traditions and cultures of Spanish-speaking countries. Students learn the language using many different language-acquisition strategies. In Spanish class we study all four elements of literacy (reading, writing, listening, and speaking) and every class provides opportunities to develop oral language and conversational skills. Resources include research-based strategies such as GLAD (Guided Language Acquisition Development), TPR (Total Physical Response), and TPRS (Teaching Proficiency through Reading and Storytelling). We also incorporate art, music and movement to create an interactive classroom that addresses different learning styles.

## Spanish Learning Goals for Fourth and Fifth Grade

- Makes connections between primary language and Spanish
- Applies oral language skills introduced in class
- Demonstrates curiosity about Spanish language and culture

# Music in Elementary

The music program at TBS is rooted in the Orff-Schulwerk, an approach to music instruction that celebrates children's inherently playful nature through movement, rhythmic speech, singing, pitched percussion (xylophones, metallophones and glockenspiels), and unpitched percussion (body percussion and drums). Students have the opportunity to sing, dance, play instruments, improvise, and compose every time they come to music class. They explore traditional and contemporary music as well as pieces drawn from the Orff-Schulwerk primary source volumes. *"Elemental music is never just music. It is bound up with movement, dance, and speech, and so it is a form of music in which one must participate, in which one is involved not as a listener but as a co-performer."* -Carl Orff

## Music Learning Goals for Fourth and Fifth Grade

- Accurately plays ostinati on barred and unpitched percussion instruments
- Contributes ideas in improvisation activities
- Demonstrates willingness to sing, make rhythms and engage in movement activities
- Takes care of the instruments

# Physical Education in 3-5

The TBS upper elementary physical education program focuses on developing four physical skills (overhead throwing, catching, striking and running to kick a ball), all of which focus on body mechanics, spatial awareness, and effort/force. In addition, we focus on developing two social skills: teamwork (including listening, questioning, persuading, respecting, helping, sharing, and participating) and sportsmanship (which combine skills of honesty, fairness, respect, and graciousness in winning and losing). The students engage in a variety of fun, athletic, team-building activities that allow for repetition, which helps in the development of all these skills. On a daily basis the students engage in stretching and calisthenics, to help build a strong foundation for skill development. Dance activities help to promote rhythm and timing, while circus activities enhance balance, timing, hand-eye coordination, flexibility and physical strength.

## Physical Education Learning Goals for Third Grade

- Teamwork
- Sportsmanship
- Catching
- Throwing
- Striking
- Running to kick a ball

# MIDDLE SCHOOL CURRICULUM

## Sixth Grade Overview

Our Sixth Grade program resides in the heart of the Middle School, and is intentionally designed to be an manageable segue from the Elementary division into the Middle School. Students spend a portion of the day in their classroom with one or both of their two teachers, much like a self-contained Elementary classroom. They also spend a portion of their day in half groups moving to different classrooms, much like in Middle School. Sixth, Seventh, and Eighth graders integrate as a Middle School many times a week for snack, lunch, recess, community meeting, and exploratories.

The core courses for Sixth Grade are English, math, science, cultural studies, current events, and Spanish. Specialist courses include Art, Drama, Music, P.E., and Health. Sixth graders also have an advisory meeting each morning, led by the classroom teachers. Advisory time is structured in such a way as to build connections and have fun, while meeting the complex social and emotional needs of adolescents. Topics explored in advisory include: character traits, identity, culture, upstanding, well-being, and executive function. The advisory program is based on the Developmental Designs approach and is the primary way that we help students develop core social emotional learning competencies.

To round out their experience, 6th graders have plenty of opportunities for choice, creativity, advocacy, and leadership development through exploratory classes and extracurricular programs that include: intramural sports, math club, open art studio, band, service learning club, student council, and the annual Middle School spring play.

When engaging in any class, our expectations are that a student:

- Effectively prepares and organizes materials.
- Uses available resources to track and complete assignments.
- Meets all deadlines and due dates.
- Engages effectively in class activities.
- Effectively seeks support from teacher and peers.
- Acts in accordance with classroom behavior expectations.
- Perseveres through challenges.
- Follows directions.
- Communicates understanding clearly & effectively.

