

K-8 Curriculum Guide 2017-18

Table of Contents

Kindergarten 1	
First & Second Grade7	,
Third Grade 14	1
Fourth & Fifth Grade21	L
Middle School2	8
Social/Emotional & Service Learning4	-4

Bliss Tobin

Elementary Division Head btobin@theberkeleyschool.org (510) 665-8800, ext. 160

Sima Misra

Director of Teaching & Learning smisra@theberkeleyschool.org (510) 665-8800, ext. 161

MaryBeth Venura

Middle School Division Head <u>mventura@theberkeleyschool.org</u> (510) 665-8800, ext. 161

Balanced Literacy in Elementary

Our approach to literacy is based on 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 3rd through 5th grades.

Reading Instruction is integrated into various parts of the day, and is the focus of Reader's Workshop. These periods may include mini-lessons with direct instruction in certain skills, as well as centers and activities designed to give children the chance to practice those skills.

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. In 4th/5th grades, the online program *Wordly Wise i3000* is used to strengthen vocabulary acquisition and its connection with reading comprehension.

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 confer and coach student writers one on one. 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 teachers 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 highlights 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 third 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 letters and their 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
- Attempts phonetic spelling independently
- Consistently leaves space between words when writing
- Begins to use conventionally spelled words (sight words/Word Wall words)

Speaking & Listening

- Learns and practices new vocabulary
- Asks clarifying questions
- Contributes to classroom discussions
- Listens attentively
- Articulates relevant ideas clearly
- Takes turns speaking and listening

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).

Bridges in Mathematics second edition

Aligned with the NCTM curriculum guidelines, Bridges is a rigorous, comprehensive math curriculum for grades K–5 designed to address the math standards in a way that's enjoyable and accessible to all learners. The curriculum focuses on developing in students a deep understanding of math concepts, proficiency with key skills, and the ability to solve new and complex problems. Learning activities tap into the intelligence and strengths all students have by presenting mathematically powerful material alive with language, pictures, and movement.

Students in a Bridges classroom talk about math, describe observations, explain methods, and ask questions. They are encouraged to find multiple ways to solve problems and show different ways of thinking. This is a vital way to help students build more flexible and efficient ways to solve increasingly complex problems. Hands-on activities engage them in exploring, developing, testing, discussing, and applying mathematical concepts.

Bridges features a combination of whole-group, small-group, and independent activities that are problem centered. We also use problems from the **Contexts for Learning** program for deeper exploration.

Our approach to math instruction involves collaboration between the classroom teachers, Director of Teaching & Learning, and Learning Support Office.

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

- Fluently counts from 0 to 100 verbally
- Recognizes and writes numerals up to 50
- Understands and uses counting strategies
- Classifies objects into categories
- 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 in 1st/2nd 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 5th 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.

1st/2nd and 4th/5th Grade classrooms alternate cultural studies topics from one year to the next, so that all students receive the equivalent of a 1st/2nd or 4th/5th 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:

- Understands, and accepts, that people and families can have different beliefs and practices
- Shows respect for and understanding of other cultures

Recognizes others' perspectives with respect

Social Justice in K-2nd

We weave social justice and service learning in integrated ways into our curriculum, using the Social Justice Standards from Teaching Tolerance as a framework. These standards focus on four themes.

Identity: Students will develop positive social identities, understanding that we belong to multiple groups and are unique and complex individuals. With this understanding, students will express healthy self-confidence and pride without denying the value or dignity of others, and the ability to negotiate their identity in multiple spaces.

Diversity: Students will express comfort and curiosity about the experiences of others, develop a sense of empathy and respect as well as the language to communicate it, and engage in the exchange of ideas with open minds.

Justice: Through the years at TBS, students will develop the skills to recognize, analyze, and apply the different components of Social Justice: Content Mastery, Action Skills, Critical Thinking, Self-reflection, and Awareness of Multicultural Group Dynamic.

Action: Students will demonstrate empowerment, empathy, and the skills to act, with others or alone, against prejudice, injustice, and/or discriminatory actions.

In K-2nd grades, teachers address the different anchor standards using a variety of resources. Responsive Classroom, Zones of Regulation, and Teaching Tolerance lessons are used to explore the identity anchor standard, reading books like The Colors of Us and Who Are You? about gender inclusivity. The diversity standard is taught through cultural classroom celebrations, read alouds like Parr's Family Book, poetry writing ("I Am" and "We Are" poems), songs, and projects like "Our Family's Journey," celebrating all types of families, learners, and other differences. Teachers address the justice anchor standard by using a *Changemakers* curriculum focusing on a number of different folks who have made positive change in the world, studying women's rights, workers' rights, and those fighting for environmental justice. And students learn about action through Community Meetings, lessons on being an ally, and Service Learning with projects like letter writing.

In Core Arts classes, students explore identity, diversity, justice, and action through the performing arts, visual arts, and languages of a range of cultures and communities. Students engage their creative nature to examine their own and others' identities, to learn about the influence of the arts on justice and equity, and the ways in which the arts and language are inseparable from social action.

Science in Elementary

Our framework for science instruction and curricula draw from the following resources, among others:

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

FOSS (Full Option Science System), a research-based science curriculum for grades K-8 developed at the Lawrence Hall of Science, University of California, Berkeley. The FOSS Program bridges research and practice by providing tools and strategies to engage students and teachers in enduring experiences that lead to deeper understanding of the natural and designed worlds.

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. 1st/2nd Grade and 4th/5th Grade classrooms alternate science topics from one year to the next, so that all students receive the equivalent of a 1st/2nd or 4th/5th 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 areas that include 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

- Focuses while in the studio and completes process steps
- Uses trial and error when uncertain how to proceed, viewing mistakes as an opportunity to learn
- Is open to new ideas and actively seeks them out

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 explore the traditions and cultures of Spanish-speaking countries. In Spanish class we study all four elements of literacy (reading, writing, listening, and speaking) with an emphasis on oral language comprehension. Instructional resources include research-based

strategies such as GLAD (Guided Language Acquisition Development), TPR (Total Physical Response), TPRS (Teaching Proficiency through Reading and Storytelling), and Comprehensible Input. We also incorporate art, music, and movement to create an interactive classroom that addresses different learning styles.

Spanish Learning Goals for Kindergarten

- Recognizes familiar words and phrases when heard spoken
- Communicates effectively about familiar topics using single words and phrases
- Shares information about self in a conversational setting

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
- Sings as part of an ensemble

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

- Effectively performs gross motor skills while demonstrating an understanding of skill specific learning cues
- Applies knowledge of social emotional skills covered towards group activities (trust, honesty and fairness)

Balanced Literacy in Elementary

Our approach to literacy is based on 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 3rd through 5th Grades.

Reading Instruction is integrated into various parts of the day, and is the focus of Reader's Workshop. These periods may include mini-lessons with direct instruction in certain skills, as well as centers and activities designed to give children the chance to practice those skills.

