

Birchland Park Summer 2020 Packet



With an unprecedented 2019-2020 school year behind us, it is more important than ever for students to keep their academic skills sharp over the summer to be ready for the start of the 2020-2021 school year.

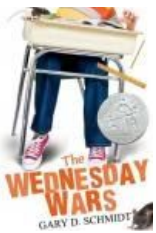
With that in mind, BPMS is expanding our usual summer reading program to include an entire catalog of academic activities to help keep your student sharp while they are away from school. In addition to choosing one novel for their **required summer reading**, this packet will outline a number of fun optional activities in math and science that your child can explore to keep their minds active and engaged this summer!

Birchland Park Summer Reading 2020

Students at Birchland Park will be exploring the topic of dealing with conflicts with this year's summer reading selections. Through a variety of genres, they will discover the beauty of diversity and being oneself despite the circumstances. Students must choose at least **ONE** book from the following list and be prepared to take a quiz on that book in September.

Parents can purchase any of these books from their favorite bookstore or online source. They are also available on Nook, Kindle, or Audible. In addition, you can borrow them from the public library.

Parents, please be advised of the parental notes attached to some of the selections before purchasing that novel for your child. Books marked with an (*) denote easier reads. For further information about most titles, go to <https://www.commonsemmedia.org/book-reviews>. This is a great resource for learning exactly what content and issues are presented in the book.



The Wednesday Wars by Gary Schmidt (Historical/Realistic Fiction) ***Newbery Honor Winner*** Holling is sure Mrs. Baker hates him. At first Mrs. Baker just has Holling clean erasers, but then decides to make better use of the time by introducing him to Shakespeare. As events in the larger world during the 1967-68 school year unfold in the background, Holling begins to learn about himself, his family, friends, and the mysterious adult world.



Goodbye Stranger by Rebecca Stead: (Realistic Fiction) Best friends Bridge, Tabitha, and Emily once swore upon a Twinkie that they'd never fight -- but seventh grade is testing that vow.

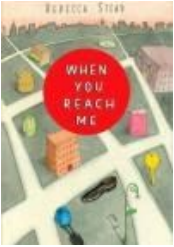


Fish in a Tree by Lynda Mullaly Hunt (Realistic Fiction) ***Schneider Family Book Award Winner*** Ally has always been good at drawing, but she has a secret: She never quite learned how to read. Instead, she came up with a series of clever stalls and distractions to get out of it. But now, she has a new teacher, Mr. Daniels, more attentive than most.



The Thing About Jellyfish by Ali Benjamin (Realistic Fiction) Just before the start of seventh grade, Suzy Swanson learns that her best friend has drowned.. Suzy feels terrible about the way things were left between them, and she

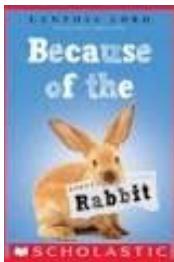
needs to find out how and why Franny died so she won't feel like the villain of Franny's life anymore.



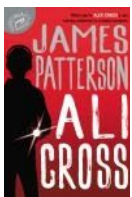
When You Reach Me by Rebecca Stead (Science Fiction) **Newbery Medal Winner**
Twelve-year-old Miranda has enough to worry about, but now Miranda is getting creepy hidden notes that tell her to write down the story of what happens to her -- but not inform anyone. It will take a tragedy to show Miranda that neither the notes nor her friendships are quite what she imagined.



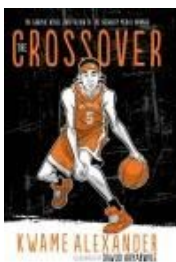
Stella by Starlight by Sharon Draper (Historical Fiction) It's 1932 in the segregated South -- Bumblebee, North Carolina, to be exact, where 11-year-old Stella is growing up poor, smart, and African-American in a loving family. Life is mostly peaceful, but deadly violence is only as far away as the next Klan rally, when the local bigots decide that Bumblebee's black people need scaring. In this constantly oppressive climate, the adults of Stella's community struggle and sacrifice to give their kids a better future, often accepting shockingly bad treatment to keep the peace and their jobs. (*Warning- book contains realistic depictions of racial tensions*)



***Because of the Rabbit** by Cynthia Lord (Realistic Fiction). Emma convinces her father to bring home a bunny for the night. On the first day of school, she's paired with a boy named Jack for a project. He can't stay on topic, he speaks out of turn, and he's obsessed with animals. Jack doesn't fit in, and Emma's worried he'll make her stand out. Emma and Jack bond over her rescue rabbit. Will their new friendship keep Emma from finding the new best friend she's meant to have?



Ali Cross by James Patterson (Mystery) ALI CROSS is the youngest son of Alex Cross, the African American detective hero of James Patterson's best-selling adult mystery series, set in Washington, D.C. Ali's determined to follow in his father's footsteps. When Gabriel, one of his middle school classmates, goes missing instead of showing up for their regular online game, Ali's determined to find him and bring him back.



