



# BLACK PINE CIRCLE SCHOOL

A SCHOOL OF THOUGHT

## Upper School Curriculum 2017-2018

### THE BPC UPPER SCHOOL PROGRAM

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## **THE BPC UPPER SCHOOL PROGRAM**

The Black Pine Circle upper school faculty creates ways to engage students in their own learning and in the school's community. Students research their own questions, assess their own writing, and reflect on their own work. Teachers foster student inquiry and the development

of voice, engaging students in the creation of a truly welcoming school culture in which students feel safe taking risks and practicing intellectual generosity.

During this dynamic developmental time, young adolescents require a careful balance of challenge and support. Our advisory program allows small groups of students to meet twice a month with an advisor, checking in about concerns, reflecting on academic and social progress, and covering social and emotional learning topics. Throughout the school year, students organize dances, write plays, and conduct science experiments. Our eighth grade MasterWorks program allows students time to conceive, plan, and carry out a project reflective of their individual interests or passions. We gather as a whole upper school community twice a month in a town hall meeting to give performances, share announcements, and to deepen the sense of community within the upper school. Outdoor education trips at each grade level, service learning projects, field trips, and community events create additional paths of belonging for our students.

Overall, we could not be prouder of the questions our students continue to ask. The richness of their ideas infuses all aspects of upper school life.

## **SIXTH GRADE COURSES**

Sixth graders enter Black Pine Circle School from many different elementary schools, beginning their upper school years in a program carefully designed to meet the needs of early adolescents. The rich variety of courses in upper school allow students to see the connections between disciplines while delving deeply into each subject. Sixth graders take a whole class trip to the Marin Headlands each fall, combining team-building and natural science education in a wonderful setting. Our sixth grade program continues to support students as they make their way as independent learners and thinkers.

### **English in Sixth Grade**

In sixth grade, students read, observe, think, discuss, and write about literature in an effort to understand larger themes, to make connections, and to interpret information. Sixth grade English emphasizes:

- Working together
- Fostering curiosity
- Encouraging the love of literature
- Reading for understanding and meaning
- Developing critical thinking
- Developing empathy
- Articulating ideas in writing

- Developing a writer's voice
- Learning to self-assessment
- Listening, participating, and exploring new ideas in Socratic discussions

The heart of the English program is multi-faceted: we read for understanding and meaning, we observe closely, we practice asking questions and thinking critically, we learn to listen and to share ideas in Socratic seminars, and we learn to write with clarity and meaning.

Sixth graders read novels and poems throughout the year, observing, thinking, and commenting, and writing about characters, setting, plot, theme, language, point of view, and writing style. This year's reading reflects the sixth grade theme of How Journeys Change Us and will include poems and some of the following novels: *The Green Glass Sea*, *Weedflower*, *The Call of the Wild*, *Watership Down*, *The Odyssey*, *The Watsons Go To Birmingham*, *The Giver*, and *To Kill a Mockingbird*.

Our close readings, often of poetry, provide the basis for learning to annotate, for learning to think more deeply about a text, and for learning to back up statements with evidence in our Socratic dialogues.

Writing is a major part of the English program. As they read, students write nightly in their reading notebooks, practicing articulating what they observe and think. They also explore the tenets of writing through close readings of literature and poetry, through learning about and using literary devices, and through writing themselves. Students learn and practice a simple structure for writing a five-paragraph essay that presents a clear thesis supported by three substantive examples. Grammar, punctuation, and vocabulary (taken from the texts) are integrated into the yearlong program.

## **Mathematics in Sixth Grade**

Mathematics in the adolescent years is characterized by the transition from concrete to abstract thinking. In sixth grade, the focus is on making sense of problems, persevering in finding solutions, communicating thinking through symbols, constructing reasonable arguments, giving constructive feedback, using abstract and quantitative reasoning, looking for patterns and structure, and improving precision and accuracy.

Curiosity drives our studies in mathematics. Students explore new topics through inquiry by asking questions, noticing similarities and differences, and discovering patterns. We engage students in mathematics by relating skills and concepts to the real world and through integration with other areas of study. Students are encouraged to build meaning and understanding through exploration, and they are given ample time to ask questions. Content will be revisited in a variety of ways throughout the sixth, seventh, and eighth grades, so students have multiple entry points to understanding familiar concepts.

## **Math Topics and Questions for Exploration**

**Number and operations:** *Why do we use the base ten system? How are fractions, decimals, and percents related to each other? Why do we need negative numbers?* Sixth graders practice computation and estimation as they review the four operations and their relationships with each other. We use hands-on activities and real-world applications to help students solidify their conceptual understanding with fractions, decimals, and percents. In addition to learning the skills of computation, students use manipulatives and visual explorations to discover patterns in numbers and investigate the reasons behind the algorithms we use.

**Pre-algebra:** *How can patterns be represented by functions? Why do we use variables?* The sixth grade mathematics curriculum is designed to aid students in making the transition from elementary mathematics to algebra in seventh and eighth grade. It provides an in-depth presentation of the prerequisite skills, concepts, and problem-solving processes that will help students become comfortable with and successful in algebra.

**Data analysis and probability:** *How is data collected and organized? What can we interpret from our data? How can we present our data to others?* Students regularly apply skills of data analysis in science experiments and in preparation for the Science Fair.

**Mental math:** *How can I do math in my head in the real world?* Students will learn and practice strategies for building number sense that will aid them in solving problems in real-life situations like shopping and calculating a tip in a restaurant. They will use these strategies to simplify and make their work fluid with all number calculations.

**Problem solving:** *What strategies can we use to solve problems? How can we best explain our solutions to others?* We explore a variety of strategies and approaches to problem solving. Our goal is to promote flexible thinking and creative problem solving. Regular examples of math problems from real life will highlight how mathematics is used every day. Students practice showing their work and explaining their thinking through drawings, written explanations, and step-by-step lists of the mathematical computations used in their solutions.

**Measurement:** *How do we measure the world around us? Why are accurate measurements important?* We explore measurements of length, area, volume, mass, and temperature using the metric system in all science activities. We also investigate the customary system of measurement, precision in measurement, scientific notation, and scale drawings.

**Geometry:** *How do we describe the spatial world around us?* Students investigate circles, triangles, quadrilaterals, lines, and angles. They will explore the relationships between angles and polygons and find area, perimeter, and volume.

## **Assessment**

Students are assessed on the following:

**Class participation:** Students are expected to be actively and constructively engaged in class activities and discussions.

**Portfolio:** Students keep a record of their work for the semester in a portfolio kept in the classroom. Periodically, students are asked to reflect on their work □to look for signs of learning.

**Written communication:** In math, students need to communicate their ideas □through writing. Students respond to a variety of journal topics asking them to □explain their thinking on mathematical ideas or problems.

**Tests and quizzes:** Tests are not a major focus in sixth grade, but small assessments are given frequently to show students how they are doing in a particular skill area. Study skills are incorporated into the curriculum to help students prepare for assessments successfully.

**Challenge work and additional practice:** We recognize that students in sixth grade are arriving at BPC with different levels of preparedness and are often on a wide spectrum of developmental readiness for some of the topics covered. Our curriculum is designed to present students with opportunities to delve deeper into topics, and challenge problems and projects are offered regularly to all students. Some students might need additional practice on topics, and others might be ready for even more challenging work.

**Homework:** Regular homework will be assigned. Students will often have assignments designed to help them practice communicating about the skills we are learning. These assignments will take many forms: play a game, explain a process, show how concepts connect one to the other, or invent a tool that demonstrates new understanding.

## **Spanish in Sixth Grade**

The goal of the Spanish program is to give our students the ability and confidence to speak Spanish. The students work on the four key areas of language study: listening, speaking, reading, and writing. The extensive use of authentic videos, audio, images, and texts allows for an interactive experience with the vocabulary and grammatical structures. The students will engage in completing a variety of activities, practices, and assessments.

As the course progresses, there is increasing emphasis on oral communication. Students are expected to actively engage in our group conversations. During the year, students make oral presentations, write their own dialogues, create games, participate in role-plays or interviews, and more. Writing reports about Spanish-speaking countries will give students knowledge about those countries' geography, history, culture, daily life, and contributions to the arts. Field trips enhance their understanding and knowledge of Hispanic culture.

### **Units**

- Present tense of regular verbs: ar, er, ir
- Present tense of some irregular verbs
- Possessive adjectives
- Nouns, articles, and adjectives: gender and number

- Interrogative words and construction of questions
- Telling time
- Future tense using ir + a + verb
- Vocabulary: greetings, weather expressions, numbers, food, school items
- Linguistic sounds and corresponding symbols

## **Textbooks**

We use different textbooks that are designed for both beginning and intermediate students. Some are used as a guide for many different activities in class and others as homework. In addition to the books, there are many supplemental materials, magazine and video language programs to which the students are exposed. These are some of the texts and resources we use in our program:

- *¡En Español!* textbook from McDougall and Littell
- *Mi Libro de Gramática* from Española
- *Action English Pictures* (an action series picture sequence book)
- *¡Ya Escribimos!*, *¡Así Escribimos!*, and *¡A Escribir!* from National Textbook Company
- *¡Ahora! ¡El Sol!* from Scholastic Magazines
- Internet-based activities, such Quizlet and Conjuguemos
- Current events from important newspapers from Spanish-speaking countries

## **Homework**

Homework should take around 20 minutes. During the year, the students will be asked to research a topic or work on a specific projects. In addition to regular homework, long-term assignments and extra work will also be assigned at intervals. Because homework is an extension and/or reinforcement of what is covered in class, it is important to do work when it is assigned. If an emergency arises and homework is not completed, a note from a parent with a brief explanation will be appreciated. The academic planner and the Launchpad (the BPC upper school homework site at [www.launchpad.blackpinecircle.org](http://www.launchpad.blackpinecircle.org)) are the best ways for parents to keep track of Spanish homework. Please make sure your student has a Spanish-English dictionary available at home.

## **Quizzes / Tests**

Short quizzes will be given on a regular basis. A test will be given after the completion of each chapter/unit or after we have covered a grammatical point. Dates for tests will be announced in advance.

## Mandarin in Sixth Grade

Sixth grade Mandarin is a beginner course for students who have little or no exposure to the language. This course helps students build a solid foundation in basic listening, speaking, reading, writing comprehension skills in modern Mandarin.

Students start this course from learning the official romanization system for Mandarin, including phonetic alphabets and intonations. Then, students learn basic Mandarin content around different themes. Simplified Chinese characters from Mainland China are taught in this class. Students develop their Mandarin and Chinese culture through stories, songs, tongue twisters, chants, plays and poems.

A variety of approaches are used throughout the school year, including TPRS (Teaching Proficiency Through Reading and Storytelling), the Project Approach, and Socratic seminars, etc. Students participate in hands-on activities, such as creating Chinese food recipes, comic strips, posters, charts; or acting out stories and giving individual or group oral presentations.

### Texts and Materials

- *Chinese Made Easy 1* and *Workbook 1* [Simplified Characters Version]
- *Huan Ying 1* and *Workbook 1* [Simplified Characters Version]
- Mandarin picture books
- *Tell Me More! A TPRS Curriculum* (Mandarin Version)
- A variety of tongue twisters, songs, and plays

### Assessment

Students are assessed on the following:

**Class participation:** Active participation in class activities, discussions, and presentations is important in this class.

**Class Work:** Students' class work will be collected and kept in their portfolio folder to be assessed for the semester.