## Sixth Grade English

The Sixth Grade English curriculum focuses on strengthening reading comprehension and analysis skills, creative and expository writing for different purposes and audiences, and increasing word knowledge through explicit vocabulary work. Throughout the year students read texts from multiple genres including poetry, short story, historical and realistic fiction, and auto/biography. In the Sixth Grade writing curriculum, students continue working on organized, detailed paragraphs and multi-paragraph essays, using the six traits of writing as a framework. Our yearlong throughlines-- *How does studying literature help us understand ourselves and the world around us?*, *How can I become a more active and thoughtful reader?* and *How do I communicate ideas effectively in writing and speech?--* serve as a frame for our learning throughout the year.

Primary Resources (not comprehensive): Home of the Brave by Katherine Applegate, Haroun and the

Sea of Stories by Salman Rushdie, The Wonderful Story of Henry Sugar by Roald Dahl, The Tell-Tale Heart by Edgar Allan Poe, Harrison Bergeron by Kurt Vonnegut, a selection of auto/biographies of human rights activists, The Outsiders by S.E. Hinton, Vocabulary from Classical Roots Book 6, teacher-generated resources and materials.

## English Learning Goals in Sixth Grade

- Cite textual evidence to support analysis of text
- Determine and analyze themes in texts
- Summarize text objectively
- Analyze how particular elements of a story interact to propel action or character's decision in fiction, e.g. setting, characters, plot
- Analyze the impact of specific word choices in text
- Analyze the structure an author uses to organize a text to contribute to its meaning in fiction and nonfiction.
- Integrate multiple reading strategies to comprehend text in fiction and nonfiction
- Articulate text-self, text-same text, text-different text, text-history/world connections in fiction and nonfiction.
- Read consistently and independently and develop an identity as a reader.
- Write arguments to support claims with relevant evidence
- Introduce claim(s) or a topic; organize reasons and evidence or ideas, concepts, and information logically
- Provide a concluding statement or section that follows from the argument, information or explanation presented.
- Write narratives to develop real or imagined experiences or events
- Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.
- With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
- Vary sentence patterns for meaning, reader/listener interest, and style.
- Maintain consistency in writing style and tone.
- Use context as a clue to the meaning of a word or phrase.
- Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word

# Sixth Grade Math

The Sixth Grade math curriculum moves from concrete concepts and examples introduced in Elementary school toward abstract concepts and applications. The curriculum challenges students to justify and explain their answers, describe their processes, and approach problems in a variety of ways. Students demonstrate understanding of material through in-class activities, conversations, games, quizzes, tests, and projects. Students learn that in order to truly master Sixth Grade math, they must take responsibility for their learning, use self-assessment to identify strengths and challenges, improve perseverance, and articulate their understanding. Though each individual unit has content-specific learning goals, detailed below, we will spend the year pondering three key throughlines: "What do numbers convey?", "How is math relevant to my life?", and "How do we use strategies and skills to solve problems?"

**Primary Resources**: teacher-generated resources and materials, Connected Mathematics 2 (Pearson), California Mathematics Grade 6 (Glencoe McGraw-Hill), JUMP Math

### Math Learning Goals in Sixth Grade

- Identifies and uses prime and composite numbers, factors, and multiples
- Compares, converts, and interprets fractions, decimals, and percents in various contexts
- Identifies, uses, and applies vocabulary related to lines, angles, and polygons
- Adds and subtracts mixed, improper, and regular fractions in various contexts
- Multiplies and divides mixed, improper, and regular fractions in various contexts
- Performs operations with fractions in various contexts
- Understands and uses integers in various contexts
- Calculates area and perimeter of various polygons and circles
- Simplifies expressions using the proper order of operations
- Correctly solves one and two-step equations
- Organizes data into appropriate tables and charts and accurately calculates values related to it
- Analyzes and infers information about given sets of data
- Represents outcomes for a given event in an organized way, and determines each event's probability
- Estimates the probability for various future events, given a range of situations (independent events, dependent events, compound events)
- Has automaticity of basic math facts
- Computes fluently with multi-digit numbers
- Uses strategies and tools to solve problems and justify answers
- Applies and synthesizes current content to complete multi-step projects
- Interprets and solves difficult multi-step word problems related to current content areas

# Sixth Grade Science

Sixth Grade students study Earth science with the goal of understanding Earth's systems, with a particular focus on the geology and topography of the Bay Area, and using that knowledge to make informed decisions about humans' impact on the planet and sustainability. Concepts include Earth's history, structure and dynamic processes, weather and atmosphere, energy resources and pollution and Earth's place in the universe. Field trips, integrated throughout the year, include a visit to an active mineral mine, East Bay regional parks, science museums and a week exploring sustainable farming and energy use.