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. In 4th/5th grades, the online program *Wordly Wise i3000* is used to strengthen vocabulary acquisition and its connection with reading comprehension.

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 confer and coach student writers one on one. 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 teachers 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 highlights 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 third 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 1st or 2nd Grade student develops the following skills and concepts:

Reading

- Reads at grade level benchmark
- Reads with grade appropriate fluency and phrasing
- Demonstrates stamina in independent reading duration
- Reads grade appropriate sight words with speed, accuracy and consistency
- Applies grade-level strategies for decoding words/sounds
- Makes text-to-text, text-to-self, and text-to-world connections
- Makes predictions about stories
- Retells stories with key details/events including: setting, characters, problems, and solutions
- Uses inferencing to deepen understanding
- Uses evidence from texts to support opinions
- Applies text features to locate information in nonfiction books
- Independently selects and reads "Good Fit" books

Writing

- Writes letters clearly and legibly
- Uses tools such as personal dictionary and word wall 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
- Writes in complete sentences
- Uses and edits for final punctuation
- Uses and edits for appropriate letter case
- Adds detail such as five senses, onomatopoeia, emotion, dialogue, etc.
- Includes descriptive language
- Generates ideas independently
- Organizes & expresses ideas clearly
- Recognizes & uses basic poetic structures and devices when writing poetry
- Revises based on feedback
- Can research and incorporate nonfiction text features into a written piece

Speaking & Listening

- Asks clarifying questions
- Contributes to classroom discussions
- Listens attentively
- Articulates relevant ideas clearly
- Takes turns speaking

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).

Bridges in Mathematics second edition

Aligned with the NCTM curriculum guidelines, Bridges is a rigorous, comprehensive math curriculum for grades K–5 designed to address the math standards in a way that's enjoyable and accessible to all learners. The curriculum focuses on developing in students a deep understanding of math concepts, proficiency with key skills, and the ability to solve new and complex problems. Learning activities tap into the intelligence and strengths all students have by presenting mathematically powerful material alive with language, pictures, and movement.

Students in a Bridges classroom talk about math, describe observations, explain methods, and ask questions. They are encouraged to find multiple ways to solve problems and show different ways of thinking. This is a vital way to help students build more flexible and efficient ways to solve increasingly complex problems. Hands-on activities engage them in exploring, developing, testing, discussing, and applying mathematical concepts.

Bridges features a combination of whole-group, small-group, and independent activities that are problem centered. We also use problems from the **Contexts for Learning** program for deeper exploration.

While engaging in the TBS math curriculum, a 1st or 2nd Grade student develops the following skills and concepts:

First Grade

- Accurately counts objects
- Counts on from a given number
- Fluently counts from 0 to 100 verbally
- Recognizes numerals up to 100
- Understands that the digits of a two-digit number represent amounts of tens and ones
- Identifies and compares 2-D and 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
- Constructs, describes, and extends repeating patterns
- Writes accurate number sentences
- Utilizes and recognizes basic symbols of math operation (+, -, =, <, >)
- Contributes to and reads data from graphs
- Demonstrates math thinking with writing, pictures, manipulatives, or verbal expression
- Uses appropriate math tools strategically

Second Grade

- Reads and writes 3-digit whole numbers
- Orders whole numbers up to 1000, and understands the place value of the digits
- 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
- Identifies and compares 2-D and 3-D shapes by attributes
- Accurately measures length and width using standard units
- Understands that different units of measurement are appropriate for different applications
- Reads & writes time to the nearest 15 minutes

- Solves problems involving coins and paper currency
- Constructs, describes, and extends repeating patterns
- Utilizes and recognizes basic symbols of math operation (+, -, x, ÷, =, <, >)
- Collects, organizes, and presents data with pictographs and bar graphs
- Explains mathematical thinking using equations, diagrams & words
- Applies effective strategies and appropriate operations to word problems

Cultural Studies in Elementary

Our framework for cultural studies comes from both Montessori curriculum in 1st/2nd 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 5th 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.

1st/2nd and 4th/5th Grade classrooms alternate cultural studies topics from one year to the next, so that all students receive the equivalent of a 1st/2nd or 4th/5th social studies education after two years in the class.

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
- Recognizes ability and responsibility to affect positive change in the world
- Recognizes that all humans have certain basic needs and can identify those needs
- Identifies similarities and differences between one's own traditions and beliefs and those of others
- Describes what a changemaker is and does to make positive changes in the world
- Understands the importance of reusing, recycling and repurposing materials

Social Justice in K-2nd

We weave social justice and service learning in integrated ways into our curriculum, using the Social Justice Standards from Teaching Tolerance as a framework. These standards focus on four themes.

Identity: Students will develop positive social identities, understanding that we belong to multiple groups and are unique and complex individuals. With this understanding, students will express healthy self-confidence and pride without denying the value or dignity of others, and the ability to negotiate their identity in multiple spaces.

Diversity: Students will express comfort and curiosity about the experiences of others, develop a sense of empathy and respect as well as the language to communicate it, and engage in the exchange of ideas with open minds.

Justice: Through the years at TBS, students will develop the skills to recognize, analyze, and apply the different components of Social Justice: Content Mastery, Action Skills, Critical Thinking, Self-reflection, and Awareness of Multicultural Group Dynamic.

Action: Students will demonstrate empowerment, empathy, and the skills to act, with others or alone, against prejudice, injustice, and/or discriminatory actions.

In K-2nd grades, teachers address the different anchor standards using a variety of resources. Responsive Classroom, Zones of Regulation, and Teaching Tolerance lessons are used to explore the identity anchor standard, reading books like <u>The Colors of Us</u> and <u>Who Are You?</u> about gender inclusivity. The diversity standard is taught through cultural classroom celebrations, read alouds like Parr's Family Book, poetry writing ("I Am" and "We Are" poems), songs, and projects like "Our Family's Journey," celebrating all types of families, learners, and other differences. Teachers address the justice anchor standard by using a *Changemakers* curriculum focusing on a number of different folks who have made positive change in the world, studying women's rights, workers' rights, and those fighting for environmental justice. And students learn about action through Community Meetings, lessons on being an ally, and Service Learning with projects like letter writing.

In Core Arts classes, students explore identity, diversity, justice, and action through the performing arts, visual arts, and languages of a range of cultures and communities. Students engage their creative nature to examine their own and others' identities, to learn about the influence of the arts on justice and equity, and the ways in which the arts and language are inseparable from social action.

Science in Elementary

Our framework for science instruction and curricula draw from the following resources, among others:

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

FOSS (Full Option Science System), a research-based science curriculum for grades K-8 developed at the Lawrence Hall of Science, University of California, Berkeley. The FOSS Program bridges research and practice by providing tools and strategies to engage students and teachers in enduring experiences that lead to deeper understanding of the natural and designed worlds.