**Writings:** Students will be rewriting the learned stories and creating their own stories.

**Vocabulary:** It is very important for students to spend time regularly reviewing and memorizing the new words they have learned each week.

**Homework:** Regular homework will be assigned and should take about 15-20 minutes. Assignments will be given from the assigned workbook, or from class activities and projects. The purpose of homework for Mandarin class is to review what students have learned in class and reinforce their long-term memory of the knowledge. It is important to do homework when it is assigned. The academic planner and homework page on the LaunchPad link (the BPC upper school homework site at [www.launchpad.blackpinecircle.org](http://www.launchpad.blackpinecircle.org)) are the best ways for parents to

keep track of Mandarin homework. Please make sure your student has a Mandarin-English & English-Mandarin dictionary available at home.

Late assignments will be accepted with deducted credits unless there are extraordinary mitigating circumstances for lack of timely performance. If an emergency arises and homework is not completed, a note from a parent with a brief explanation will be appreciated. All late assignments must be turned in within one week of the original due date or they will not be accepted. Learning a foreign language is not easy, so practicing through homework is one of the most important elements in mastering the language gradually.

**Quizzes/Tests:** Tests are not a major focus in sixth grade, but small quizzes are given occasionally to help show students how they are doing in a particular skill area. Quizzes will be given more often in seventh and eighth grades. Study skills are incorporated into the curriculum to help students prepare successfully for assessments. There will be no midterm or final exam.

## **SCIENCE in Sixth Grade:**

*What role does science play in our everyday lives? How do scientists study their surroundings?* The sixth grade science curriculum focuses on Earth science with a field science emphasis. We base our science learning on observing carefully, questioning, inferring, hypothesizing, experimenting, and doing hands-on activities. Students venture outside into the field to make observations and collect data from the natural world around them. Students engage their natural curiosity by looking at the planet through scientists' lenses and practicing the skills scientists need to explore the world around them.

### **Science Topics and Questions of Exploration**

**Earth's Place in Space:** *How does earth's place in the universe affect our daily lives? How and why do scientists study places beyond Earth? What can we still discover about the Moon, Mars, and beyond?* Topics will include: seasons, tides, eclipses, and space exploration.

**Earth's History:** *How do scientists study what has happened in Earth's history? What have we learned from Earth's past, and what changes do we need to prepare for?* Topics will include plate tectonics and paleoclimatology.

**Earth's Systems:** *How do materials cycle within and between the Earth's systems (geosphere, biosphere, atmosphere, hydrosphere, anthroposphere)? How does energy flow within and between the Earth's systems?* Topics will include: the rock cycle, the water cycle, and the carbon cycle.

**Climate Change:** *What evidence have scientists gathered that shows how Earth's climate is changing? What is the evidence that these changes are human-caused? How can we mitigate future climate change, and how will we adapt to the changes already occurring?*

**Human Impacts on Earth:** *How do humans harness energy and materials from the Earth? What impacts are humans having on the planet and its resources?* Topics will include: water usage, land usage, pollution, energy sources, etc. Students will weigh the pros and cons of the options humans have when using Earth's resources.

**California's Natural History:** *How does the natural history of California affect how we live? What issues do California's residents need to be aware of in their relationships with the land?* Students will put special emphases on San Francisco Bay and our local watershed.

**Engineering:** *How do engineers plan and design structures or machines to fill a specific purpose? What skills do engineers need?* Throughout the year, students face engineering challenges related to our topics of study where they will use their own creativity and problem-solving skills. Examples of projects students might participate in include: building a seismically sound building, designing blades for a wind turbine, creating a solar water heater, or testing flood barriers.

**Science Fair:** All students participate in the BPC Science Fair. The sixth grade works collaboratively on science fair projects. Topics and themes for the Science Fair are decided later in the year based on topics covered in class.

**Sex education:** A puberty education specialist visits BPC for one week per year to cover reproductive anatomy and physiology, birth control methods, sexually transmitted diseases, the emotional and psychological aspects of sexuality, dating, and other issues associated with adolescence. More information on this unit is sent home before it is presented.

**Outdoor Education Program:** Sixth graders spend four days and three nights at the NatureBridge Golden Gate campus, located in the Marin Headlands, part of the Golden Gate National Recreation Area.

## **Assessment**

The main areas that are used to assess growth are:

**Class participation & collaboration:** Students are expected to be actively engaged and work collaboratively with peers in class activities, labs, and discussions.

**Assignments & Projects:** Work should demonstrate critical thinking, curiosity, and interest in learning and be completed with care and attention to detail.

**Tests and quizzes:** Assessments are given regularly to show students how they are doing in a particular skill/concept area. Study skills are incorporated into the curriculum to help students prepare successfully for assessments.

**Homework:** Regular homework will be assigned. Assignments may include making observations or collecting data in field science journals, textbook readings, online research, vocabulary work, finishing lab write-ups, or conducting a simple science experiment at home.

## History in Sixth Grade

In 6th grade history, students will learn how peoples and histories are various and ever changing, not singular and static. This approach will help students investigate human adaptations and the effect they had on human relationships, shifts in community building, and the engineering of power structures. Additionally, students will learn about what lens(es) they are wearing as they examine historical texts and artifacts (ex: female, American, modern, young, etc). Our class covers the human story from the beginning with early humans and early civilizations, and then moving in second semester to early empires and early global powers. Students will analyze how different groups of people organized and constructed societies, and also study the effects those power structures had on human relations. Conversely, this course will study how individuals and communities have affected societal change. This study will allow students to examine the past for patterns to inform their understanding and agency for today. The essential question for our class over the duration of the year is: "How do human relationships change over time?"

Our class will use several main texts, which included but are not limited to: Houghton Mifflin's *A Message of Ancient Days*, Oxford's *First Ancient History*, the British Museum's *A History of the World in 100 Objects* and Jing Liu's graphic novel *Understanding China Through Comics*. In our classroom, students are welcomed to a safe space where they will share their own knowledge and experience(s) of history, learning collectively. They will see *themselves* as historians and history makers. Students will work together to using historical thinking skills to deconstruct texts, images and artifacts to find patterns and trends, and will work in partners and groups to explore, ask questions, gather data, propose solutions, and draw conclusions. Students are encouraged to be brave, to be daring and innovative--not perfect.

<b>Standards:</b> UC Berkeley History-Social Studies Project California State Standards for History Common Core State Standards for History	<b>Frameworks:</b> Agency by Design Harvard's Project Zero
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### Main Texts:

<i>A Message of Ancient Days</i> Houghton Mifflin <i>First Ancient History</i> Oxford <i>The History of the World in 100 Objects</i> by Neil MacGregor <i>Understanding China Through Comics</i> by Jing Liu
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### Historical Thinking Skills:

<u>The Big Six Historical Thinking Concepts</u> (by Colyer, Seixas, Fornazzari, and Morton) 1) Historical Significance
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- 2) Evidence
- 3) Cause and Consequence
- 4) Continuity and Change
- 5) Historical Perspectives
- 6) Ethical Dimension

**Unit Overview:**

Unit 1: Early Humans  
 Unit 2: Early Civilizations  
 Unit 3: Early Empires  
 Unit 4: World Cultural Exchange

**Homework grading rubric:**

5	Completed assignment that goes above expectations.
4	Completed assignment that meets expectations.
3-1	Assignment does not meet expectations due to: a) Lack of sufficient support b) Didn't explain fully or incomplete explanation c) Wrong answer(s) d) Incomplete
0	Didn't turn in assignment

**Grading policy:**

Big Six Historical Thinking Concepts (60%)  
 Homework (15%)  
 Quizzes/tests/projects (20%)  
 Self-reflection (5%)

**Art in Sixth Grade**

The goal of the upper school art program is to instill in students an appreciation of art, both as creators and as viewers. This is achieved through instruction and student practice of specific skills, introduction to a broad range of media and materials, and exposure to the art of different times and cultures.

Art class focuses on students learning to use and care for materials and tools, creating artwork, improving technical skills, experimenting with different media, being able to discuss their work--the how and why of it--and having the opportunity to exhibit their work on an ongoing basis. Students view the work of many artists and cultures throughout history, thus developing an understanding of what goes into the making of art, a greater understanding of how life and art connect, and a sense of their own creative process.

Sixth graders study an artist of their choice, write a report on the artist, and make a piece of work in the style of the artist. The project culminates in an oral presentation to the class, allowing students an opportunity to teach others what they've learned about the artist they've chosen, and discuss the process of making art in the style of their chosen artist.

Students are required to keep sketchbooks as a place to express themselves. In their sketchbooks they will practice techniques, make observations about materials, plan projects, write definitions of art language/elements of art, and collect information about artists. These become logs of the year's work, and students can look back through them to see how their skills have improved over the year.

There will be occasional homework assignments, for example, to watch a special show, make a few sketches, look up an artist online, or visit a museum exhibit.

**Projects this year may include:**

- **Drawing:** still life, self-portraits and figure drawing, landscapes, imaginary works
- **Design:** logos, posters, t-shirts, stencils, screen printing, etc.
- **Painting:** color mixing and color theory, watercolor, tempera, acrylic,
- **Printmaking:** soft-cut rubber, monoprints, collographs
- **Collage:** paper, fabric, decoupage, 3-D
- **Textiles:** weaving, sewing, embroidering
- **Sculpture:** wire, clay, paper mache, wood, junk, cardboard

Student work will be exhibited throughout the year in our gallery, located in the hallway of the FAD theater and at our end-of-year exhibit.

## **Drama in Sixth Grade**

Black Pine Circle School's drama program gives students an additional avenue to express their creativity as well as learn some basic theater skills. Confidence in speaking publicly, preparation for presentation, and the fun of pretending are key components of this class. This class encourages students to express themselves with words, body language, and imagination. Sixth graders will work on fundamental improvisational techniques throughout the year. They will cover basic stage skills and presentation. The sixth grade program includes ongoing class performances, a storytelling section, and a section devoted to a work, or multiple works, of William Shakespeare.

## Music in Sixth Grade

Our goals are to sing and play; to listen and describe; to find joy in making music together; to explore how music is constructed and why it moves us by reading, writing, performing, moving, composing, arranging and analyzing music from a variety of genres, cultures, and time periods. Through vocal performance, composition, movement, and use of the piano keyboard, students develop a sequenced skill set with which to enhance their critical thinking and more deeply explore their responses to music. Musical activities are designed to cultivate collaborative skills, multi-tasking, and to build confidence through healthy risk-taking.

How and Why Music is Constructed Students will:

- Decode, sight-sing, play, improvise, compose, notate, and publish musical ideas in standard notation.
- Perform and write straight, dotted, uneven, and syncopated rhythms in various meters.
- Recognize notes on the grand staff using both letter names and sol-fa syllables; translate these notes to the keyboard; explore melodic structure, scales, keys, and expressive Italian terms and symbols.
- Access differentiated online theory exercises, games, and composition projects.
- Further their understanding of how music communicates a culture and gain familiarity with selected composers, compositional forms and timbres through listening, discussing, and analyzing music from a variety of cultures and time periods.

How Music Moves Us: Performance Practice

**Singing:** vocal technique, sight-singing, part songs, descants, and ostinati, with repertoire in a variety of musical styles and genres

**Instruments:** electric keyboards, ORFF instruments, body percussion

**Movement:** mind-body experiences of musical concepts

**Performances:** Classes perform choral repertoire for BPC music events including Generations Day, the Winter Concert, and the Spring Concert. Students reflect on their musical performances and their application of expressive techniques for performing music.