**Primary Resources**: *Middle School Earth Science Flexbook*, from the *CK-12 Foundation*, teachergenerated materials and Internet resources.

## Science Learning Goals in Sixth Grade

- Understands the nature of scientific inquiry
- Understands and uses science process skills including observation, measurement, classification.
- Accurately maps prominent landforms, waterways, and other features of the Bay Area
- Understands the unique properties of minerals and uses them to identify minerals
- Demonstrates understanding of the rock cycle and identifies rock types
- Explains the effects of geological processes on the Earth's surface

- Explains causes and effects of volcanic activity
- Identifies relationships between our atmosphere, weather patterns, and climate
- Analyzes costs and benefits of various renewable and nonrenewable energy
  resources

# Sixth Grade Cultural Studies

Cultural Studies curriculum in Sixth Grade centers around three throughlines: "What is culture?", "How does the past affect the present?", "How are modern cultures and ancient cultures different? How are they similar?" and "How do technology and culture impact each other?"

Students begin the year with a digital citizenship unit that focuses on privacy, participation, credibility, property, and identity in the digital world. The remainder of the year is spent studying the evolution of humankind, from hominids, to hunter-gatherers, to the early civilizations of Mesopotamia, Egypt, China, Greece, and Israel. Students will explore the geography, economics, politics, social structure, religious practices, and effects on future civilizations of each ancient civilization, and become a resident expert on one civilization of their choosing.

**Primary Resources**: Social Studies: Ancient Civilizations (Harcourt), Good Play Project resources (Project Zero), teacher-generated resources and materials.

## Cultural Studies Learning Goals in Sixth Grade

- Explains benefits and disadvantages of modern digital technology and social media
- Uses ethical thinking strategies to make decisions about various digital scenarios
- Understands and explains important milestones in Earth and human history
- Compares and contrasts the Paleolithic and Neolithic cultures
- Identifies advancements that gave rise to early civilizations
- Describes geography, culture, and influence of ancient civilizations, including Mesopotamia, Egypt, Israel, Greece, and China

# Sixth Grade Current Events

In current events class, students read and explore local, national, and global news. Students learn to be discerning about news sources and inquisitive and curious about their readings. Topics include Paul Salopek's *Out of Eden* walk, important political issues and various political campaigns, human rights, and environmental issues. Along with emerging news stories, students will broaden their knowledge of world geography and cultures.

**Primary Resources:** various news media, NY Times Learning Blog, teacher-generated resources and materials

## Current Events Learning Goals in Sixth Grade

- Summarizes and communicates current news stories
- Finds relevance in local, national, and global news stories
- Assesses credibility of various news media
- Identifies bias in various news media outlets

# Sixth Grade Spanish

Sixth Grade Spanish focuses on communication, and strengthening student's ability to speak, listen, read and write in Spanish. Students will be introduced to conjugation, pronouns, and sentence agreement. Vocabulary is taught and acquired through reading and cultural themes such as: families, identity, Día de los Muertos, and California as part of Mexico. Spoken language is used daily through greetings, conversation, skits and presentations.

**Primary Resources:** TPRS Strategies and level novels (Teaching Proficiency Through Reading and Storytelling)

### Spanish Learning Goals for Sixth Grade

- Communicates effectively with comprehensible pronunciation and intonation
- Participates in class conversation with accuracy according to their level
- Understands spoken Spanish
- Understands and performs commands
- · Makes meaning of a sentence using contextual clues
- Uses sentence agreement when writing
- Identifies and uses adjectives appropriately
- Identifies and uses pronouns appropriately
- Practices vocabulary consistently
- Has acquired vocabulary Introduced

## Seventh Grade Overview

The core courses for Seventh Grade are humanities, math, science, and Spanish. The specialist courses are visual art, drama, physical education, music and health. Core and specialist classes are taught in grade-level groupings of 10-13 students. Several times a week, for snack, lunch, community meeting and exploratories, Sixth, Seventh, and Eighth Graders are integrated.

Advisory is an essential part of the Seventh Grade curriculum. Advisory groups meet to start each day and the time is structured in such a way as to build connections and have fun, while meeting the complex social and emotional needs of adolescents. Topics explored in advisory include: character, identity, upstanding, well-being, and executive function. The advisory program is based on the Developmental Designs approach and is the primary way that we help students develop core social emotional learning competencies.

To round out their experience, Seventh Graders have plenty of opportunities for choice, creativity, advocacy, and leadership development, through our exploratory classes and extracurricular programs including intramural sports, math club, open art studio, band, service learning club, student council, leadership academy, and the annual Middle School spring play.