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. 1st/2nd

Grade and 4th/5th Grade classrooms alternate science topics from one year to the next, so that all students receive the equivalent of a 1st/2nd or 4th/5th science education after two years in the class.

While engaging in the TBS science curriculum, a 1st or 2nd Grade student develops the following skills and concepts over two years:

- Makes observations and shares with others
- Uses tools to gather scientific information
- Uses pictures and words to explain scientific thinking
- Understands that change occurs over varying lengths of time
- Observes and articulates properties of states of matter
- Understands that water can be in different forms in different places on earth
- Understands the relative motions of the sun and earth, and uses them to explain the seasons
- Understands that a day and year varies depending on the planet's revolution and rotation
- Retells and sequences major events from the history of the universe from the Big Bang to the solidifying of the earth
- Has a general understanding of the evolutionary changes of life on earth
- Identifies living things by their characteristics
- Uses design thinking for problem solving

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 areas that include 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 1st and 2nd Grade

- Focuses while in the studio and completes process steps
- Uses trial and error when uncertain how to proceed, viewing mistakes as an opportunity to learn
- Is open to new ideas and actively seeks them out

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 explore the traditions and cultures of Spanish-speaking countries. In Spanish class we study all four elements of literacy (reading, writing, listening, and speaking) with an emphasis on oral language comprehension. Instructional resources include research-based strategies such as GLAD (Guided Language Acquisition Development), TPR (Total Physical Response), TPRS (Teaching Proficiency through Reading and Storytelling), and Comprehensible

Input. We also incorporate art, music, and movement to create an interactive classroom that addresses different learning styles.

Spanish Learning Goals for 1st and 2nd Grade

- Recognizes familiar words and phrases when heard spoken
- Communicates effectively about familiar topics using single words and phrases
- Shares information about self in a conversational setting

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 1st and 2nd Grade

- Keeps a steady beat
- Uses proper technique on barred and unpitched percussion instruments
- Contributes ideas in improvisation activities
- Sings as part of an ensemble

Movement in K-2nd grades

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 1st and 2nd Grade

- 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 1st and 2nd Grades

- Effectively performs gross motor skills while demonstrating an understanding of skill specific learning cues
- Applies knowledge of social emotional skills covered towards group activities (trust, honesty and fairness)
- Demonstrates an understanding of skill specific cues through self assessment and oral explanations

Balanced Literacy in Elementary

Our approach to literacy is based on 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 3rd through 5th Grades.

Reading Instruction is integrated into various parts of the day, and is the focus of Reader's Workshop. These periods may include mini-lessons with direct instruction in certain skills, as well as centers and activities designed to give children the chance to practice those skills.

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. In 4th/5th grades, the online program *Wordly Wise i3000* is used to strengthen vocabulary acquisition and its connection with reading comprehension.

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 confer and coach student writers one on one. 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 teachers 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 highlights 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 3rd Grade student develops the following skills and concepts:

Reading

- Reads out loud with fluency and expression
- Demonstrates increasing stamina for sustained reading
- Independently chooses and reads "just right" books
- Uses phonetic understanding to decode words (rereads for understanding)
- Uses varied strategies for determining meaning of unfamiliar words
- Refers explicitly to text as basis when asking and answering questions
- 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 guestions 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
- Demonstrates sense of story structure, character, and events
- 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

Speaking & Listening

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

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).

Bridges in Mathematics second edition

Aligned with the NCTM curriculum guidelines, Bridges is a rigorous, comprehensive math curriculum for grades K–5 designed to address the math standards in a way that's enjoyable and accessible to all learners. The curriculum focuses on developing in students a deep understanding of math concepts, proficiency with key skills, and the ability to solve new and complex problems. Learning activities tap into the intelligence and strengths all students have by presenting mathematically powerful material alive with language, pictures, and movement.

Students in a Bridges classroom talk about math, describe observations, explain methods, and ask questions. They are encouraged to find multiple ways to solve problems and show different ways of thinking. This is a vital way to help students build more flexible and efficient ways to solve increasingly complex problems. Hands-on activities engage them in exploring, developing, testing, discussing, and applying mathematical concepts.

Bridges features a combination of whole-group, small-group, and independent activities that are problem centered. We also use problems from the **Contexts for Learning** program for deeper exploration.

Our approach to math instruction involves collaboration between the classroom teachers, Director of Teaching & Learning, and Learning Support Office.

While engaging in the TBS math curriculum, a 3rd Grade student develops the following skills and concepts:

- 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
- Understands properties of 2-D and 3-D shapes
- Classifies angles as right, acute, or obtuse
- Finds and understands perimeter of polygons
- Measures length using standard units
- Reads & writes time to the nearest minute
- Solves problems involving coins and paper currency
- 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
- 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 in 1st/2nd 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 5th 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.

1st/2nd and 4th/5th Grade classrooms alternate cultural studies topics from one year to the next, so that all students receive the equivalent of a 1st/2nd or 4th/5th social studies education after two years in the class.

While engaging in the TBS cultural studies curriculum, a 3rd Grade student develops the following skills and concepts:

- Understands different types of physical geography
- Demonstrates map-reading skills
- Recognizes aspects of local maps and landmarks
- Identifies how humans impact the environment in the past and present
- Differentiates fact from opinion
- Compares and contrasts between how local Native Americans lived in the ancient past, recent past, and how we live today
- Understands how to organize and create a timeline
- Exhibits understanding of economic concepts and reasoning

Social Justice in 3rd-5th

We weave social justice and service learning in integrated ways into our curriculum, using the Social Justice Standards from Teaching Tolerance as a framework. These standards focus on four themes.

Identity: Students will develop positive social identities, understanding that we belong to multiple groups and are unique and complex individuals. With this understanding, students will express healthy self-confidence and pride without denying the value or dignity of others, and the ability to negotiate their identity in multiple spaces.

Diversity: Students will express comfort and curiosity about the experiences of others, develop a sense of empathy and respect as well as the language to communicate it, and engage in the exchange of ideas with open minds.

Justice: Through the years at TBS, students will develop the skills to recognize, analyze, and apply the different components of Social Justice: Content Mastery, Action Skills, Critical Thinking, Self-reflection, and Awareness of Multicultural Group Dynamic.

Action: Students will demonstrate empowerment, empathy, and the skills to act, with others or alone, against prejudice, injustice, and/or discriminatory actions.

In 3rd-5th grades, teachers use a variety of resources to address the anchor standards. Resources such as Teaching Tolerance, Responsive Classroom, and the Zones of Regulation are important in specifically addressing the anchor standard of identity. Teachers meet the diversity standard through a cultural studies curriculum that includes the Circle of Viewpoints routine, for example, in simulations of multiple cultures coming together at points in California history. Students address the anchor standard of justice through a curriculum specifically addressing stereotypes. To address the anchor standard of action, teachers use both Responsive Classroom and a cultural studies curriculum that includes opportunities for student engagement in justice making and raising awareness, for example, in studying the many reasons people move, including slavery, immigration, and pioneering in American history, or Japanese internment, Farm Workers' rights, and Gay Rights.