**Involvement in music school-wide:** Soloists may choose to perform at Solo Day, Town Halls, or for their classes. Students may also elect to join the orchestra, bands, Wii-Tunes singing club, or form small ensembles to play or sing at Ensemble Day.

## Physical Education in Sixth Grade

The aim and focus of physical education in middle school is the development of a lifelong appreciation of active bodies and minds. Students will learn:

- Proper warm up and stretching techniques
- Basic knowledge, both physical and mental, of a wide range of sports methods and strategies that lead to successful team achievement
- Types of communication employed in the athletic world
- Strength training and aerobic fitness exercises

We encourage students to put forth their maximum effort and best attitude. Mistakes are a part of life, and students are encouraged to experiment with physical movements and ideas. All of the activities will be at a beginner level for sixth graders. Running, exercise and team sports will be devoted to paying close attention to how they follow direction and how they work with their classmates.

**Proper shoes and clothes that allow for free and safe movement are necessary and mandatory for students to participate fully in each class.**

### Sixth Grade Theme: Having an open mind about physical education

Sixth grade P.E. offers an opportunity for each student to develop a positive physical self-image, which will be either the starting point or continuation of a healthy lifestyle. Students are expected to listen and follow directions in order to be able to complete the tasks properly and maintain safety at all times.

## Applied Ecology in Sixth Grade

Applied (*adjective*)

1. (of a subject or type of study) put to practical use as opposed to being theoretical.

E·col·o·gy (*noun*)

1. the branch of biology that deals with the relations of organisms to one another and to their physical surroundings.
2. the political movement that seeks to protect the environment, especially from pollution.

In Applied Ecology (or "AppEco" for short), students will deepen their understanding and appreciation of the natural world and will learn to apply their ecological knowledge in the BPC garden, their personal lives, and their communities. 6th graders will be focusing specifically on ecosystems. They will develop their systems-thinking, teamwork, and observation skills as they explore the following key questions:

- Unit 1: What is an ecosystem? What are the different parts? How do they interact with each other?
- Unit 2: What types of ecosystems have I seen? Which ecosystems exist/have existed in the East Bay?
- Unit 3: How do ecosystems change? What impacts an ecosystem?
- Unit 4: What would we like to see for the future of Bay Area ecosystems? How can we be ecological leaders?

These units will feature a variety of hands-on activities, work time in the garden, cooking and food tastings, group discussions of readings, current events, and documentaries, and longer-term creative projects. Through Applied Ecology, students will cultivate the skills and knowledge to be lifelong students and stewards of nature.

## **Historical Literature in Sixth Grade**

Meeting once a week, we will read books set in various historical settings. For most classes we will meet in Literature Circles of 4-5 people and also have a time of general discussion of the theme we are studying. Most weeks, homework will consist of reading a portion of your assigned book as well as preparing notes that relate to your Literature Circle job for the week. Jobs include Summarizer, Director, Literary Luminary, Illustrator, and Connector.

### **Unit 1: Community**

Key Questions: What is a community? What unites people, either within factions within a community or as a whole society? What causes conflicts within communities? How do people go about resolving them? What are the best ways to resolve conflicts?

Book (all-class): *The Pushcart War*, by Jean Merrill (1960s New York City)

Historical Connections: The Qingming Scroll (1200s Kaifeng, China); *Roman City* (film), by David Macaulay

### **Unit 2: The Individual in the Community**

Key Questions: What has it been like to be a young person in different times and places in history? What expectations and dreams have parents and society placed on young people of the past? What differences have there been for girls and boys? What are the different ways in which young people have responded? How has life changed and stayed the same over time for young people?

Books (student choice):

- *Fever 1793*, by Laurie Halse Anderson (1793 Philadelphia)
- *Catherine, Called Birdy*, by Karen Cushman (Medieval England)
- *The Day of the Pelican*, by Katherine Paterson (1990s-2001 Kosovo, America)
- *Heart of a Samurai*, by Margi Preus (1840s Japan, America)
- *Shadow of a Bull*, by Maia Wojciechowska (Early 20th-century Spain)

**Unit 3: Humans and Nature**

Key Questions: What have humans had to do in order to overcome nature and survive? When have humans gone too far and destroyed nature rather than care for it? What risks have people taken with nature? What benefits do humans get from living in harmony with nature? What has been the impact of

Books (student choice):

*Sugar Changed the World*, by Marc Aronson and Marina Budhos (India, Africa, Americas, Europe, Middle Ages to 1800s)

- *Shipwreck at the Bottom of the World*, by Jennifer Armstrong (England, Antarctica, 1914)
- *Black Potatoes*, by Susan Campbell Bartoletti (1840s Ireland)
- *The Boy Who Harnessed the Wind*, by William Kamkwamba and Bryan Mealer (Malawi, 2000s)
- *The Great Fire*, by Jim Murphy (1870s Chicago)

**Unit 4: Humans and Ideas**

Key Questions: What ideas have driven human history? What motivates people to make change in their world? Who are the great change makers in history, and what ideas have fueled their actions?

Books (individual project): Students read biographies of their choice and share about them in their Literature Circles.

**Rhetoric & Debate in Sixth Grade**

**Course Overview**

The rhetoric and debate program is designed to have students articulate their own ideas and respond to the ideas of others, while examining topics in local and global societies. The curriculum provides students with the opportunity to practice and apply central debate skills: students will learn how to research, use reason and logic to articulate ideas, deconstruct and develop their own persuasive arguments with supported evidence, speak and take action, and listen to their peers. Students will practice these skills individually and in groups.

## **Homework**

The amount of homework depends on the lesson as well the amount of time students are able to start working on the assignment in class. At times, there will also be additional homework that is optional if students want to earn extra credit.

## **Technology in Sixth Grade**

BPC's sixth grade technology program focuses on five areas: foundational understanding of technology, Google applications for productivity and presentation, computational thinking, 3D design, and digital citizenship. We emphasize technology as a tool of, and not a substitute for, effective learning strategies.

**Foundations:** As needed, students will practice foundational skills such as file management and email etiquette. Some students will continue to practice touch-typing skills with the goal of typing at least 30 words per minute without looking. This program allows students the chance to take a more self-guided approach to learning technology skills based on their own interests and skill levels. Technology is constantly changing and developing, and students need to learn to adapt and learn new skills on their own as needed. We will also demystify some of the technologies students use every day (computer hardware, wifi, domain names, bluetooth, etc.).

**Google Applications:** Students will expand their skills in using cloud-based applications through Google Apps for Education (experimenting with formatting in Docs, learning new formulas and conditional formatting in Spreadsheets, Presentations, Drawing, Forms, etc.) and will be encouraged to explore other free web-based tools.

**Computational thinking:** All students will learn and practice computational thinking and basic coding (using [scratch.mit.edu](http://scratch.mit.edu) and [cubit.cc](http://cubit.cc)) with the option to explore more. All students will read Gene Luen Yang's *Secret Coders* graphic novel.

**3D Design:** Students will have an opportunity to engage in design and workflow for our 3D printers and laser cutter.

**Digital citizenship:** At BPC, we strive to help our students become good "digital citizens" by focusing on topics including digital etiquette, Internet safety, media literacy, and intellectual property rights. Students will develop effective online research strategies and take a careful look at copyright, fair use, and Creative Commons licensing in their own work.

Students are expected to be actively engaged and work collaboratively with peers in technology class during group discussions and self-guided work time. Projects will be assigned periodically to give students a chance to demonstrate the skills they've learned. Assessments will be given periodically to check students' understanding of specific skills and topics.

## **Trimester Courses in Sixth Grade**

### **Ethics in Sixth Grade**

In this trimester course, we spend approximately ten class periods gaining a better understanding of the history and larger world issues relating to ethics in the past and present. Students explore the differences between values, morals, social norms and societal viewpoints. Classes often revolve around ethical dilemmas and vignettes in a historical context (e.g. the Salem Witch Trials), as well as the typical challenges related to the ethical life of an adolescent in the 21st Century (e.g. plagiarism, social hierarchies, technology use and misuse). Classroom instruction methods include; films, Socratic discussion, cooperative learning, reading, and dramatic presentations. There is no homework in this class. Student understanding and mastery is evaluated using a variety of techniques, including quizzes and short in-class written assignments, as well as participation.

### **Habits of Mind in Sixth Grade**

Habits of Mind, a trimester course, is an 11-week introduction to the ways that students learn best while studying, organizing, and prioritizing on a middle school level. This includes understanding how the mind works, teaching the basics of executive functioning, and helping each student identify their learning strengths and challenges. We infuse concepts of mindfulness and meta-cognition into every class session. Our goals include raising each student's awareness of their strengths as well as raising their comfort with a growth mindset that embraces the usefulness of mistakes and errors. Note-taking and annotation will be touched on, as well as learning how to work effectively in groups. In this class, students learn what kind of studying environment works for them and how to break large tasks into smaller ones. This class is designed to help sixth graders develop and excel with their newfound independence. This class meets once a week and will generally not include homework. Students may be asked to pay attention to some aspect of their learning style and behavior in class.

### **Pilates in Sixth Grade**

The Pilates class, a trimester course, will be an opportunity for the sixth graders to learn about movement and strengthening as well as understanding the anatomy of the human body. A large part of each class will be focused on getting the students moving, learning many of the Pilates exercises, and understanding how to properly execute these exercises. Students will also learn about how and why Pilates began, the purpose of the exercises and how they affect the body and the 9 core principles of Pilates.

## SEVENTH GRADE COURSES

As seventh graders continue their development as critical thinkers and active community members, our program continues to nurture their growth. Students take increased responsibility for their own learning, taking on longer-term projects and greater elements of choice in their work. Our Outdoor Education programming continues with a seventh grade leadership retreat toward the end of the school year, which helps prepare them for their role as upper school leaders in eighth grade.

### English in Seventh Grade

In seventh grade, English students bring the reading and writing skills introduced in sixth grade to a more complex and demanding level. Students will engage in the following :

- Practice strategies for observing, interpreting, connecting, questioning, and synthesizing texts
- Learn skills of expression (both verbal and written) that benefit students in all subjects, not just English class
- Become familiar with the process of writing the five-paragraph essay, including prewriting, drafting, revising, and editing
- Continue to develop their own unique voices through creative writing
- Strengthen oral communication skills through discussions, presentations, and Socratic seminars
- Develop self-awareness about individual strengths and areas for improvement, and hone their ability to identify and correct errors in written expression
- Identify, understand, and interpret figurative language
- Recognize intertextual themes and societal or cultural concerns
- Become critical readers of literary productions
- Consider the ways in which the skills used in critical consumption of texts, when mastered, can be applied beyond the classroom

Along the way, we explore the following:

- Elements of a story (parts of a plot, types of characters, differing points of view, etc.)
- Extrinsic factors in interpreting a text, including the life of the author and the historical or cultural contexts in which the work was created
- Different forms of prose and poetry, various genres of fiction, age-appropriate non-fiction

The focus for the English curriculum in seventh grade is the “American Dream.” We examine how authors, characters, and the students themselves define the American Dream, and we think about how the American Dream might be different for different groups within the United States. Students consider the (im)possibility of achieving the American Dream, focusing on when that dream pans out, and where and for whom it falls short.