When engaging in any class, our expectations are that a student:

- Effectively prepares and organizes materials.
- Uses available resources to track and complete assignments.
- Meets all deadlines and due dates.
- Engages effectively in class activities.
- Effectively seeks support from teacher and peers.
- Acts in accordance with classroom behavior expectations.
- Perseveres through challenges.
- Follows directions.
- Communicates understanding clearly & effectively.

## Seventh Grade Humanities

The Seventh Grade Humanities curriculum focuses on strengthening executive function, time management, and building ownership for one's own education. The vehicles by which students have opportunity to build these skills are through works that focus on furthering critical reading skills, creative and expository writing for different purposes and audiences, increasing word knowledge through explicit vocabulary work, understanding how culture is created, and the relationship between culture and perspective. Throughout the year students read texts from multiple genres including poetry, short stories, historical and realistic fiction and nonfiction from a wide range of cultural perspectives. Students in seventh grade continue to work on writing organized, detailed paragraphs and move on to multi-paragraph essays as the year progresses.

The theme of *The Hero's Journey* links our texts this year and gives students a lens through which to make sense of their work and their own experience in early adolescence. Our throughlines, "How can examining text and visual media help us understand ourselves and the world around us?" and "How do we communicate ideas effectively in writing and speech?" frame our learning throughout the year.

**Primary Resources include:** *My Ishmael* by Daniel Quinn, *Longitude* by Dava Sobel, *A Long Walk to Water* by Linda Sue Park, *Iqbal* by Francesco D'Adamo, *Boxers & Saints* by Gene Luen Yang, David Smith's *Mapping the World by Heart, Vocabulary from Classical Roots* Book A, *Grammar* by Mark Dressel, Teacher Curriculum Institute's *History Alive! The Medieval World and Beyond*, mapyourworld.org, and other various textbook selections and media resources.

## *English Learning Goals in Seventh Grade* Reading

- Cites several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text in fiction and nonfiction
- Determines a theme or central idea of a text and analyzes its development over the course of the text in fiction and nonfiction
- Summarizes text objectively in fiction and nonfiction
- Analyzes how particular elements of a story or drama interact to propel action or character's decision in fiction, e.g., setting, characters, plot
- Identifies and analyzes individuals, events, and ideas in a text in nonfiction, e.g., analyze interactions between individuals, ideas and events
- Determines the meaning of words and phrases as they are used in a text, including figurative, symbolic, and technical meanings in fiction and nonfiction and distinguishing among connotative and denotative meanings
- Compares and contrasts more than one authors' or primary/secondary sources' conflicting presentation of events in nonfiction, e.g., analyze how two or more authors shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts
- Traces and evaluates the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims in nonfiction
- Integrates multiple reading strategies to comprehend text in fiction and nonfiction, e.g., annotation for observations, questions, and connections; using different kinds of notetaking to track understanding; using text features like visual information to build understanding; self-monitoring for understanding

## Writing

- Writes arguments to support claims with clear reasons and relevant evidence or informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content
- Introduces claim(s) or a topic; organizes reasons and evidence or ideas, concepts, and information logically, e.g. using strategies such as definition, classification, comparison/contrast, and cause/effect; includes formatting, graphics, and multimedia when useful to aiding comprehension
- Develops the topic with relevant facts, definitions, concrete details, quotations, or other information and examples for informative texts
- Supports claim(s) with logical reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text for arguments
- Uses words, phrases, clauses, and appropriate transitions to clarify the relationships among ideas, concepts, claim(s), reasons, and evidence
- Establishes and maintains a formal style
- Provides a concluding statement or section that follows from the argument, information or explanation presented

- Writes narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences
- Uses precise words and phrases and relevant descriptive details to convey experiences and events
- Provides a conclusion that follows from the narrated experiences or events
- Conducts short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate
- Gathers relevant information from multiple print and digital sources; assesses the credibility
  of each source; and quotes or paraphrases the data and conclusions of others while avoiding
  plagiarism and providing basic bibliographic information for sources
- Develops and strengthens writing as needed by planning, revising, editing, rewriting, or trying a new approach
- Demonstrates command of the conventions of standard English grammar and usage when writing or speaking
- Demonstrates command of the conventions of standard English capitalization, punctuation, and spelling when writing
- Uses knowledge of language and its conventions when writing, speaking, reading, or listening
- Varies sentence patterns for meaning, reader/listener interest, and style
- Maintains consistency in style and tone
- Determines or clarifies the meaning of unknown and multiple-meaning words and phrases, choosing flexibly from a range of strategies
- Uses context as a clue to the meaning of a word or phrase
- Uses common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible)
- Consults reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech
- Verifies the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary)