In Core Arts classes, students explore identity, diversity, justice, and action through the performing arts, visual arts, and languages of a range of cultures and communities. Students engage their creative nature to examine their own and others' identities, to learn about the influence of the arts on justice and equity, and the ways in which the arts and language are inseparable from social action.

Science in Elementary

Our framework for science instruction and curricula draw from the following resources, among others:

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

FOSS (Full Option Science System), a research-based science curriculum for grades K-8 developed at the Lawrence Hall of Science, University of California, Berkeley. The FOSS Program bridges research and practice by providing tools and strategies to engage students and teachers in enduring experiences that lead to deeper understanding of the natural and designed worlds.

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. 1st/2nd Grade and 4th/5th Grade classrooms alternate science topics from one year to the next, so that all students receive the equivalent of a 1st/2nd or 4th/5th science education after two years in the class.

While engaging in the TBS science curriculum, a 3rd Grade student develops the following skills and concepts:

- Actively engages in scientific investigations
- Uses pictures and words to explain scientific thinking
- Makes observations, predictions, and conclusions based on evidence-based arguments

- Understands the needs, parts, and functions of plants and seeds
- 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, including weather systems

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 areas that include 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 3rd Grade

- Focuses while in the studio and completes process steps
- Uses trial and error when uncertain how to proceed, viewing mistakes as an opportunity to learn
- Is open to new ideas and actively seeks them out

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 explore the traditions and cultures of Spanish-speaking countries. In Spanish class we study all four elements of literacy (reading, writing, listening, and speaking) with an emphasis on oral language comprehension. Instructional resources include research-based strategies such as GLAD (Guided Language Acquisition Development), TPR (Total Physical Response), TPRS (Teaching Proficiency through Reading and Storytelling), and Comprehensible Input. We also incorporate art, music, and movement to create an interactive classroom that addresses different learning styles.

Spanish Learning Goals for 3rd Grade

- Communicates effectively about familiar topics using single words and phrases
- Presents information about self and other familiar topics using single words or memorized phrases
- Reads and understands learned or memorized words and phrases

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 3rd 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 3rd Grade

- Demonstrates age-appropriate overhand throwing
- Demonstrates age-appropriate catching
- Demonstrates age-appropriate striking
- Demonstrates age-appropriate running to kick a ball
- Demonstrates age-appropriate teamwork
- Demonstrates age-appropriate sportsmanship

Balanced Literacy in Elementary

Our approach to literacy is based on 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 3rd through 5th grades.

Reading Instruction is integrated into various parts of the day, and is the focus of Reader's Workshop. These periods may include mini-lessons with direct instruction in certain skills, as well as centers and activities designed to give children the chance to practice those skills.

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. In 4th/5th grades, the online program *Wordly Wise i3000* is used to strengthen vocabulary acquisition and its connection with reading comprehension.

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 confer and coach student writers one on one. 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 teachers 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 highlights 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 third 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 4th or 5th Grade student develops the following skills and concepts:

Reading

- Reads grade level text fluently
- Reads aloud with expression
- Summarizes narrative text
- Discerns main idea and themes presented in text
- Connects texts to prior knowledge, other texts, and personal experiences
- Uses evidence from text to support inferences
- Reads nonfiction text for information
- Analyzes and responds to narrative text in literature discussions

Writing

- Produces clear and coherent writing
- Revises and edits
- Punctuates correctly
- Capitalizes correctly
- Spells grade level words correctly
- Writes complete, varied sentences
- Organizes sentences within a paragraph structure
- Uses dialogue and description to develop experiences and events
- Includes relevant information from lessons, texts, and experiences in expository writing

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).

Bridges in Mathematics second edition

Aligned with the NCTM curriculum guidelines, Bridges is a rigorous, comprehensive math curriculum for grades K–5 designed to address the math standards in a way that's enjoyable and accessible to all learners. The curriculum focuses on developing in students a deep understanding of math concepts, proficiency with key skills, and the ability to solve new and complex problems. Learning activities tap into the intelligence and strengths all students have by presenting mathematically powerful material alive with language, pictures, and movement.

Students in a Bridges classroom talk about math, describe observations, explain methods, and ask questions. They are encouraged to find multiple ways to solve problems and show different ways of thinking. This is a vital way to help students build more flexible and efficient ways to solve increasingly complex problems. Hands-on activities engage them in exploring, developing, testing, discussing, and applying mathematical concepts.

Bridges features a combination of whole-group, small-group, and independent activities that are problem centered. We also use problems from the **Contexts for Learning** program for deeper exploration.

Our approach to math instruction involves collaboration between the classroom teachers, Director of Teaching & Learning, and Learning Support Office.

While engaging in the TBS math curriculum, a 4th or 5th Grade student develops the following skills and concepts:

4th Grade

- 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; represents them on a number line diagram
- 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
- 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
- Represents data with line plots, bar graphs, and tables
- Explains mathematical thinking using equations, diagrams, and words
- Applies effective strategies and appropriate operations to word problems

5th Grade

- Makes reasonable estimates of a solution using rounding
- Reads and writes multi-digit whole numbers to 1,000,000,000
- 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
- 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
- Writes simple equations 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
- 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 5th 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.

1st/2nd and 4th/5th Grade classrooms alternate cultural studies topics from one year to the next, so that all students receive the equivalent of a 1st/2nd or 4th/5th social studies education after two years in the class.

While engaging in the TBS cultural studies curriculum, a 4th or 5th Grade student develops the following skills and concepts over two years:

- Analyzes and interprets primary and secondary source documents
- Describes historical events from multiple perspectives
- Uses reference and technology tools to research and create documents
- Reads, interprets, and creates different types of maps
- Compares and contrasts historical events with current ones
- Demonstrates knowledge of California geography
- Sequences events in California history

Social Justice in 3rd-5th

We weave social justice and service learning in integrated ways into our curriculum, using the Social Justice Standards from Teaching Tolerance as a framework. These standards focus on four themes.

Identity: Students will develop positive social identities, understanding that we belong to multiple groups and are unique and complex individuals. With this understanding, students will express healthy self-confidence and pride without denying the value or dignity of others, and the ability to negotiate their identity in multiple spaces.

Diversity: Students will express comfort and curiosity about the experiences of others, develop a sense of empathy and respect as well as the language to communicate it, and engage in the exchange of ideas with open minds.

Justice: Through the years at TBS, students will develop the skills to recognize, analyze, and apply the different components of Social Justice: Content Mastery, Action Skills, Critical Thinking, Self-reflection, and Awareness of Multicultural Group Dynamic.

Action: Students will demonstrate empowerment, empathy, and the skills to act, with others or alone, against prejudice, injustice, and/or discriminatory actions.