Texts this year may include: "A Model of Christian Charity," selections from some of the founding documents, selections from Horatio Alger's stories, various historical speeches and documents, Emma Lazarus' "New Colossus," S. E. Hinton's *The Outsiders*, John Steinbeck's *Of Mice and Men*, Gene Yang's *American Born Chinese*, Sherman Alexie's *The Absolutely True Diary of a Part-Time Indian*, Lorraine Hansberry's *A Raisin in the Sun*, F. Scott Fitzgerald's *The Great Gatsby*, and J.D. Salinger's *The Catcher in the Rye*. In addition to these literary works, other texts may include relevant films, songs, images, and other media through which the promise of the American Dream is expressed. This list is subject to change, but should give an idea of the scope of the course.

Students write in journals regularly in order to improve their skills in applying writing mechanics, developing voice, expanding ideas, and revising for clarity. We will approach vocabulary from an etymological angle, beginning first with roots, prefixes, and suffixes, and working up to full word lists. Students will learn grammar in discrete lessons with those learned skills reinforced in the context of written work.

Finally, students will practice listening, speaking, and reasoning skills. We will hold regular Socratic seminars in which students are encouraged to think deeply and critically about texts and to hone their listening and speaking skills while engaging in respectful and intellectually challenging dialogue with their peers. Students have frequent opportunities to work in pairs or groups, learning from each other as well as from the teacher. An interdisciplinary approach encourages students to apply skills learned in English class to other subjects and throughout their lives.

## **Math in Seventh Grade**

The Algebra 1 curriculum at BPC provides an important foundation for strengthening every student's math abilities and overall math awareness. The main elements of this foundation in grades seven are algebra, geometry, and applied mathematics.

Studying algebra can help students in many ways. It helps them to organize their thoughts in order to solve mathematical problems that they meet in their everyday lives, and it prepares them to continue their studies in mathematics and science. Whatever they choose to do in the future—from running a business to doing scientific or social research—they will need to use algebra. It will generally strengthen their mental powers by encouraging them to master a complex system of interlocking ideas.

We start with the regular course of algebra in seventh grade. The curriculum includes students' explorations of the main algebraic concepts and processes, so that students can understand the following concepts: variable, expression, polynomial, equation, inequality, ratio, proportion, real number and function. Students also develop confidence in solving linear equations and their systems using concrete, informal and formal methods; in doing operations on polynomials and

equations; and in applying algebraic methods and slopes to solve a variety of real-world and abstract mathematical problems.

In seventh grade, we study the geometry of one, two, and three dimensions as a deductive system in which a few simple statements are assumed and then used to derive more complex ones. The BPC geometry course introduces all of the geometric concepts usually presented in a traditional course in high school geometry, in an investigative and application-oriented format. Students will find the beauty of geometry as a deductive system and develop an appreciation of geometry as a means of describing the physical world. We will consider, for example, how astronomers have used geometry to measure the distance from the earth to the moon, how artists have used it to develop the theory of perspective, and how chemists have used it to understand the structure of molecules. We will also consider some interesting contributions to the subject that were made by the ancient Greeks (e.g. Euclid, who systematized the ideas that we will study), in India during the Middle Ages, and in Europe during the Renaissance. Finally, we will survey the "non-Euclidean" geometry developed in the 19th century and see how Einstein used it in his theory of the nature of space. Students will have many opportunities to use their imagination. Students will:

- Identify, describe, compare, and classify geometric figures
- Visualize and represent geometric figures with special attention to developing spatial sense
- Represent and solve problems using geometric models, properties, and relationships

Since geometry is a logical subject, students need to take time to become thoroughly acquainted with the ideas contained within it. Therefore, in seventh grade, students will explore fundamental ideas, including points, lines, segments, planes, angles, parallel lines, and some basic postulates and theorems; they will study congruent and similar triangles, trigonometric ratios and the Pythagorean Theorem; and they will learn about perimeters and areas, surface areas, and volumes.

We will use a couple of textbooks as references, including *Merrill Informal Geometry*, Glencoe McGraw-Hill's *California Algebra 1: Concepts, Skills, and Problem Solving*.

Many people, not just students, wonder why mathematics is important. The BPC math curriculum is designed to answer that question through integration, application, and connection. Since mathematics is the key to our understanding of the physical world, we will explore some topics in physics, biology, and chemistry through both science and math labs.

We have explored why and what we are going to study in mathematics class, but the main question is, "How are we going to do this?" We consider: "I hear and I forget. I see and I remember. I do and I understand." The message of this Chinese proverb is that to learn with understanding, students should engage actively with mathematical ideas and materials. Students learn mathematics by doing it. Thus, we provide and encourage:

**An activity-oriented approach to mathematics learning:** We use the Socratic method of asking questions, which leads students to discover a result. Students are encouraged to actively participate, to think, to question, and to seek understanding. As each new concept unfolds,

students are given an opportunity to investigate the ideas by using a wide variety of manipulative materials, activities, and projects. Then, through guided discussion, the students are led to a deeper understanding of the ideas and their relations to the overall structure of mathematics. Following the investigation and discussion, students will have sufficient problem-solving practice to develop speed and accuracy.

**Careful provision for individual differences:** Throughout each topic, students are challenged to do what they can do. To experience individual success, we provide an environment that stresses cooperation and communication rather than competition. For this purpose we combine independent work or small-group work with whole-class discussion. Our goal is to teach students to be independent learners. In this case, skill development is necessary. The topics in each course are arranged according to the level of independence that is required. The early topics can be used to develop skills; the later ones require their use. Students have the opportunity to take part in an additional enrichment program. This program includes Math Accelerated Teams (MATs) and Clubs. In the Math Club, we will go beyond the foundation of mathematics to more advanced areas of geometry, algebra, trigonometry, and number theory.

**Emphasis on what students should know and be able to do in the field of mathematics:** We believe that there are fundamental mathematical concepts that must be understood by each student with sharpness and clarity. When truly understood, they provide powerful tools for extending knowledge. A long-range planning chart of these concepts is given to assist students and their parents in making individual efforts and assignments according to needs, abilities, and time available for each student. The individual assignments can be remedial, regular, or advanced.

**Learning strategies and techniques:** We use the “most difficult first” strategy or the pretests strategy for highly capable learners, allowing them to work on more challenging activities instead of the grade-level work. We use the “learning contract” strategy for students who are likely to learn the material much faster than their peers. Such students can form Math Accelerated Teams (MATs) to work on tasks at their own pace and challenge level.

**Homework:** Homework will be assigned four times per week in seventh grade for further mastery of the material we cover in class. It is due during the next class period unless otherwise specified.

**Tests:** A test will be given after the completion of each topic or chapter. Tests will be announced in advance. Also, there will be mid-year and end-of-year tests.

### **Seventh Grade Curriculum:**

- Unit A     Review of the prerequisite concepts from pre-algebra
- Unit 1     Introduction to algebra: the language and tools of algebra
- Unit 2     Working with real numbers
- Unit 3     Solving linear equations

- Unit 4 Using proportional reasoning
- Unit 5 Graphing relations and functions
- Unit 6 Analyzing linear equations and slopes
- Unit 7 End-of-year review
- Unit 8 Geometry: points, lines, segments, planes, angles, triangles, polygons, perimeters and areas of polygons, parallel and perpendicular lines and their slopes, Pythagorean Theorem, motion geometry-flips, turns and slides, congruent and similar triangles, surface areas and volumes of solids

Textbooks: Glencoe McGraw-Hill, *California Algebra 1* (2008) & *Merrill Informal Geometry*

## **Spanish in Seventh Grade**

The goal of the Spanish program is to give our students the ability and confidence to speak Spanish. The students work on the four key areas of language study: listening, speaking, reading, and writing. The extensive use of authentic videos, audio, images, and texts allows for an interactive experience with the vocabulary and grammatical structures. The students will engage in completing a variety of activities, practices, and assessments.

As the course progresses, there is increasing emphasis on oral communication. Students are expected to actively engage in our group conversations. During the year, students make oral presentations, write their own dialogues, create games, participate in role-plays, interviews, and more. Writing reports about Spanish-speaking countries will give students knowledge about those countries' geography, history, culture, daily life, and contributions to the arts. Field trips enhance their understanding and knowledge of Hispanic culture.

### **Units**

- Review and reinforcement of the material previously covered
- Present tense of irregular verbs
- Direct object pronouns
- Demonstrative adjectives and pronouns
- Prepositions of location
- Comparison of equality and inequality
- Commands (formal and familiar, affirmative and negative)
- Contrast between ser vs. estar, conocer vs. saber, pedir vs. preguntar, and ir vs. venir
- Present progressive
- Preterit tense of regular verbs

## **Textbooks**

We use different textbooks that are designed for both beginning and intermediate students. Some are used as a guide for many different activities in class and others to provide homework. In addition to the books, there are many supplemental materials, magazine and video language programs to which the students are exposed. These are some of the texts and resources we use in our program:

- *¡En Español!* textbook from McDougall and Littell
- *Mi Libro de Gramática* from Española
- *Action English Pictures* (an action series picture sequences book)
- *¡Ya Escribimos!*, *¡Así Escribimos!*, and *¡A Escribir!* from National Textbook Company
- *¡Ahora!* *¡El Sol!* from Scholastic Magazines
- Internet-based activities such Quizlet and Conjuguemos
- Current events from important newspapers from Spanish-speaking countries

## **Homework**

Homework should take around 20 minutes. During the year, the students will be asked to research a topic or work on a specific projects. In addition to regular homework, long-term assignments and extra work will also be assigned at intervals. Because homework is an extension and/or reinforcement of what is covered in class, it is important to do homework when is assigned. If an emergency arises and homework is not completed, a note from a parent with a brief explanation will be appreciated. The academic planner and the LaunchPad (the BPC upper school homework site at [www.launchpad.blackpinecircle.org](http://www.launchpad.blackpinecircle.org)) are the best ways for parents to keep track of Spanish homework. Please make sure your student has a Spanish-English dictionary available at home.

## **Quizzes / Tests**

Short quizzes will be given on a regular basis. A test will be given after the completion of each chapter/unit or after we have covered a grammatical point. Dates for tests will be announced in advance.

## **Mandarin in Seventh Grade**

Seventh grade Mandarin deepens the students' understanding of Mandarin and Chinese culture. Students learn intermediate content in Mandarin in an 85% immersion class setting. Students are able to converse in Mandarin within the learned contexts. Longer and more complex stories, songs, tongue twisters and chanting are taught in this course. Students develop relevant Mandarin grammar skills in this course. Intermediate listening, speaking and

reading and writing comprehension skills are developed over the course of the year. Simplified Chinese characters are used in this course.

### **Texts and Materials**

- *Tell Me More! A TPRS Curriculum*
- *Chinese Made Easy 1 and Workbook* [Simplified Characters Version]
- *Huan Ying 1 and Workbook 1* [Simplified Characters Version]
- Mandarin picture books
- Newspaper articles in Mandarin

### **Assessment**

Students are assessed on the following:

**Class participation:** Active participation in class activities, discussions, and presentations is important in this class.

**Class Work:** Students' class work will be collected and kept in their portfolio folder to be assessed for the semester.

**Writings:** Students will be rewriting the learned stories and creating their own stories.

**Vocabulary:** It is very important for students to spend time regularly reviewing and memorizing the new words they have learned each week.

**Homework:** Regular homework will be assigned and should take about 15-20 minutes. Assignments will be given from the workbook, or from class activities and projects. The purpose of homework for Mandarin class is to review what students have learned in class and reinforce their long-term memory of the knowledge. It is important to do homework when it is assigned. The academic planner and homework page on the LaunchPad link (the BPC upper school homework site at [www.launchpad.blackpinecircle.org](http://www.launchpad.blackpinecircle.org)) are the best ways for parents to keep track of Mandarin homework. Please make sure your student has a Mandarin-English & English-Mandarin dictionary available at home.