# Seventh Grade Math

Seventh grade math is a pre-algebra class that aims to both reinforce students' basic operational skills and prepare students for a full-year algebra course. The curriculum engages students in problem-solving that tackles graphing, geometry, proportional reasoning, and number theory. An emphasis on pattern recognition is evident throughout the year. They hone the characteristics of successful problem-solvers: persistence, curiosity, flexibility, risk-taking, and reflection.

### Primary Resources: Connected Mathematics and JUMP Math.

## Math Learning Goals in Seventh Grade

- Uses a table, graph, or equation to effectively solve verbal problems
- Creates accurate tables and graphs of data based on a story problem
- Creates a table and formula for a given visual pattern that is a true representation
- Writes an equation based on data from a story problem that accurately represents the scenario
- Correctly interprets a distance-time graph and writes a plausible verbal description for it, including relating relative speed to the slope of the graph
- Demonstrates understanding of a distance-time graph as an abstract representation and not a picture of a situation

- Understands and calculates area and perimeter of basic polygons
- Performs two-digit multiplication accurately using the traditional algorithm with both whole numbers and decimals
- Understands the mathematical concept of similarity and can identify similar figures, given basic dimensions
- Computes accurately with fractions
- Writes relevant ratios, fractions, and/or percents for given data; compares ratios accurately
- Understands the meaning of unit rates and can use them to compare quantitative data
- Understands proportions and can use them to solve problems
- Adds and subtracts integers (positive and negative numbers) accurately
- Multiplies and divides integers accurately
- Can successfully use integers to solve word problems
- Understands and applies the order of operations
- Shows the reasoning behind the answer
- Has automaticity of basic math facts

## Seventh Grade Science

Seventh graders complete a laboratory-based life science course that introduces them to themes such as ecosystem concepts, cell biology, reproduction and heredity, DNA and biotechnology, and evolution and natural selection. The Seventh Grade science curriculum also integrates field trips that involve scientific study of local ecosystems along with science-related service learning opportunities.

**Primary Resources**: *Middle School Earth Science Flexbook*, from the *CK-12 Foundation*, teachergenerated materials and Internet resources.

### Science Learning Goals in Seventh Grade

- Understands metric measurement
- Understands the nature of science and experimental design
- Describes how matter cycles and energy flows through an ecosystem
- Can explain the Linnaean system of classification
- Understands the various relationships between organisms in an ecosystem
- Understands how resource availability affects carrying capacity of an ecosystem
- Can describe the structure and functions of carbohydrates, lipids, proteins, and nucleic acids
- Can describe the structure and function of the human digestive system
- Understands why cells reproduce and the processes they undergo in order to divide
- Understands the significance of mitosis and meiosis, and can describe the differences between the two
- Can compare and contrast sexual and asexual reproduction
- Can describe the anatomy and physiology of the human reproductive system
- Understands the structure and function of DNA
- Understands heredity and Mendelian genetics and can do monohybrid genetics problems
- Understands how populations evolve through natural selection

## Seventh Grade Spanish

Seventh Grade Spanish focuses on communication. Students will be either speaking,

listening, reading, or writing in Spanish. Students are expected to try all or as many of these areas as possible to be able to gain proficiency in the language. They will move on to more complex grammatical topics such as: irregular verbs, an introduction to the preterite, the difference between Ser and Estar, reflexive verbs and pronouns, and sentence agreement. Vocabulary is taught and acquired through cultural themes and readings.

**Primary Resources:** TPRS Strategies and level novels (Teaching Proficiency Through Reading and Storytelling). Students also read various novels according to their level, such as *Brandon Brown vs. Yucutan* or *Los Piratas del Caribe* y *el Triángulo de las Bermudas* 

## Spanish Learning Goals for Seventh Grade

- Communicates effectively with comprehensible pronunciation and intonation
- Participates in class conversation with accuracy according to their level
- Understands spoken Spanish
- Understands and performs commands
- Makes meaning of a sentence using contextual clues
- Uses sentence agreement when writing
- Effectively writes a sentence using the preterit in first person
- Practices vocabulary consistently
- Uses prepositions to follow directions
- Conjugates irregular verbs in the preterit first person singular
- Conjugates regular verbs in the preterit
- Has acquired vocabulary introduced

# Eighth Grade Overview

The core courses for Eighth Grade are humanities (integrated English and U.S. history), math, science, and Spanish. The specialist courses are visual art, drama, physical education, music and health. Core and specialist classes are taught in grade-level groupings of 10-13 students. Several times a week, for snack, lunch, community meeting and exploratories, Sixth, Seventh, and Eighth Graders are integrated.