In 3rd-5th grades, teachers use a variety of resources to address the anchor standards. Resources such as Teaching Tolerance, Responsive Classroom, and the Zones of Regulation are important in specifically addressing the anchor standard of identity. Teachers meet the diversity standard through a cultural studies curriculum that includes the Circle of Viewpoints routine, for example, in simulations of multiple cultures coming together at points in California history. Students address the anchor standard of justice through a curriculum specifically addressing stereotypes. To address the anchor standard of action, teachers use both Responsive Classroom and a cultural studies curriculum that includes opportunities for student engagement in justice making and raising awareness, for example, in studying the many reasons people move, including slavery, immigration, and pioneering in American history, or Japanese internment, Farm Workers' rights, and Gay Rights.

In Core Arts classes, students explore identity, diversity, justice, and action through the performing arts, visual arts, and languages of a range of cultures and communities. Students engage their creative nature to examine their own and others' identities, to learn about the influence of the arts on justice and equity, and the ways in which the arts and language are inseparable from social action.

Science in Elementary

Our framework for science instruction and curricula draw from the following resources, among others:

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

FOSS (Full Option Science System), a research-based science curriculum for grades K-8 developed at the Lawrence Hall of Science, University of California, Berkeley. The FOSS Program bridges research and practice by providing tools and strategies to engage students and teachers in enduring experiences that lead to deeper understanding of the natural and designed worlds.

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. 1st/2nd

Grade and 4th/5th Grade classrooms alternate science topics from one year to the next, so that all students receive the equivalent of a 1st/2nd or 4th/5th science education after two years in the class.

While engaging in the TBS science curriculum, a 4th or 5th Grade student develops the following skills and concepts over two years:

- Actively participates in inquiry process
- Follows procedural directions and manages materials
- Draws labeled diagrams
- Collects and records data accurately
- Makes claims based on evidence and reasoning
- Interprets and presents scientific data
- Understands the properties of matter
- Identifies chemical and physical changes
- Understands how energy changes form
- Describes energy transfer
- Describes the water cycle
- Designs and builds systems to solve engineering problems
- Describes adaptations of organisms within an ecosystem
- Describes how energy changes form within an ecosystem
- Evaluates human impact on ocean ecosystems
- 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 areas that include 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 4th and 5th Grade

- Focuses while in the studio and completes process steps
- Uses trial and error when uncertain how to proceed, viewing mistakes as an opportunity to learn
- Is open to new ideas and actively seeks them out

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 explore the traditions and cultures of Spanish-speaking countries. In Spanish class we study all four elements of literacy (reading, writing, listening, and speaking) with an emphasis on oral language comprehension. Instructional resources include research-based strategies such as GLAD (Guided Language Acquisition Development), TPR (Total Physical

Response), TPRS (Teaching Proficiency through Reading and Storytelling), and Comprehensible Input. We also incorporate art, music, and movement to create an interactive classroom that addresses different learning styles.

Spanish Learning Goals for 4th and 5th Grade

- Communicates effectively about familiar topics using single words and phrases
- Presents information about self and other familiar topics using single words or memorized phrases
- Reads and understands learned or memorized words and phrases

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 4th and 5th 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 4th and 5th Grade

- Demonstrates age-appropriate overhand throwing
- Demonstrates age-appropriate catching
- Demonstrates age-appropriate striking
- Demonstrates age-appropriate running to kick a ball
- Demonstrates age-appropriate teamwork
- Demonstrates age-appropriate sportsmanship

6th Grade Overview

Our Sixth Grade program resides in the heart of the Middle School, yet the 6th Grade year also functions as a bridge between the Elementary division and 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 6th Grade are English, math, science, cultural studies, current events, and Spanish. Core arts courses include visual art, drama, music, physical education, 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, We Day service learning club, and Middle School winter and spring plays.

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.
- Cultivates a growth mindset.

6th Grade English

The 6th 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 autobiography. 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

<u>Sea of Stories</u> by Salman Rushdie, <u>The Giver</u> by Lois Lowry, <u>A Sound of Thunder</u> by Ray Bradbury, <u>The Tell-Tale Heart</u> by Edgar Allan Poe, <u>Harrison Bergeron</u> by Kurt Vonnegut, a selection of auto/biographies of human rights activists, <u>Never Fall Down</u> by Patricia McCormick, *Vocabulary from Classical Roots*, teacher-generated resources and materials

English Learning Goals in 6th Grade include:

- Reads consistently and independently; develops an identity as a reader.
- Articulates text-self, text-text, text-history/world connections in fiction and non-fiction.
- Determines and analyzes theme and symbolism in texts.
- Understands and identifies author intent, foreshadowing, satire, allusion, and plot elements.
- Analyzes the impact of specific word choices in poetry.
- Incorporates poetry techniques into original poems.
- Introduces a claim; organizes evidence and ideas logically in writing.
- Cites textual evidence to support analysis of text.
- Outlines and writes a multi-paragraph essay given a prompt.
- Writes narratives to develop real or imagined experiences or events.
- Demonstrates command of the conventions of standard English grammar and mechanics.
- Uses Greek or Latin affixes & roots as clues to the meaning of a word.
- Develops and strengthens writing as needed by planning, revising, editing, rewriting, or trying a new approach.

6th Grade Math

The 6th 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, approach problems in a variety of ways, and cultivate a growth mindset toward math. Students demonstrate understanding of material through in-class activities, conversations, games, quizzes, tests, and projects. Students learn that in order to truly master 6th 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?" "What skills and strategies can I use to approach complex problems?" and "How would I teach this to someone else?"

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

Math Learning Goals in 6th Grade

- Uses assorted strategies and tools to approach and solve problems.
- Justifies answers and shows understanding in multiple ways.
- Identifies and uses factors and multiples in various contexts.
- Compares, orders, and reasons with integers and absolute values.
- Compares, converts, and interprets fractions, decimals, and percents in various contexts.
- Reasons and draws conclusions about rates, ratios, and unit rates.
- Identifies, uses, and applies vocabulary related to lines, angles, and polygons.
- Uses multiple strategies to calculate area of various polygons, including triangles, special quadrilaterals, and L-shaped figures.

- Understands the relationship between a circle's area and circumference and can calculate both.
- Calculates surface area and volume of 3D figures using nets and other strategies.
- Applies basic arithmetic understanding to algebraic expressions and equations.
- Reasons about and solves one and two-step equations and inequalities.
- 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).

6th 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, Golden Gate National Recreation Area, science museums and a week exploring sustainable farming and energy use.