Late assignments will be accepted with deducted credits unless there are extraordinary mitigating circumstances for lack of timely performance. If an emergency arises and homework is not completed, a note from a parent with a brief explanation will be appreciated. All late assignments must be turned in within one week of the original due date or they will not be accepted. Learning a foreign language is not easy, so practicing through homework is one of the most important elements in mastering the language gradually.

**Quizzes/Tests:** Small quizzes are given occasionally to help show students how they are doing in a particular skill area. Quizzes will be given more often in seventh than in sixth grade. Study skills are incorporated into the curriculum to help students prepare successfully for assessments. There will be no midterm or final exam.

## Science in Seventh Grade

### Approach

Science is not about memorizing “big words.” Science is about being curious, asking questions, gathering and analyzing data, asking testable questions, researching, and making connections between your prior knowledge and making new discoveries.

The most important goal of science class is to foster students’ curiosity about how the world works. The course emphasizes deep investigations over a broad range of content. It is designed to help students develop basic explanations for natural phenomena and the ability to apply experimental procedures to collect and analyze data. The curriculum allows for the flexibility to explore areas of student inquiry, interest, and current events. The seventh grade science course is comprised of roughly 50 per cent life science topics and 50 per cent engineering skills and practices.

**Classification of Living Things:** This unit introduces taxonomy and highlights the evolutionary relationships between all living organisms.

**Meet the Microbes:** In this unit, students explore types of microscopy and other data visualization techniques that help scientists study organisms and structures at the micro- and nanometer scale. Students will study viruses, bacteria, protists, and fungi in the context of how they harm (and help) human health and environment. This unit includes a focus on the immune system and epidemiology--participating in simulations, case studies and other investigations, students explore topics in immunology, learn why and how outbreaks occur, and evaluate epidemiological data to explore current issues in local and global public health.

**Cells and Biotechnology:** Students will examine different kinds of cells and their function and touch upon concepts in cell division, DNA and its role in protein synthesis, and biotechnology. This year, students will have the opportunity to use a bioprinter in the Q Lab.

**Invertebrate Animals:** Focusing on evolutionary patterns, students will explore the various phyla of invertebrate animals as well as the mind-boggling diversity of adaptations such organisms have developed.

**STE(A)M Study:** Students will explore the design process, principles in engineering, and the basics of physical computing and fabrication. They will work with traditional hand tools as well tools facilitating 3D design: CAD software, 3D printers, laser cutters, and a desktop milling machine. Each student will be invited to dig deeper into a maker topic of his or her choice through an independent STEAM project.

**Other seventh grade highlights include:**

**Connection with the Advanced Light Source (ALS) and Lawrence Berkeley National Lab:** Students will learn about imaging at the micro- and nanoscale and participate in a simulated

proposal process. Student groups with the lowest-scoring (best) proposals will have the opportunity to have their samples scanned on the ALS beamlines.

**Science Fair:** Seventh grade students will conduct a controlled experiment of their (almost free) choice in which they do background research, set-up and test variables, analyze their data, and communicate their findings. There will be intermediate due dates during the project and the final project will be completed by the date of the (non-competitive) science fair in February.

**Field Trip to the Maker Faire.** Seventh graders will participate in Education Day at the San Mateo Maker Faire (May) ahead of their own School Maker Faire (May/June).

**Both seventh and eighth grade science includes a sex education unit.** An outside specialist will cover reproductive anatomy and physiology, birth control methods, sexually transmitted diseases and the emotional and psychological aspects of sexuality, dating, and other issues associated with adolescence. More information on this unit will be sent home before it is presented.

To learn more about our work in science, please visit [bpcsteam.blogspot.com](http://bpcsteam.blogspot.com).

## History in Seventh Grade

In 7th grade history, students will learn how peoples and histories are various and ever changing, not singular and static. This approach will help students investigate the historical and present constructions of power to examine the forces/people who manufacture, maintain, challenge and change power systems. Additionally, students will learn about what len(s) they are wearing as they examine historical texts and artifacts (ex: female, American, modern, youth, etc). Our class covers the human story from the Fall of Rome up until the Columbian Exchange while tracking patterns and changes in systems of power, both rising and declining. This class will allow students to examine the past for patterns to inform their understanding and agency for mapping and engaging with power in their daily lives today. Our essential question for the duration of the year is “How does power and interconnectedness intersect?”

Our class will use several main texts, which included but are not limited to: Houghton Mifflin’s *A Message of Ancient Days*, Oxford’s *First Ancient History*, the British Museum’s *A History of the World in 100 Objects* and Pamela S. Turner’s *Samurai Rising*. In our classroom, students are welcomed to a safe space where they will share their own knowledge and experience(s) of history, learning collectively. They will see *themselves* as historians and history makers. Students will work together to using historical thinking skills to deconstruct texts, images and artifacts to find patterns and trends and will work in partners and groups to explore, ask questions, gather data and propose solutions and draw conclusions. Students are encouraged to be brave, to be daring and innovative, not perfect.

<p><b>Standards:</b>  UC Berkeley History-Social Studies Project  California State Standards for History  Common Core State Standards for History</p>	<p><b>Frameworks:</b>  Agency by Design  Harvard's Project Zero</p>
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**Main Texts:**

<p><i>The History of the World in 100 Objects</i> by Neil MacGregor  <i>Samurai Rising</i> by Pamela S. Turner  <i>A Message of Ancient Days</i> Houghton Mifflin  <i>First Ancient History</i> Oxford</p>
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**Historical Thinking Skills:**

<p><u>The Big Six Historical Thinking Concepts</u> (by Colyer, Seixas, Fornazzari, and Morton)</p> <ol style="list-style-type: none"> <li>1) Historical Significance</li> <li>2) Evidence</li> <li>3) Cause and Consequence</li> <li>4) Continuity and Change</li> <li>5) Historical Perspectives</li> <li>6) Ethical Dimension</li> </ol>
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**Unit Overview:**

<p>Unit 1: Fall of Rome, Rise of Islam  Unit 2: Tang Dynasty, Medieval Japan  Unit 3: Mayans, Black Death  Unit 4: Sikhism, Renaissance, Columbian Exchange</p>
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**Homework policy:**

5	Completed assignment that goes above expectations
4	Completed assignment that meets expectations
3-1	Assignment does not meet expectations due to: <ol style="list-style-type: none"> <li>a) Lack of sufficient support</li> <li>b) Didn't explain fully or incomplete explanation</li> <li>c) Wrong answer(s)</li> <li>d) Incomplete</li> </ol>
0	Didn't turn in assignment

## Grading policy:

Big Six historical thinking concepts (60%) Homework (15%) Quizzes/tests/projects (20%) Self-reflection (5%)
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## Art in Seventh Grade

The goal of the upper school art program is to instill in students an appreciation of art, both as creators and as viewers. This is achieved through instruction and student practice of specific skills, introduction to a broad range of media and materials, and exposure to the art of different times and cultures.

Art class focuses on learning to use and care for materials and tools, creating artwork, improving technical skills, experimenting with different media, being able to discuss their work--the why and how of it--and having the opportunity to exhibit their work on an ongoing basis. Students view the work of many artists and cultures throughout history, thus developing an understanding of what goes into the making of art, a greater understanding of how life and art connect, and a sense of their own creative process.

Students are required to keep sketchbooks as a place to express themselves. In their sketchbooks, they will practice techniques, make observations about materials, plan projects, write definitions of art language/elements of art, and collect information about artists. These become logs of the year's work, and students can look back through them to see how their skills have improved over the year.

There will be occasional homework assignments, for example, to watch a special show, make a few sketches, look up an artist online, or visit a museum exhibit.

### Projects this year may include:

- **Drawing:** still life, self-portraits and figure drawing, landscapes, imaginary works
- **Design:** logos, posters, t-shirts, stencils, screen printing, etc.
- **Painting:** color mixing and color theory, watercolor, tempera, acrylic
- **Printmaking:** soft-cut rubber, monoprints, collographs
- **Collage:** paper, fabric, decoupage, 3-D
- **Textiles:** weaving, sewing, embroidering
- **Sculpture:** wire, clay, paper mache, wood, junk, cardboard

Student work will be exhibited throughout the year in our gallery, located in the hallway of the FAD theater and at our end-of-year exhibit.

## **Drama in Seventh Grade**

Black Pine Circle School's drama program gives students an additional avenue to express their creativity as well as learn some basic theater skills. Confidence in speaking publicly, preparation for presentation, and the fun of pretending are key components of this class. This class encourages students to express themselves with words, body language, and imagination. Students in seventh grade will continue developing theatrical skills and vocabulary. In addition to in-class activities and projects, there will be units on monologues, two-person and small group scenes, and a unit devoted to exploring a work of William Shakespeare.

## **Music in Seventh Grade**

The goal of music class for seventh graders at Black Pine Circle School is to further develop the music that lives in every student. We will build on the concepts and skills acquired in previous grades as well as differentiate for multiple learning levels. Voice, body percussion, ukulele, and xylophones will be primary instruments of study. Students will gain real life experience in multiple genres and bring the music out of their heads and into action. We will sing, dance, and make a full body-mind connection with the music.

### **Course Objectives**

- Pursue a theoretical yet soulful connection to music from around the world
- Perform on instruments, alone and with others, in a varied repertoire of music
- Sing, alone and with others, with a varied repertoire of music
- Singing in three part harmony on varied repertoire
- Improvise melodies, variations, and accompaniments
- Compose and arrange music within specified guidelines
- Read and notate music
- Listen to, analyze, and describe music
- Evaluate music and music performances
- Understand relationships between music, the other arts, and disciplines outside the arts
- Understand music in relation to history and culture

### **Program**

In the seventh grade, students will focus on music theory, vocal technique, instruments, and performances. Students will be re-introduced to the pedagogy developed by Carl Orff, incorporating song, body rhythm, games, movement, along with student-driven ideas, to expand upon simple music concepts. Students will learn ukulele by utilizing a personalized program that uses a variety of songs and techniques, as well as *Ukulele in the Classroom* by James Hill and Melanie Doane. Students will create and perform in large and small ensembles, gaining in confidence as well as building social skills.

## Physical Education in Seventh Grade

The aim and focus of physical education in middle school is the development of a lifelong appreciation of active bodies and minds. Students will learn:

- Proper warmup and stretching techniques
- Basic knowledge, both physical and mental, of a wide range of sports methods and strategies that lead to successful team achievement
- Types of communication employed in the athletic world
- Strength training and aerobic fitness exercises

We encourage students to put forth their maximum effort and best attitude. Mistakes are a part of life, and students are encouraged to experiment with physical movements and ideas. All the activities will move a little faster because the students will build on what they have learned in the sixth grade. For example, running, calisthenics and team sports should be played at a slightly more challenging level. Students will be looking towards expending more effort and energy, following the rules, and examining the best ways to communicate and play with their classmates.

**Proper shoes and clothes that allow for free and safe movement are necessary and mandatory for students to participate fully in each class.**

### Seventh Grade Theme: Pushing Past Limits

Seventh graders will be challenged to extend themselves past any physical or mental limits they have set for themselves. There will be ample opportunity for students to break barriers they may have never approached before. Seventh grade students are expected to listen and follow directions in order to be able to complete the tasks properly and maintain safety at all times.