Advisory is an essential part of the Eighth Grade curriculum. It meets at the start and end of each day. Advisory time is structured in such a way as to build connections and have fun, while meeting the complex social and emotional needs of adolescents. Topics explored in advisory include: character, identity, digital citizenship, upstanding, and well-being. In addition, Eighth Graders also participate in meetings that focus on their transition to High School. The advisory program is based on the Developmental Designs approach and is the primary way that we help students develop core social emotional learning competencies.

To round out their experience, Eighth Graders have plenty of opportunities for choice, creativity, advocacy, and leadership development, through our exploratory classes and extracurricular programs, including intramural sports, open art studio, math club, band, service learning club, student council, leadership academy, and the annual Middle School spring play.

When engaging in any class, our expectations are that a student:

- Effectively prepares and organizes materials.
- Uses available resources to track and complete assignments.
- Meets all deadlines and due dates.
- Engages effectively in class activities.
- Effectively seeks support from teacher and peers.
- Acts in accordance with classroom behavior expectations.
- Perseveres through challenges.
- Follows directions.
- Communicates understanding clearly & effectively.

# **Eighth Grade Humanities**

Eighth Grade Humanities combines US History and English. Students read primary and secondary sources to distinguish differences in purpose and audience among historians and to understand the value and points of view of different historical documents. Throughlines include, "How do we tell the story of the United States?", "What makes good writing?", "How does the past affect the present in the United States?", and "What does it mean to read well?" The course focuses on reading, writing, speaking, and listening skills, with an emphasis on the five-paragraph essay and on varied forms of notetaking.

**Primary Resources:** Vocabulary from Classical Roots, Howard Zinn's A Young People's History of the United States; American Born Chinese; Fahrenheit 451; To Kill a Mockingbird; Romeo and Juliet.

### Humanities Learning Goals in Eighth Grade

• Determines a theme or central idea of a text and analyzes its development over the course of the text in fiction and nonfiction

- Summarizes text objectively in fiction and nonfiction
- Analyzes the impact of specific word choices in fiction and nonfiction, e.g., analogies, allusions
- Compares and contrasts more than one author's or primary/secondary source's conflicting presentation of events in nonfiction; analyzes a case in which two or more texts provide conflicting information on the same topic and identifies where the texts disagree on matters of fact or interpretation
- Traces and evaluates the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims in nonfiction
- Integrates multiple reading strategies to comprehend text in fiction and nonfiction, e.g., annotation for observations, questions, and connections; using different kinds of notetaking to track understanding; using text features like visual information to build understanding; selfmonitoring for understanding
- Articulates text-self, text-same text, text-different text, text-history/world connections in fiction and nonfiction
- Reads consistently and independently and develops an identity as a reader
- Writes arguments to support claims with clear reasons and relevant evidence or informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content
- Develops the topic with relevant facts, definitions, concrete details, quotations, or other information and examples for informative texts
- Supports claim(s) with logical reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text for arguments
- Establishes and maintains a formal style
- Uses precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events
- Conducts short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate
- Gathers relevant information from multiple print and digital sources; assesses the credibility of each source; and quotes or paraphrases the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources
- Develops and strengthens writing as needed by planning, revising, editing, rewriting, or trying a new approach
- Uses knowledge of language and its conventions when writing, speaking, reading, or listening
- Identifies main causes and effects of early contact between Europe and the Americas
- Describes the structure of government as set forth by the U.S. Constitution
- Identifies Constitutional rights guaranteed to US Citizens; analyzes scenarios involving possible rights violations.

# Eighth Grade Math

Eighth grade students take a full-year algebra course, including writing, graphing, and solving linear and quadratic equations and inequalities. The fall term is a study of the line as well as an introduction to the process of writing mathematics; the second term is a study of the curve -- second degree equations, parabolas, and the quadratic formula.