Primary Resources: *River Cutters* GEMS guide, STEM Teaching Kit: *Thermodynamics and Heat Transfer*, Next Generation Science Standards, teacher-generated materials

Science Learning Goals in 6th Grade include:

- Understands the nature of scientific inquiry and uses inquiry skills to make sense of natural phenomena.
- Constructs an argument supported by evidence and scientific reasoning to support an explanation for a phenomenon.
- Accurately identifies prominent landforms, waterways, and other features of the Bay Area.
- Uses models to construct explanations about how rivers create landforms and make sense of patterns of erosion and deposition.
- Applies understanding of tectonic plate movement to make sense of how geoscience processes have changed Earth's surface.
- Demonstrates understanding of how the interactions of atmospheric air masses result in weather phenomena.
- Demonstrates understanding that heat transfers through conduction, radiation, and convection.
- Applies understanding of heat transfer to design, construct, and test a device that minimizes thermal energy transfer.

6th Grade Cultural Studies

Cultural Studies curriculum in 6th Grade centers around four 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 are all humans similar? How are they different?"

Students begin the year exploring individual identities and cultures, and then identify similarities and differences within the class. Using the Teaching Tolerance Social Justice Standards to guide our curriculum, students also spend time making sense of concepts like race, ethnicity, oppression, and privilege through guided conversations and reflection activities. 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 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. They develop research questions and culminate their research by writing five-paragraph essays.

Primary Resources: Social Studies: <u>Ancient Civilizations</u> (Harcourt), Teaching Tolerance Social Justice Standards and lessons, teacher-generated resources and materials.

Cultural Studies Learning Goals in 6th Grade

- Demonstrates understanding of personal culture, identity, diversity, and injustice.
- Demonstrates appreciation, curiosity, and growth about personal culture, identity, diversity, and injustice.
- Describes key events and remaining mysteries in human evolution as they relate to each other.
- Uses strategies, tools, and complex questions to synthesize new information.
- Describes and justifies reasons for Neolithic farming revolution.
- Describes and gives examples of characteristics of civilizations.
- Compares and contrasts cultural similarities and differences between Ancient Egypt, Mesopotamia, Greece, Rome, Indus Valley, China, and Maya.
- Effectively researches and organizes information in a five paragraph research paper related to ancient civilizations content.

6th 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 <u>Out of Eden</u> 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, *Mapping the World by Heart* curriculum, teacher-generated resources and materials

Current Events Learning Goals in 6th Grade include:

- Makes sense of, and finds relevance in, current events.
- Summarizes current news stories.
- Accurately sketches a world map from memory.
- Understands multiple perspectives on current local, national, and global issues.
- Understands multiple perspectives on immigration issues and their impacts on communities.

6th 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) including <u>Esperanza</u> by Carol Gaab

Spanish Learning Goals for 6th Grade

- Communicates effectively about familiar topics using complete sentences, dialogues, vocabulary & adjectives.
- Presents information using the acquired vocabulary about families, adjectives, indefinite articles, and about the readings.
- Understands words, questions, phrases and simple sentences related to what has been covered in class.
- Understands the main idea of short stories and novels and is able to answer to simple questions related to the plot.
- Writes short sentences about familiar topics using the vocabulary presented this semester.
- Uses the vocabulary acquired in class consistently.
- Understands words, questions, phrases and simple sentences related to what has been covered in class.

7th Grade Overview

The core courses for 7th Grade are humanities, math, science, and Spanish. The Core Arts courses are visual art, drama, physical education, music, and health. Classroom and core arts classes are taught in grade-level groupings of 10-13 students. Several times a week, for snack, lunch, community meeting and exploratories, 6th, 7th, and 8th graders are integrated.

Advisory is an essential part of the 7th 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, 7th 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, We Day service learning club, and Middle School winter and spring plays.

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.

7th Grade Humanities

Through the lens of social justice, the 7th 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 first semester encompasses three themes: Prologue, *The Hero's Journey*; Cycle 1, *Perspectives*; and Cycle 2, *Civilization*. Prologue's guiding question is, "How can I apply the Hero's Journey to my life?" In Cycle 1, students are asked to examine the question, "How does culture influence perspective, and perspective influence culture?" The guiding question for Cycle 2 is, "What are the advantages and disadvantages of civilization?"

The second semester encompasses: Cycle 3, *Revolutions*; Cycle 4, *Social Justice*; and finally, Prologue, creating portfolios as guided reflection. In Cycle 3, students examine the questions, "What are the causes of revolution?" and "What makes a revolution successful?" In Cycle 4, students examine the question, "What is social justice?"

Primary Resources include: My Ishmael by Daniel Quinn, The Selfish Gene by Richard Dawkins, Pay it Forward: Young Reader's Edition by Catherine Ryan Hyde, The Worst Mistake in the History of the Human Race by Jared Diamond, Beyond Civilization by Daniel Quinn, Ship Breaker by Paolo Bacigalupi, Animal Farm by George Orwell, Dreams and Harlem by Langston Hughes, The Good Food Revolution by Will Allen, The Universal Declaration of Human Rights, Vocabulary from Classical Roots, Grammar by Mark Dressel, Teacher Curriculum Institute's History Alive! The Medieval World and Beyond, and other various textbook selections and media resources.

Humanities Learning Goals in 7th Grade

- Determines a theme or central idea of a text.
- Writes arguments to support claims with clear reasons and relevant evidence.
- Develops and strengthens writing as needed by revising, editing, rewriting, or trying a new approach.
- Exhibits understanding of new vocabulary and ideas.
- Demonstrates command of common and proper nouns, plural nouns, possessive nouns, and collective nouns.
- Demonstrates command of identifying and editing sentence fragments, identifying subjects and predicates in simple and compound sentences, and identifying and editing run-ons.
- Demonstrates command of subject/verb agreement, conjunctions, punctuating direct quotations, and comma use.
- Demonstrates command of personal pronouns, adjective prepositional pronouns, adverb prepositional pronouns, and misplaced and dangling modifiers.
- Begins paragraphs with topic sentences.
- Delivers effective oral presentations.

- Makes connections between a wide range of historical information in drawing conclusions about a historical theme or event.
- Articulates the relationship between one's culture and one's perspective.
- Articulates the advantages and disadvantages of civilization.
- Demonstrates understanding of the causes of revolutions.
- Demonstrates understanding of indicators of successful revolutions.
- Demonstrates understanding of the characteristics of social justice.
- Demonstrates understanding of how to conduct research projects to answer a question, drawing on several sources

7th 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 where they utilize their skills in proportional reasoning, rational number operations, graphing, algebra, and geometry. 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*, *JUMP Math*, teacher-generated resources and materials.

Math Learning Goals in 7th Grade

- Shows the reasoning behind the answer.
- Computes accurately with fractions, and applies knowledge to complex problems.
- Computes percentages involving both whole numbers and decimals, and applies knowledge to complex problems.
- Understands the meaning of unit rates and can use them to compare quantitative data.
- Understands proportions and can use them to solve problems.
- Adds, subtracts, multiplies and divides rational numbers (positive and negative whole numbers and fractions).
- Understands and applies the order of operations.
- Translates verbal phrases into algebraic expressions, and understands their utility in "proving" number tricks.
- Understands and applies the distributive property in expanding algebraic expressions
- Simplifies algebraic expressions by combining like terms.
- Solves word problems leading to two-step equations and equations requiring combining like terms.
- Calculates the surface area and volume of two- and three-dimensional figures.
- Knows and applies the formulas for the area and circumference of a circle in solving problems.