## Applied Ecology in Seventh Grade

Applied (*adjective*)

1. (of a subject or type of study) put to practical use as opposed to being theoretical.

E·col·o·gy (*noun*)

1. the branch of biology that deals with the relations of organisms to one another and to their physical surroundings.
2. the political movement that seeks to protect the environment, especially from pollution.

In Applied Ecology (or “AppEco” for short), students will deepen their understanding and appreciation of the natural world and will learn to apply their ecological knowledge in the BPC garden, their personal lives, and their communities. Seventh graders will be focusing specifically

on food systems. They will develop their systems-thinking, teamwork, and observation skills as they explore the following key questions:

- Unit 1: What is a food system? What are the different parts? How do they interact with each other?
- Unit 2: Where does my food come from, and why does it matter? What choices are available to food consumers? How are food choices connected to health, society, the environment, and me?
- Unit 3: How have food systems changed historically? How are they changing now? What are the impacts of these changes?
- Unit 4: What would we like to see for the future of Bay Area food systems? How can we be ecological leaders?

These units will feature a variety of hands-on activities, work time in the garden, field trips to local food organizations, cooking and food tastings, group discussions of readings, current events, and documentaries, and longer-term creative projects. Through Applied Ecology, students will cultivate the skills and knowledge to be lifelong students and stewards of nature.

## **Trimester Courses in Seventh Grade**

### **Cultural Competency in Seventh Grade**

Students will individually and collectively examine their identities, differences, commonalities, values, and beliefs. We will work together to create and sustain classroom norms that make encourages communication about different elements of identity and culture. With this in mind, students will develop a basic lexicon, as well as practical strategies, for approaching important and sometimes difficult conversations. Socratic seminars will also be an integral part of the classroom, to encourage authentic dialogue and questioning. Topics will include race, ethnicity, religion, socio-economic status, gender identity, sexual orientation, body size, ability, family structure, and other elements of identity. This class will promote healthy identity development, self-esteem, and deeper understanding of cultural differences and improved cross-cultural communication.

### **Duck's Nest - Community Service in Seventh Grade**

BPC partners with the local preschool, Duck's Nest, providing students with the opportunity to work with children aged 2 to 5 years old. Before students visit Duck's Nest, there is an

orientation with the director, Melanie Traynor, during which they learn about working with younger children, are given an opportunity to ask questions, and complete a survey to gather any additional input they have about working at the preschool. Students walk approximately seven blocks to the preschool, accompanied by two faculty chaperones. At Duck's Nest preschool, students are divided into groups of four to work in different age-grouped classrooms. This program affords our students the chance to learn the skills of leadership, empathy and service to the community.

## **Electronics in Seventh Grade**

The electronics course combines playful discovery learning, science content instruction, design challenges, and tinkering to give students a foundation in the fundamental principles of electrical circuits. We will become conversant in the principles of continuity, voltage, current, and resistance. Students will discover the relationship between flowing electrons and magnetism to make a speaker and a jumping coil or solenoid. We will practice measuring electricity in homemade batteries and a variety of circuits. Students will solder and work with a variety of components engaging the maker skills and hopefully demystifying the world of electronic technology.

## EIGHTH GRADE COURSES

As eighth graders continue their development as critical thinkers and active community members, our program continues to nurture their growth. Students take increased responsibility for their own learning, taking on longer-term projects and greater elements of choice in their work. Our Outdoor Education programming culminates with an eighth grade field science week on Santa Catalina Island off the coast of Los Angeles. We carefully advise students and families about their high school options, and we are always pleased to see BPC graduates attending a wide array of high schools—a testament to the diversity and individuality of BPC students.

### English in Eighth Grade

“Words are...our most inexhaustible source of magic.” – Albus Dumbledore

**Overview:** In eighth grade English, we will concern ourselves with two main themes, Stories and Wordcare.

#### Curriculum Unit

##### I. Stories and Human Nature

Essential Questions: What is a story? Why do we need stories? What purposes do stories serve in our lives? Key Texts: *Haroun and the Sea of Stories*, by Salman Rushdie; “Theseus and the Minotaur”; an extract from *H is for Hawk*, by Helen Macdonald; and poems of William Wordsworth

##### II. The Crafting of Stories

Essential Questions: What is a good story, and how does one tell one? How does gender affect how one writes and what one writes about? Key Texts: “Writing Short Stories,” by Flannery O’Connor; short stories by various authors, including O’Connor, Gwendolyn Brooks, Kate Chopin, Doris Lessing, Gabriela Mistral, Mark Twain, and Eudora Welty; as well as poems of Emily Dickinson

##### III. Stories and their Effect on Us

Essential Question: Why do authors sometimes write tales of woe or create unsavory main characters? Key Texts: You will select one of the following to read in a literature circle: *Fahrenheit 451*, by Ray Bradbury; *Wuthering Heights*, by Emily Bronte; *Brave New World*, by Aldous Huxley; ; *Nectar in a Sieve*, by Kamala Markandaya; *Frankenstein*, by Mary Shelley; or poems of Gwendolyn Brooks

#### **IV. Stories and the Moral Imagination**

Essential Questions: How do novels help us address moral questions? How do they help us nurture our own moral imaginations? Key Texts: *Pride and Prejudice*, by Jane Austen and poems of Langston Hughes and Thomas Lux

#### **V. Words and Power**

Essential Questions: How does one use words truthfully? Why should one care about the way one uses words? Who gets to decide what words mean (and who doesn't)? Key Texts: "Politics and the English Language," by George Orwell; extracts from *Through the Looking Glass*, by Lewis Carroll; *The Tempest*, by William Shakespeare; and poems of Tracy K. Smith, Gary Soto, and Derek Walcott

#### **VI. Words and Community**

Essential Questions: How do poets and storytellers help us understand the art of "shepherding words"? How does one use words in a way that promotes the true, the beautiful, and the good in one's community? What do we mean by the word "hero," and how does our understanding of the idea compare with that of the Anglo-Saxons? Texts: *Beowulf* and poems of W.H. Auden and Elizabeth Bishop.

**Writing**: Two to three times a week we will write informally in exploratory assignments where we will reflect on the literature we are studying, developing ideas we have introduced in seminar. We will further develop some pieces into longer, structured and polished essays of literary analysis, including argumentative, extended definition, and comparison/contrast forms. We will also write several creative pieces, including fiction and poetry.

**Grammar and Word Study**: In our class notebooks we will practice and develop our language skills through daily vocabulary and grammar exercises. Quizzes will be given regularly on the material we have been practicing. Exercises will be adapted from various sources, including *English Grammar*, by Richard Hudson; *How to Write a Sentence*, by Stanley Fish; and *The Elements of Style*, by Strunk and White.

**Performance**: Public presentation of the literature we are studying will play a big role in the class. Each day class begins with a student reading the poem of the day. Students will also memorize one poem a month. We will coordinate with the drama teacher at times so that we can deepen our appreciation and exploration of the texts through prepared performances in drama class.

**Socratic Seminar**: Our primary goal is to develop a shared understanding of the texts and themes through all-class dialogue, so Socratic seminar will be the main learning approach we use. Seminars, or seminar-like activities will take place most class periods.

## Math in Eighth Grade

The Algebra 1 curriculum at BPC provides an important foundation for strengthening every student's math abilities and overall math awareness. The main elements of this foundation in grades seven and eight are algebra, geometry, and applied mathematics.

Studying algebra can help students in many ways. It helps them to organize their thoughts in order to solve mathematical problems that they meet in their everyday lives, and it prepares them to continue their studies in mathematics and science. Whatever they choose to do in the future—from running a business to doing scientific or social research—they will need to use algebra. It will generally strengthen their mental powers by encouraging them to master a complex system of interlocking ideas.

The eighth grade algebra course includes explorations of algebraic concepts such as polynomials; algebraic fractions; linear, quadratic and exponential functions; inequalities and their systems; radicals and quadratic equations; and functions, along with processes related to them. As a result, students are able to represent situations and number patterns with graphs, rules, equations, and inequalities and to investigate the interrelationships of these representations. The developed mathematical apparatus gives students a chance to solve a variety of mathematical, science-based, and real-world problems.

In eighth grade, we study the geometry of one, two, and three dimensions as a deductive system in which a few simple statements are assumed and then used to derive more complex ones. The BPC geometry course introduces all of the geometric concepts usually presented in a traditional course in high school geometry, in an investigative and application-oriented format. Students will find out the beauty of geometry as a deductive system and develop an appreciation of geometry as a means of describing the physical world. We will consider, for example, how astronomers have used geometry to measure the distance from the earth to the moon, how artists have used it to develop the theory of perspective, and how chemists have used it to understand the structure of molecules. We will also consider some interesting contributions to the subject that were made by the ancient Greeks (e.g. Euclid, who systematized the ideas that we will study), in India during the Middle Ages, and in Europe during the Renaissance. Finally, we will survey the "non- Euclidean" geometry developed in the 19th century and see how Einstein used it in his theory of the nature of space. Students will have many opportunities to use their imagination.

### Students will:

- Identify, describe, compare, and classify geometric figures
- Visualize and represent geometric figures with special attention to developing spatial sense
- Represent and solve problems using geometric models, properties, and relationships

Since geometry is a logical subject, students need to take time to become thoroughly acquainted with the ideas contained within it. Therefore, in eighth grade, the study of geometry

includes congruency and similarity, quadrilaterals, regular polygons, the right triangles, the circle and its relationships, coordinate geometry, areas, and volumes.

We will use a couple of textbooks as references, including *Merrill Informal Geometry*, Glencoe McGraw-Hill's *California Algebra 1: Concepts, Skills, and Problem Solving*.

Many people, not just students, wonder why mathematics is important. The BPC math curriculum is designed to answer that question through integration, application, and connection. Since mathematics is the key to our understanding of the physical world, we will explore some topics in physics, biology, and chemistry through both science and math labs.

We have explored why and what we are going to study in mathematics class, but the main question is, "How are we going to do this?" We consider: "I hear and I forget. I see and I remember. I do and I understand." The message of this Chinese proverb is that to learn with understanding, students should engage actively with mathematical ideas and materials. Students learn mathematics by doing it. Thus we provide and encourage:

**An activity-oriented approach to mathematics learning:** We use the Socratic method of asking questions, which leads students to discover a result. Students are encouraged to actively participate, to think, to question, and to seek understanding. As each new concept unfolds, students are given an opportunity to investigate the ideas by using a wide variety of manipulative materials, activities, and projects. Then, through guided discussion, the students are led to a deeper understanding of the ideas and their relations to the overall structure of mathematics. Following the investigation and discussion, students will have sufficient problem-solving practice to develop speed and accuracy.

**Careful provision for individual differences:** Throughout each topic, students are challenged to do what they can do. To experience individual success, we provide an environment that stresses cooperation and communication rather than competition. For this purpose we combine independent work or small-group work with whole-class discussion. Our goal is to teach students to be independent learners. In this case, skill development is necessary. The topics in each course are arranged according to the level of independence that is required. The early topics can be used to develop skills; the later ones require their use. Students have the opportunity to take part in an additional enrichment program. This program includes Math Accelerated Teams (MATs) and Clubs. In the Math Club, we will go beyond the foundation of mathematics to more advanced areas of geometry, algebra, trigonometry, and number theory.

**Emphasis on what students should know and be able to do in the field of mathematics:** We believe that there are fundamental mathematical concepts that must be understood by each student with sharpness and clarity. When truly understood, they provide powerful tools for extending knowledge. A long-range planning chart of these concepts is given to assist students and their parents in making individual efforts and assignments according to needs, abilities, and time available for each student. The individual assignments can be remedial, regular, or advanced.