### Primary Resources: Harold Jacobs' Elementary Algebra

## Math Learning Goals in Eighth Grade

- Applies fundamental operations with ease, including distributive rule and order of operations
- Recognizes types of functions by equation and graph
- Understands and applies accurately the properties of positive and negative numbers, including variables and their opposites
- Applies fundamental operations accurately with rational numbers (fractions)
- Solves equations in one variable by applying properties of equality, and uses such equations in solving perimeter, area, and rate problems
- Solves equations in two variables, manipulates between standard and slope-intercept form, and graphs linear equations using multiple techniques
- Determines the equation for a line given two points or the slope and one point
- Solves and graphs inequalities in one variable
- Solves pairs of simultaneous equations by addition and subtraction, by graphing, and by substitution; uses simultaneous equations to solve mixture problems
- Applies properties of exponents accurately and represents large and small numbers in scientific notation
- Applies fundamental operations to polynomials accurately
- Factors integers, monomials, and polynomials
- Applies fundamental operations to algebraic fractions and converts accurately between simple and complex algebraic fractions
- Can identify, simplify, and apply fundamental operations to square roots, and can solve equations containing them
- Solves polynomial equations by graphing, factoring, taking the square root, completing the square, and applying the quadratic formula
- Shows the reasoning behind the answer
- Reviews assignments/tests and makes corrections

# Eighth Grade Science

Eighth graders study physical science with a focus on chemistry and physics, in addition to a unit on sexuality education. The focus is on lab experiences and concepts that will be integral to their high school science learning. Design thinking starts to come to the forefront with a number of projects including mousetrap cars, bottle rockets, and egg drops. In addition, they continue some of the field-based projects that they started in the Seventh Grade.

**Primary Resources**: *Middle School Physical Science Flexbook* (from the *CK-12 Foundation*), teacher-generated materials and Internet resources.

## Science Learning Goals in Eighth Grade

- Understands metric measurement
- Understands the nature of science and experimental design
- Can define matter by its properties
- Can describe how energy influences the states of matter
- Can describe the structure of the atom and the history of atomic theory
- Understands the organization of the periodic table
- Can describe the different types of chemical bonds and chemical reactions
- Understands properties of solutions
- Problem solves design challenges with a partner in a laboratory setting
- Understands and can describe examples of Newton's Laws of Motion
- Understands issues around human sexuality
- Functions as a member of a team to successfully complete assigned projects

# **Eighth Grade Spanish**

Eighth Grade Spanish focuses on communication and the cultural understanding of the language. Students are either speaking, listening, reading, or writing in Spanish. Students are expected to try all or as many as these areas as possible to be able to gain proficiency in the language. The entire class is taught completely in Spanish. Grammar concepts include present progressive, the preterite, and imperfect. Vocabulary will be taught and acquired through readings, cultural themes, special projects and research projects. Students spend the year preparing for a one-week immersion trip to a Spanish-speaking country, which takes place in the spring.

Primary Resources: Novels according to students' levels.

### Spanish Learning Goals for Eighth Grade

- Communicates effectively with comprehensible pronunciation and intonation
- Participates in class conversation with accuracy according to the level
- Understands spoken Spanish
- Understands and performs commands
- Makes meaning of a sentence using contextual clues
- Uses sentence agreement when writing
- Conjugates verbs in the preterit with all persons
- Conjugates verbs in the imperfect with all persons
- Conjugates irregular verbs appropriately
- Uses the preterit and imperfect appropriately
- Practices vocabulary consistently
- Has acquired vocabulary from the readings
- Can write at least one paragraph in the preterit tense using regular and irregular verbs

# Middle School Visual Arts

The Middle School art program provides a process-based studio experience that allows students to explore the possibilities of their materials and concepts instead of focusing their efforts on only the final product. Middle school students investigate drawing, painting, printmaking, self-portraits, collage, sculpture, two-dimensional applied design, and media technology. Employing studio tools such as sketchbooks, thinking routines, and self/peer reflection, students increase their ability to look at and discuss art, they develop visual arts vocabulary, the ability to read and write about art and the skill to problem-solve while completing projects. Through global/social content they gain an understanding of how the arts connect to other disciplines. Past projects have included animated shorts and working lamps at the Sixth Grade level, fused glass at the Seventh Grade level, and a repurposed fashion show in Eighth Grade.