7th 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 7th 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*, Next Generation Science Standards, teacher-generated materials and Internet resources.

Science Learning Goals in Seventh Grade

- Uses mathematics and computational thinking and understands metric measurement.
- Applies concepts and understanding of the nature of science and experimental design to various and novel challenges, including evaluation for validity.
- Can differentiate between living and non-living things based on characteristics that they
 exhibit
- Can explain the Linnaean system of classification and understands its significance.
- Can model how energy flows and matter cycles through ecosystems using food chains and webs.
- 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.
- Understands and can describe cell structures and their functions.
- Understands the various methods by which cells use energy.
- Understands cell reproduction.
- 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.

7th 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. Yucatán Los Piratas del Caribe* y *el Triángulo de las Bermudas*.

Spanish Learning Goals for 7th Grade

- Communicates effectively about familiar topics using a series of sentences, conjugation of regular verbs in the present and preterit tense.
- Asks and responds to simple questions related to what's been covered in class using regular and irregular verbs in the present and preterit tense.
- Presents information using the acquired vocabulary, phrases, and connected sentences.
- Understands simple conversations, phrases, presentations, and the main idea of the readings presented in class.
- Writes sentences about familiar topics using acquired vocabulary.

8th Grade Overview

The core courses for 8th 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, 6th, 7th, and 8th graders are integrated.

Advisory is an essential part of the 8th 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, 8th 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, We Day service learning club, and Middle School winter and spring plays.

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.

8th 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 perspective 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 close reading, the five-paragraph essay, and varied forms of note-taking.

Primary Resources: Vocabulary from Classical Roots, Howard Zinn's A Young People's History of the United States; American Born Chinese by Gene Luen Yang; Fahrenheit 451 by Ray Bradbury; Enrique's Journey by Sonia Nazario; The Distance Between Us by Reyna Grande; All American Boys by Jason Reynolds & Brandon Kiely; varied primary source documents, including the Constitution.

Humanities Learning Goals in 8th Grade

- Reads consistently and independently; develops an identity as a reader.
- Effectively summarizes fiction and nonfiction texts.
- Integrates multiple reading, note taking, and annotation strategies to comprehend fiction and nonfiction; notes questions and observations.
- Analyzes the impact of specific word choices in fiction, especially metaphors and allusions.
- Explains how setting affects plot and character development in fiction.
- Articulates text-self, text-same text, text-different text, text-history/world connections in fiction and nonfiction.
- Uses the structure of nonfiction text to better understand relevant ideas.
- Traces character development through the course of a novel.
- Supports claims with relevant factual or textual evidence, demonstrating an understanding of the topic or text for arguments.
- Conducts short research projects to answer a question from multiple print and digital 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, mechanics, and sentence structure when writing.
- Uses Greek or Latin affixes and roots to build vocabulary and to determine word meanings.
- Identifies main causes and effects of European contact with the Americas.
- Explains geographic influences on the development of European colonies in the Americas.
- Applies Constitutional rights questions to real and hypothetical scenarios.

8th 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' <u>Elementary Algebra</u>, teacher-generated resources and materials.

Math Learning Goals in 8th Grade

- Shows the reasoning behind the answer.
- Applies fundamental operations with ease, including distributive rule and order of operations.
- Understands the concept of a function and recognizes types of functions by equation and graph.
- Understands and applies accurately the properties of positive and negative numbers.
- 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.
- Applies the Pythagorean Theorem to accurately determine unknown side lengths in right triangles.
- Solves pairs of simultaneous equations by addition and subtraction, by graphing, and by substitution; uses simultaneous equations to solve mixture problems.
- Understands and applies the properties of exponents.
- Represents small and large numbers in scientific notation.

- Applies fundamental operations to polynomials.
- Factors integers, monomials, and polynomials.
- Can simplify and apply fundamental operations to square roots, and can solve equations containing them.
- Solves polynomial equations by graphing, factoring, taking the square root, and applying the quadratic formula.

8th 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 7th Grade.

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

Science Learning Goals in 8th Grade

- Uses mathematics and computational thinking and understands metric measurement.
- Applies concepts and understanding of the nature of science and experimental design to various and novel challenges, including evaluation for validity.
- Understands kinetic theory of matter and can apply that knowledge to explain phase change.
- Understands basic gas laws.
- Can differentiate between compounds and mixtures and elements.
- Can differentiate between physical and chemical properties and changes in matter.
- Can read and understand chemical formulas.
- Can describe the structure of the atom and understands the history of atomic theory.
- Understands the organization of the periodic table.
- Can describe the different types of chemical bonds.
- Can use the understanding of the periodic table and bonding to predict interactions among elements.
- Can describe the different types of chemical reactions, and understands and can balance chemical equations.
- Understands chemical equations and can balance simple and complex equations.
- Understands the role of energy in chemical equations.
- Understands and can describe properties of solutions.
- Understands issues around human sexuality.
- Problem solves design challenges with a partner in a laboratory setting.
- Understands motion and forces and can describe examples of Newton's Laws of Motion.

8th 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 8th Grade

- Communicates effectively about familiar topics using sentences and series of sentences, in the preterite and the imperfect.
- Asks and responds to questions related to what has been covered in class using complete sentences.
- Presents information using the acquired vocabulary phrases and connected sentences.
- Understands conversations, phrases, and presentations related to topics covered in class.
- Writes sentences about familiar topics using acquired vocabulary, sentence agreement, and conjugation.
- Understands the main idea of the readings introduced this term, and is able to answer questions, paraphrase, and summarize.

Middle School Social Justice

We weave social justice and service learning in integrated ways into our curriculum, using the Social Justice Standards from Teaching Tolerance as a framework. These standards focus on four themes.

Identity: Students will develop positive social identities, understanding that we belong to multiple groups and are unique and complex individuals. With this understanding, students will express healthy self-confidence and pride without denying the value or dignity of others, and the ability to negotiate their identity in multiple spaces.

Diversity: Students will express comfort and curiosity about the experiences of others, develop a sense of empathy and respect as well as the language to communicate it, and engage in the exchange of ideas with open minds.

Justice: Through the years at TBS, students will develop the skills to recognize, analyze, and apply the different components of Social Justice: Content Mastery, Action Skills, Critical Thinking, Self-reflection, and Awareness of Multicultural Group Dynamic.

Action: Students will demonstrate empowerment, empathy, and the skills to act, with others or alone, against prejudice, injustice, and/or discriminatory actions.