**Learning strategies and techniques:** We use the "most difficult first" strategy or the pretests strategy for highly capable learners, allowing them to work on more challenging activities

instead of the grade-level work. We use the “learning contract” strategy for students who are likely to learn the material much faster than their peers. Such students can form Math Accelerated Teams (MATs) to work on tasks at their own pace and challenge level.

**Homework:** Homework will be assigned four times per week in eighth grades for further mastery of the material we cover in class. It is due during the next class period unless otherwise specified.

**Tests:** A test will be given after the completion of each topic or chapter. Tests will be announced in advance. Also, there will be mid-year and end-of-year tests.

### **Eighth Grade Curriculum:**

Unit 1 Analyzing linear equations and application to statistics and geometry

Unit 2 Solving systems of linear equations

Unit 3 Solving linear inequalities

Unit 4 Operations with polynomials

Unit 5 Factoring of polynomials

Unit 6 Quadratic and exponential functions

Unit 7 Radical expressions and triangles

Unit 8 Rational expressions and equations

Unit 9 Statistics and probability

Textbooks: Glencoe McGraw-Hill, *California Algebra 1* (2008) & Merrill *Informal Geometry*

### **Spanish in Eighth Grade**

The goal of the Spanish program is to give our students the ability and confidence to speak Spanish. The students work on the four key areas of language study: listening, speaking, reading, and writing. The extensive use of authentic videos, audio, images, and texts allows for an interactive experience with the vocabulary and grammatical structures. The students will engage in a variety of activities, practices, and assessments.

As the course progresses, there is increasing emphasis on oral communication. Students are expected to actively engage in our group conversations. During the year, students make oral presentations, write their own dialogues, create games, participate in role-plays, interviews, and more. Writing reports about Spanish-speaking countries will give students knowledge about those countries' geography, history, culture, daily life, and contributions to the arts. Field trips enhance their understanding and knowledge of Hispanic culture. All eighth graders have the

option of spending two weeks at an intensive language school in Costa Rica, living with host families and furthering their cultural understanding and language skills abroad.

## Units

- Review and reinforcement of the material previously covered
- Preterit of regular and irregular verbs
- Imperfect tense of regular and irregular verbs
- Reflexive verbs and pronouns
- Negative words
- Introduction to present perfect tense
- Introduction to the prepositions: por and para
- Caer bien, caer mal, and gustar
- Ojalá with present, past, and past perfect subjunctive

## Textbooks

We use different textbooks that are designed for both beginning and intermediate students. Some are used as a guide for many different activities in class and others to provide homework. In addition to the books, there are many supplemental materials, magazine and video language programs to which the students are exposed. These are some of the texts and resources we use in our program:

- *¡En Español!* textbook from McDougall and Littell
- *Mi Libro de Gramática* from Española
- *Action English Pictures* (an action series picture sequences book)
- *¡Ya Escribimos!*, *¡Así Escribimos!*, and *¡A Escribir!* from National Textbook Company
- *¡Ahora!* *¡El Sol!* from Scholastic Magazines
- Internet based activities such Quizlet and Conjuguemos
- Current events from important newspapers from Spanish-speaking countries

## Homework

Homework should take around 20 minutes. During the year, the students will be asked to research a topic or work on a specific projects. In addition to regular homework, long-term assignments and extra work will also be assigned at intervals. Because homework is an extension and/or reinforcement of what is covered in class, it is important to do it when is assigned. If an emergency arises and homework is not completed, a note from a parent with a brief explanation will be appreciated. The academic planner and the LaunchPad (the BPC upper school homework site at [www.launchpad.blackpinecircle.org](http://www.launchpad.blackpinecircle.org)), are the best ways for parents to keep track of Spanish homework. Please make sure your student has a Spanish-English dictionary available at home.

## Quizzes / Tests

Short quizzes will be given on a regular basis. A test will be given after the completion of each chapter/unit or after we have covered a grammatical point. Dates for tests will be announced in advance.

## Mandarin in Eighth Grade

Eighth grade Mandarin course mainly focus on helping students get acquainted with more advanced original written Mandarin materials and videos. The goal is to enable students converse in Mandarin with Mandarin speakers. This course also prepares students for Mandarin placement test for high school if they wish to continue learning Mandarin in high school. Simplified Chinese characters are used in class and Mandarin is the primary language of instruction.

## Texts and Materials

- *Integrated Chinese Level 1 Part 1*
- Mini-stories from *Look, I Can Talk!*
- *Chinese (Zhong Wen) Textbooks and Workbooks (for advanced heritage learners)*
- *Newspaper articles in Mandarin*

## Assessment

Students are assessed on the following:

**Class participation:** Active participation in class activities, discussions, and presentations is important in this class.

**Class Work:** Students' class work will be collected and kept in their portfolio folder to be assessed for the semester.

**Writings:** Students will be rewriting the learned stories and creating their own stories.

**Vocabulary:** It is very important for students to spend time regularly reviewing and memorizing the new words they have learned each week.

**Homework:** Regular homework will be assigned and should take about 15-20 minutes. Assignments will be given from the assigned workbook, or from class activities and projects. The purpose of homework for Mandarin class is to review what students have learned in class and reinforce their memory of the knowledge. It is important to do it when is assigned. The academic planner and homework page on the link (the BPC upper school homework site at the BPC upper school homework site at [www.launchpad.blackpinecircle.org](http://www.launchpad.blackpinecircle.org)) are the best ways for

parents to keep track of Mandarin homework. Please make sure your student has a Mandarin-English & English-Mandarin dictionary available at home.

Late assignments will be accepted with deducted credits unless there are extraordinary mitigating circumstances for lack of timely performance. If an emergency arises and homework is not completed, a note from a parent with a brief explanation will be appreciated. All late assignments must be turned in within one week of the original due date or they will not be accepted. Learning a foreign language is not easy, so practicing is one of the most important elements in mastering the language gradually.

**Quizzes/tests:** Small quizzes are given occasionally to help show students how they are doing in a particular skill area. Quizzes will be given more often in eighth grade. Study skills are incorporated into the curriculum to help students prepare successfully for assessments. There will be no midterm or final exam.

## Science in Eighth Grade

The eighth grade science curriculum is based around the IPS, or *Introductory Physical Science*, curriculum by Uri Haber-Schaim. Throughout the curriculum, abstract exploration runs concurrent with practical applications of the chemistry as we study topics such as fermented foods, dissolved gases, paint, fireworks, and more. Student will keep a lab notebook. Science units include:

**Volume and mass:** Students improve measurement skills and practice safe lab techniques while comparing physical and chemical change.

**Mass changes in closed systems:** Students will explore a variety of ways mass is conserved in closed systems and potentially not conserved in open systems. Students use histograms to analyze pooled class data. Labs testing conservation of mass allow students to focus on experimental design and error analysis.

**Characteristic properties:** Students will investigate properties such as the boiling point and density of various substances.

**Solubility:** Students will study solvents, solutes, and concentrations as they explore the solubility of solids, liquids, and gases.

**Separation of mixtures:** After learning various separation techniques, such as distillation, students will engage in an open-ended inquiry lovingly called “Sludge.” They will separate and identify the component parts of their “Sludge.”

**Compounds and elements:** Students will begin to explore chemical reactions, compounds and elements, and determine how atoms get together to form molecules.

**Atomic model of matter and the periodic table:** Students will delve into the details of atomic models, learning how their component parts influence bonding and elemental characteristics.

## History and Geography in Eighth Grade

### History Theme: The Constitution as Conversation

As author Linda Monk writes, “Many Americans think of the Constitution as words on paper preserved under glass at the National Archives in Washington, D.C. But the Constitution is also the product of an ongoing conversation among Americans about the meaning of freedom in their daily lives.”

This year, we will use the Constitution, Linda Monk’s *The Words We Live By*, and Rebecca Stefoff’s adaptation of Ronald Takaki’s *A Different Mirror for Young People: A History of Multicultural America* as our grounding texts to frame our conversations about the ever-present tension between individual freedom and social cohesion, democracy and minority rights, national unity and pluralism. We look beyond the text to explore the human stories that lie just below the surface. For example, behind the citizenship and treaty clauses, we will find a story of broken promises and a Native American nation forced to walk a treacherous Trail of Tears to deport themselves from their own land. Behind the 14th Amendment and the subsequent decisions interpreting it, we will find the story of a powerful majority reluctantly relinquishing its exclusive privileges little by little. Behind the 2nd Amendment, we will find the story of a nation born from armed insurrection and of groups who, perhaps because of the gradual erosion of those exclusive privileges, fervently demand a right to own the tools they imagine might be needed for another.

- The ultimate goal of the class is to help the students become deep-thinking, active, skillful citizens. To accomplish that, students will:
- Participate in Socratic seminars
- Learn various note-taking styles
- Role play and debate
- Practice extracting main ideas, reading critically, and applying the principles of historiography to primary sources
- Identify new connections between unrelated historical events
- Support arguments with evidence
- Learn to respect opposing (but well-supported) views and experience others respecting their views (provided, again, that they are well-supported!)

### Geography: Mapping the World by Heart

Students will have one geography period per week in which they will study the names, shapes, and locations of almost 200 countries, continent-by-continent. The class will culminate in each student drawing a map of the world, complete with labeled countries, from memory, without notes. If that sounds surprising, keep in mind that many BPC students of years past have succeeded with good results. Middle school minds appear to have an incredible capacity for this work and, according to anecdotal reports from our alums, they retain this information through

high school and beyond. Each student will also pick a topic of interest to research and use to customize their map. Examples of clever map customizations of years past include: tooth fairy traditions around the world, authors from each continent, and cheeses around the globe.

## **Art in Eighth Grade**

The goal of the upper school art program is to instill in students an appreciation of art, both as creators and as viewers. This is achieved through instruction and student practice of specific skills, introduction to a broad range of media and materials, and exposure to the art of different times and cultures.

Art class focuses on students learning to use and care for materials and tools, creating artwork, improving technical skills, experimenting with different media, being able to discuss their work-the why and how of it, and having the opportunity to exhibit their work on an ongoing basis. Students view the work of many artists and cultures throughout history, thus developing an understanding of what goes into the making of art, a greater understanding of how life and art connect, and a sense of their own creative process.

Students are required to keep sketchbooks as a place to express themselves. In their sketchbooks they will practice techniques, make observations about materials, plan projects, write definitions of art language/elements of art, and collect information about artists. These become logs of the year's work, and students can look back through them to see how their skills have improved over the year.

There will be occasional homework assignments, for example, to watch a special show, make a few sketches, look up an artist online, or visit a museum exhibit.

### **Projects this year may include:**

- **Drawing:** still life, self-portraits and figure drawing, landscapes, imaginary works
- **Design:** logos, posters, t-shirts, stencils, screen printing, etc.
- **Painting:** color mixing and color theory, watercolor, tempera, acrylic
- **Printmaking:** soft-cut rubber, monoprints, collographs
- **Collage:** paper, fabric, decoupage, 3-D
- **Textiles:** weaving, sewing, embroidering
- **Sculpture:** wire, clay, paper mache, wood, junk, cardboard

Student work will be exhibited throughout the year in our gallery, located in the hallway of the FAD theater and at our end-of-year exhibit.