### Visual Arts Learning Goals for Middle School

- Provides detailed project sketch prior to construction
- Reflects on technique after learning a new skill
- Completes assigned process steps for creating a "finished" piece
- Completes 10-minute weekly drawing exercise, considering assignment parameters and teacher advice
- Employs learned problem-solving skills during project development and completion

# Middle School Drama

The Middle School drama program is based on two main ideas: that make-believe as a form of expression and storytelling are natural human endeavors, and that every Middle School student can benefit being exposed to the rigor, and clear expectations of drama training. Beginning in sixth grade will work with basic improv games and activities. They will focus on developing skills in movement, body awareness, observation, concentration, sensory awareness, and imitation. They will also work with basic characterization and role-playing skills, as well as giving and receiving offers in pair and group improvs. Simple dramatic texts, such as monologues and poems will be introduced later in the year. In March, Middle School students have an opportunity to appear in the annual The Berkeley School play. Performances are held at the Live Oak Theater in North Berkeley.

### Drama Learning Goals for Middle School

Sixth Grade

- Collaborates with other students to solve creative challenges
- Demonstrates an understanding of how to use tableau to tell a story
- Creates novel pieces with beginning, middle, end
- Demonstrates an understanding of basic rules of improv
- Demonstrates an understanding of how to use pantomime to tell a story
- Demonstrates an understanding of how use dialog on stage to tell a story

#### Seventh Grade

- Collaborates with other students to solve creative challenges
- Demonstrates an understanding of how to use tableau to tell a story
- Creates novel pieces with beginning, middle, end
- Demonstrates an understanding of basic rules of improv
- Demonstrates an understanding of how to use pantomime to tell a story
- Demonstrates an understanding of how use dialog on stage to tell a story
- Able to perform an effective oral presentation of a poem
- Demonstrates basic acting skill in a scene study, or monologue

#### Eighth Grade

- Collaborates with other students to solve creative challenges
- Demonstrates an understanding of how to use tableau to tell a story
- Creates novel pieces with beginning, middle, end
- Demonstrates an understanding of basic rules of improv
- Demonstrates an understanding of how to use pantomime to tell a story
- Demonstrates an understanding of how use dialog on stage to tell a story
- Able to perform an effective oral presentation of a poem
- Demonstrates basic playwriting skills

### Middle School Health

The Middle School health program takes the approach that good health and academic success go hand in hand. Healthy children make better students, and better students become healthy, successful adults who are productive members of their communities. Comprehensive health education that addresses the physical, mental, emotional, and social aspects of health teaches students how to maintain and improve their health; prevent disease; reduce health-related risk behaviors; and develop health knowledge, attitudes, and skills that foster academic achievement

and improve behavior and decision making at school and out in the world. Students keep an online health journal through the use of Google Classroom to explore their beliefs and understandings around subject matter content. Students also have ample time for group and partner discussion. Learning is both about sharing different views and actively listening to those with different views; students are expected to do both. Learning is maximized when many different viewpoints are expressed and shared in the classroom. The eighth graders study relationships, human diversity, and mental health. The seventh graders study nutrition and physical activity, CPR and first aid, and social media. The sixth graders study drugs, decision making, bullying, and harassment.

## Health Learning Goals for Middle School

- Comprehends essential concepts related to enhancing health
- Analyzes internal and external influences that affect health
- · Is able to access valid health information and discern its validity
- Uses interpersonal communication skills to enhance health
- Displays decision-making skills to enhance health
- Demonstrates the ability to use goal-setting skills to enhance health
- · Practices behaviors that reduce risk and promote health
- Promotes and supports personal, family, and community health

# Middle School Physical Education

The physical education curriculum is designed to meet the learning specific needs of each and every student in the three domains in which they learn (cognitive, psychomotor and affective). Depending on their grade, students will have a varying level of instruction within each unit to broaden their knowledge of concepts and rules, improve gross and fine motor skills, and finally build upon their teamwork and sportsmanship. On a daily basis students engage in stretching and calisthenics to promote flexibility and muscle development. Units covered include activities involving throwing and accuracy (Frisbee golf and baseball), kicking a ball (kickball and soccer), catching objects (ultimate and flag football), rhythm and body movement (line dances and stunts/tumbling), and racquet sports (badminton). Finally, a health and nutrition aspect is built into the framework of class that puts an emphasis on body image and self esteem, healthy eating and maintaining an active lifestyle.

## Physical Education Learning Goals for Middle School

- Learn activity specific fine motor skills and start refining them
- Begin mastering gross motor skills
- Show the ability to participate in group games using positive sportsmanship and teamwork
- Be able to use communication successfully within the group dynamic of games
- Demonstrate knowledge of rules to games and activity specific skills (both orally and physically)
- Check one's heart rate and determine the extent to which they are physically active
- Gain an understanding of what healthy eating, self-esteem and body image look like