In Middle School, students engage in the social justice standards through our advisory program in which students engaged in class discussions surrounding identity, culture, and various group memberships. In Community Meetings, students do mindfulness, learn and hear from different presenters and topics. Other venues include class discussions, reading biographies about change makers and activists, doing research on inclusivity, learning about the Civil Rights Movement. Sixth graders study the Social Justice standards in Cultural Studies and connect to them in Current Events. Seventh graders explore Social Justice as a year long thread in Humanities, examining the relationship between one's culture and one's perspective, the historical roots and legacy of hierarchical social structures, and the causes and efficacy of revolution. They read books like <u>Animal Farm</u> and <u>When Morning Comes</u>. Eighth graders do a "Teach in" on Martin Luther King Day to teach about Civil Rights and changemakers in history and now. They also read key books like <u>To Kill a Mockingbird</u>.

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 6th Grade level, fused glass at the 7th Grade level, and a repurposed fashion show in 8th Grade.

Visual Arts Learning Goals for Middle School

- Completes 10-minute weekly drawing exercise, considering assignment parameters and teacher advice.
- Provides detailed project sketch prior to construction.
- Demonstrates creativity and/or innovation in project design and content.
- Completes all assigned process steps for each project.
- Writes an artist statement providing insight into project construction and their artistic vision.

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 students work with basic improv games and activities. These basics are continued and built upon throughout seventh and eighth grade. The students focus on developing skills in movement, body awareness, observation, concentration, sensory awareness, and imitation. They learn to tell stories using tableaus and pantomime. They also work with basic characterization and role-playing skills, as well as giving and receiving offers in the pair and group improvs. Simple dramatic texts, such as monologues and poems, and small group scenes are introduced as they become more advanced. In December and March, Middle School students have an opportunity to appear in the annual fall and spring Middle School plays.

Drama Learning Goals for Middle School

6th Grade

- Demonstrates an understanding of how to use the body as an expressive tool.
- Collaborates with other students to solve creative challenges.
- Demonstrates an understanding of the improv rule "No Blocking."
- Demonstrates an understanding of how to use tableau to tell a story.
- Collaborates effectively during creative theater projects.

7th Grade

Demonstrates an understanding of the improv rule "No Blocking."

- Demonstrates an understanding of the improv rule "Give Your Partner Something."
- Demonstrates an understanding of the improv rule "Commit To Your First Idea."
- On stage exhibits effective physical presence through body language, eye contact, and poise.
- Uses voice and speech during performances to effectively and appropriately communicate with the audience.
- Collaborates effectively during creative theater projects.

8th Grade

- Collaborates with other students to solve creative challenges.
- Demonstrates an understanding of how to use tableau to tell a story.
- Creates novel theatrical pieces with a beginning, middle, end.
- Demonstrates an understanding of basic rules of improv.
- Uses pantomime to tell a story.
- Uses dialogue on stage to tell a story.
- Uses physical characteristics to create a character.
- Writes and performs monologues for a created character.
- Performs an effective oral presentation of a poem.

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.

6th graders study drugs, decision making, bullying, and harassment.
7th graders study nutrition and physical activity, CPR and first aid, and social media.
8th graders study relationships, human diversity, and mental health.

Health Learning Goals for Middle School

6th Grade

- Analyzes and assesses TBS' emergency plans as well as their family's.
- Demonstrates an understanding of stress and anxiety along with tools to help manage either state.
- Employs the ARE concept (assertion, reasoning and evidence) in group discussions and arguments.
- Differentiates healthy and unhealthy ways of resolving conflicts.

- Exhibits the ability to be an active listener during partner and group discussion where others are sharing their beliefs and values.
- Exhibits the ability to appropriately share during partner and group discussion where one is sharing their own beliefs and values.

7th Grade

- Distinguishes between sources based on their validity and reliability.
- Analyzes the relationship between nutrition and the many influences (internal/external, diet and exercise) that impact it.
- Examines the relationship between body image/self esteem and the social constructs of gender, race and ethnicity.
- Applies knowledge of CPR/First Aid and AED curriculum from the American Red Cross to emergency situations.
- Exhibits the ability to be an active listener during partner and group discussion where others are sharing their beliefs and values.
- Exhibits the ability to appropriately share during partner and group discussion where one is sharing their own beliefs and values.

8th Grade

- Demonstrates what a healthy conversation revolving around boundaries and personal values looks like.
- Articulates the impact social and cultural experiences have on personal space.
- Analyzes topics specific to gender, how they influence identity, and their impact on history.
- Exhibits the ability to be an active listener in regards to partner and group discussion where others are sharing their beliefs and values.
- Exhibits the ability to appropriately share in regards to partner and group discussion where one is sharing their own beliefs and values.

Middle School Physical Education

The Middle School physical education curriculum centers around developing four physical skills and two social/emotional skills. The physical skills are overhead throwing, catching, striking and running to kick a ball, all of which focus on body mechanics, spatial awareness, effort/force, and the relationship between objects that are thrown, caught, struck, or kicked. The social/emotional skills are teamwork (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 improve cardio, flexibility, agility, and muscle development.

The expectations for class are to come with a positive attitude; a desire to participate fully in any and all activities; proper attire that allows for free range of motion; and footwear that can be securely

fasten to feet and gives flexibility and support to ankles, heels, arches, and toes.

Physical Education Learning Goals for Middle School

<u>Psychomotor</u>

- Demonstrates growth in overhand throwing.
- Demonstrates growth in catching.
- Demonstrates growth in striking.
- Demonstrates growth in running to kick a ball.

Social/Emotional

- Demonstrates growth in teamwork.
- Demonstrates growth in sportsmanship.

Middle School Music

The middle school music program is rooted in the notion that playing, singing, dancing, and listening to music is a joyful undertaking that can deepen our understanding of culture and history and strengthen our ability to communicate with each other. Students use xylophones, recorders, ukuleles and drums to explore a range of familiar and unfamiliar meters and diatonic modes. They improvise, compose, read and write using standard staff notation.

Music Learning Goals for Middle School

6th Grade

- Participates in instrumental ensemble activities on barred instruments and unpitched percussion.
- Composes rhythms using non-standard notation.
- Contributes ideas in improvisation and composition activities.
- Can identify and play in a variety of non-standard meters.

7th Grade

- Plays a variety of instruments, including pitched and unpitched percussion, ukulele, keyboard, and voice.
- Researches and presents a popular song from the American Revolution.
- Composes an original piece of music, dance, and/or drama based on a historical song.
- Identifies and articulates the various purposes that songs from the Anti-Apartheid movement and the American Revolution served.

8th Grade

Builds a phonograph using common materials.

- Participates in vocal and instrumental activities, including harmonizing, improvising, and group composition projects.
- Creates a digital recording of an original musical composition that demonstrates an understanding how to create and equalize tracks.
- Participates in group activities such as games, discussions, and ensemble playing.