## **Drama in Eighth Grade**

Black Pine Circle School's drama program gives students an additional avenue to express their creativity as well as learn some basic theater skills. Confidence in speaking publicly, preparation for presentations, and the fun of pretending are key components of this class. This class encourages students to express themselves with words, body language, and imagination. Eighth graders work towards an all-class open performance that represents the culmination of their skills. Character development, improvisation, performance techniques, and play writing are covered throughout the year. Eighth graders also work on various cross-curricular pieces, often in conjunction with their English and history classes.

## **Music in Eighth Grade**

The goal of music class for eighth graders at Black Pine Circle School is to further develop the music that lives in every student. We will build on the concepts and skills acquired in lower grades as well as differentiate for multiple learning levels. Voice, body percussion, guitar, ukulele, and xylophones will be primary instruments of study. Students will gain real life experience in multiple genres and bring the music out of their heads and into action. We will sing, dance, and make a full body-mind connection with the music.

### **Course Objectives**

- Pursue a theoretical yet soulful connection to music from around the world
- Perform on instruments, alone and with others, in a varied repertoire of music
- Sing, alone and with others, with a varied repertoire of music
- Improvise melodies, variations, and accompaniments
- Compose and arrange music within specified guidelines
- Read and notate music
- Listen to, analyze, and describe music
- Evaluate music and music performances
- Understand relationships between music, the other arts, and disciplines outside the arts
- Understand music in relation to history and culture

### **Program**

In eighth grade music class, we will focus on performance and putting music concepts and theory into action. The goal is to get each student involved and to use a differentiated method to give each student a voice within the class. We will examine multiple layers of a specific genre and explore its social and cultural implications. Students will implement various genres into instrumental and vocal performances as well as learn the dances associated with each style. Students will study the guitar utilizing a personalized program as well as various books and texts. We will focus on guitar techniques, chords, singing while playing, single note melodies, and large and small ensemble playing.

## **Physical Education in Eighth Grade**

The aim and focus of physical education in middle school is the development of a lifelong appreciation of active bodies and minds. Students will learn:

- Proper warm up and stretching techniques
- Basic knowledge, both physical and mental, of a wide range of sports methods and strategies that lead to successful team achievement
- Types of communication employed in the athletic world
- Strength training and aerobic fitness exercises

We encourage students to put forth their maximum effort and best attitude. Mistakes are a part of life, and students are encouraged to experiment with physical movements and ideas. All the activities will move a little faster because the students will build on what they have learned in the sixth grade. For example, running, calisthenics and team sports should be played at a slightly more challenging level. Students will be looking towards expending more effort and energy, following the rules, and examining the best ways to communicate and play with their classmates. For eighth graders, given their experience in sixth and seventh grade, all of the activities will be performed at a high level. Challenges will be differentiated for each student, taking into account personal strengths and challenges. Students will be expected to give maximum effort and energy to all activities, including running, calisthenics and team sports.

**Proper shoes and clothes that allow for free and safe movement are necessary and mandatory for students to participate fully in each class.**

### **Eighth Grade Theme: Looking Ahead**

Our eighth graders are at the point where they are starting to or continuing to make decisions about which sports, if any, they want to make a priority. For those focused on continuing a steady diet of athletic competition, P.E. provides an atmosphere of recreation and an outlet from their everyday commitments, while still providing an opportunity to develop and improve fundamentals. For those students who are less interested in competition, P.E. provides a great opportunity for them to experiment freely and perhaps gain a lifelong love of a sport or activity at a recreational level. Students are expected to listen and follow directions in order to be able to complete the tasks properly and maintain safety at all times.

## **Culture and Identity in Eighth Grade**

As in the seventh grade program, students will individually and collectively examine their identities, differences, commonalities, values, and beliefs. We will work together to create and sustain classroom norms that make encourages communication about different elements of identity and culture. With this in mind, students will develop a basic lexicon, as well as practical

strategies, for approaching important and sometimes difficult conversations. Socratic seminars will also be an integral part of the classroom, to encourage authentic dialogue and questioning. Topics will include race, ethnicity, religion, socio-economic status, gender identity, sexual orientation, body size, ability, family structure, and other elements of identity. This class will promote healthy identity development, self-esteem, and deeper understanding of cultural differences and improved cross-cultural communication.

Since the 8th-grade course runs for the entire year, students will engage with the topics on a deeper level, considering the issues of affinity groups, microaggressions, intersectionality, power, privilege, implicit and explicit bias, justice, and allyship. We will work together to identify and create resources that will develop our cultural competency. As the year progresses, and as students grow more confident in their skills and understanding, students will take the lead in the classroom and direct the curriculum towards what is most useful and important to themselves and their communities.

## **Trimester Courses in Eighth Grade**

### **Creative Writing in Eighth Grade**

In this creative writing trimester-long course, students will practice and develop their written voice. As a point of departure, they will be presented with writing prompts, writing structures, and other elements designed to ease them into the process. They will ultimately be encouraged to be creative in their task without the specter of literary judgment or criticism. Students are expected to generate eight to ten pieces of writing during the course; they will then edit, revise, polish, and share two to three pieces with their peers. The primary goal of this class is to create a vessel in which they can feel comfortable to write. The secondary goal is to create awareness of the elements that bring writing to life, such as writing a hook, creating tension, and using specific language.

### **Economics in Eighth Grade**

As a point of departure, students in this trimester-long economics class learn the basics of what a stock is, how and why share prices may fluctuate, and what it means to create a diversified portfolio. Students choose three to five stocks and track them during the term, creating a spreadsheet and using formulas within to calculate and chart the progress of their stocks. Podcasts, articles, and video provide snapshots of the actual performance of the US stock

market during the term and help inform students about the fluctuation of the market (bear versus bull market).

Students then transition to a game of “real world” economics and budgeting. Students are randomly assigned a job description, a salary and monthly paycheck (after taxes), and must create a spreadsheet listing all of the various personal items and necessities they will need beginning post-college. This includes everything from renting an apartment and furnishing it to budgeting for transportation, food, entertainment and any other various life pursuits they can envision. Curveballs such as losing belongings, health issues, gifts, repairs, and other unplanned-for life events figure into the costs of maintaining a personal budget. The goal is to balance one’s personal budget. The class concludes with an accounting of how each student’s portfolio performed in the stock market and how each student fared collectively at balancing a personal budget.

## History of Philosophy in Eighth Grade

In our trimester-long history of philosophy course, we explore the great notions of philosophy from Ancient Greece and the pre-Socratics, through the 20th century and philosophers such as Sartre and Camus. We actively practice critical thinking strategies in a Socratic Seminar format, continuously probing for historical accuracy, original ideas, and substantiated conclusions. We also explore techniques of respectfully disagreeing with each other on a regular basis. Students are supplied with developmentally appropriate translations of historic texts (e.g. Plato’s *Apology*), as well as worksheets developed by the instructor.

To support our class discussions, we read the novel *Sophie’s World*, by Jostein Gaarder, which traces a teenage girl’s interaction with great philosophers through history. Other texts used as reference materials and in the course include: *Philosophy for Kids* and *The Examined Life*, both by David White; *Philosophy: A Complete Course in a Book*, *Founders of Thought*, by Hare, Barnes, and Chadwick; *Introducing Philosophy*, by Dave Robinson and Judy Groves; *A History of Philosophy*, by Frederick Copleston; W.C. Guthrie’s *The Greek Philosophers*; *Essays in Philosophy* by R.G. Collingwood; and *The Pre-Socratics*, by Edward Hussey.

The central theme of this course can be summed up by Socrates’ best-loved quote: “The unexamined life is not worth living.”

## Technology and Society in Eighth Grade

This one-trimester, weekly class gives students a safe, structured space to discuss the role of technology and social media in their lives. The course materials will include excerpts from texts, journal articles, and video clips. Topics include:

- Brain structure and function with a particular focus on reward pathways, addictive behaviors, attention, and memory
- Pros and cons of face-to-face versus digital communication in a variety of contexts
- Benefits, distractions, and trade-offs of the Internet in students' lives
- Conscious and unconscious choices around student use of media, in particular social media
- Trade-offs between convenience and privacy
- Family, school, and personal rules around Internet and media use amid school and societal pressures

## Via Center - Community Service in Eighth Grade

Via Center is a small, independent school for students with special needs who cannot be accommodated within the special education services of the public school system. The staff/student ratio at Via Center is 1:1.

For one trimester, every Friday morning beginning at recess, students gather at the gate before walking to Via Center located one block from BPC on 6th Street. At Via Center, the students divide themselves into three or four groups for different activities with the Via Center students. The activities on offer are usually music, arts and crafts, yoga, and basketball.

Before students visit Via Center, they are oriented to the program, the students they will meet, and the emotional, intellectual, and physical differences they may observe at Via. Via's head teacher, Erin Thompson, helps our students learn about the center and the students. Through reflection and patient attention, BPC students can learn to empathize more broadly with students whose school and life experience is very different from their own. Via students enjoy the companionship, energy, and creativity of their BPC visitors.

## Workshop in Eighth Grade

In this trimester-long workshop class, we will focus on mastering core skills for designing and building useful and durable projects. The course is intended to teach students how to:

- Design with empathy--understand end-users' needs
- Measure and cut
- Fasten and join
- Stay safe

Students practice planning, drafting, measuring, and cutting. The first project is a design challenge: planning and building a chair using joinery tools (self-drilling wood screws and glue). After this project is completed, students are invited to find a need in the community and design and build to meet that need.

Creative work within constraints is important training for engineering and designing for others builds empathy and appreciation of end-users' experiences. Ideally, working with wood and tools will be great fun and a foundation for a useful, lifelong skill for the students.

## Advisory and Socio-emotional Learning in Sixth, Seventh, and Eighth Grades

In the upper school at Black Pine Circle, social and emotional learning is woven into everyday school life. All faculty understand that they hold a dual role as teacher and mentor, and they recognize that many of the most valuable lessons and teachable moments occur both inside and outside of the classroom. Regular town hall meetings, advisory groups, and parent-student-teacher conferences bolster social and emotional touchpoints at BPC. Throughout its program, BPC is intentional in preparing students for the journey of middle school, a task that entails supporting students to be socially cognizant, self-aware individuals who understand the importance of goodness and knowledge, as highlighted in the school mission.

The advisory program is central to the teaching of social and emotional lessons and also serves as support for social and emotional issues. The upper school advisory program assigns a teacher to small groups of students wherein the role of the advisor is to develop a bond with the group and serve as mentor and advocate for the individual students. The advisory groups meet twice a week and come together in upper school-wide town hall meetings as well. Topics in advisory this year will include: healthy body image, conflict resolution, refusal skills, bully-proofing, Internet safety, cultural competency, humor (impact versus intent), managing stress, relational aggression, and growth versus fixed mindset. Gathering in a circle, in a group of peers and a trusted adult, listening and speaking from their hearts, our students deepen both their emotional intelligence and sense of fun.

### **Sixth Grade Advisory**

Sixth grade advisory focuses on beginnings and helps students transition to middle school. Identity and diversity are explored as students get to know themselves and others through small group and large group activities. Understanding how the BPC upper school works and exploring how one can develop effective social skills and executive function skills is central to this year.

### **Seventh Grade Advisory**

Seventh grade advisory focuses on growth and complexity and investigates what intellectual and social growth each student wishes to strive for. Relationships, understanding the perspective of others and navigating friendships, competition, and emotion are examined this year.

### **Eighth Grade Advisory**

Eighth grade advisory focuses on leadership and challenges each student to understand how they think, feel, and behave. Students begin the process of preparing themselves and underlining the strengths that they are taking with them to high school.