Crossover by Kwame Alexander (Sports/Graphic Novel) As THE CROSSOVER: THE GRAPHIC NOVEL begins, African American basketball players Josh and Jordan Bell are looking forward to a championship season on their junior high basketball team. Josh is totally committed, but his twin brother Jordan seems distracted by his new girlfriend.



Serafina and the Twisted Staff (Serafina Book 2) by Robert Beatty (Fantasy)
SERAFINA AND THE TWISTED STAFF picks up three weeks after the death of the man in the black cloak. During her nighttime rambles, Serafina notices that many animals are leaving the forest surrounding the Biltmore estate where she lives. A terrible evil is on the way and may in fact already be working its way inside the Biltmore mansion itself.

Help your child continue to build math skills over the summer.

- Your child can continue to use **iReady** over the summer. They should login through **Clever**.
- If your child has had access to **ST Math**, they can continue to use this program. They should log in through **Clever**.
- Visit [Jo Boaler's Youcubed.org](https://www.jo-boaler.com/youcubed.org) to find parent and student resources and lots of activities. Some examples are linked below.
 1. Visit [Jo Boaler's Youcubed.org mindset videos](https://www.jo-boaler.com/youcubed.org/mindset-videos) and begin to understand how your brain works and recognize that all students can learn math.
 2. Try these art/math activities from [youcubed.org math and art](https://www.youcubed.org/math-and-art)
 3. Play some games at [youcubed.org](https://www.youcubed.org)

- Try participating in the **Quantile Summer Math Challenge**

Help your child practice math skills taught in grades 1-8 with this free program! The **Quantile® Summer Math Challenge** is a six-week program full of daily activities that are designed to help prevent summer learning loss. The typical student loses approximately 2.6 months of grade-level equivalency in math skills over the summer months each year.*

For 2020, the Challenge is open for spring and summer to support students who are learning at home. Practice math with fun learning activities and resources that are aligned to your child's grade and ability level. Resources are from the most trusted content developers like Khan Academy, ABCya, IXL Learning and more.

How It Works

Register your child at hub.lexile.com/smc. Then your child can access math learning activities on weekly topics that are aligned with state math standards. Celebrate with weekly badges and share a certificate with your child's teacher when they complete the program!

For more information, use the link below to download the flyer.

[Quantile Summer Math Challenge Flyer](#)

- Quantile also offers a **Math at Home** option. **Quantile® Math@Home** is a website full of free tools and family-friendly activities to support your child's mathematics learning.

To Use Math@Home

Enter your child's state, grade and Quantile measure to gain unlimited, free access to a growing number of fun and engaging resources like websites, worksheets and videos. If your child doesn't have a Quantile measure, you can still access the entire site. You can search for resources based on your child's grade, subject matter and comfort level in math.

- Participate in **The Math Contest**
[The Math Contest!](#)



How It Works

In order to submit an answer to a problem, you must [register](#) an account.

You can earn daily & weekly points that are added to your monthly and annual totals. You can also join a [custom leaderboard](#) to leverage the power in numbers and compete against other groups!

Custom Leaderboards

[Use the following code to join the Birchland Park leaderboard: bvlks](#)

Win a Prize!

Correctly answering problems will enter you for a chance to win a prize from The Math Contest and ClassPad!

Try some **Real Life Applications**

- US Census Bureau: Kids can learn about the upcoming 2020 Census and how census data is collected and used.
 1. [Congressional Apportionment](#): suggested for grades 7-9
 2. [City Planning with Data](#): suggested for grades 5-6
- [Yummy Math](#)
- [American Mathematical Society](#): Mathematical Moments
Discover the World of Mathematics
Mathematical Moments are 8.5" x 11" pdfs, available on many different topics in science, nature, technology, and human culture. Some have been translated into other languages, and some **feature podcast interviews** with experts in the field.
- [PBS Learning](#): K-8 Mathematics ranges from counting cardinal numbers to linear equations and functions. Students can review the calculation of area using a Cyberchase video, continue on to find the area of combined shapes using a Math Active interactive lesson, and can be assessed on their understanding using Khan Academy. Similar units can be created on topics such as lines and angles, probability models, and the multiplication and division of fractions.

For Additional Math Practice or Enrichment

- Watch some videos at [Math TV](#): MathTV has been described as the Netflix of online learning. This website is home to 10,000 free math videos covering topics such as algebra, geometry, trigonometry, and calculus. However, their “Basic Math” topic will be most relevant for middle school students.
- [Mathigon.org](#) provides active learning where students can explore using a unique content format that makes learning more interactive than ever before. Students can explore, discover, and actively engage in problem solving and creativity.
- [NRICH interactive math games](#): This is our collection of games specially chosen for use in the computer room or on the whiteboard. Each explores a strategic or mathematical theme; they will work well as teacher-led class activities but are also suitable for students to play directly, as they can all be played by individuals against the computer and none require direct teacher mediation. As with all of our games, players should be armed with a pen and paper to help to plan their strategies and record their findings as they play.
- [Math-Play](#): Check out the exciting games on this website and have fun practicing your math skills.
- [Prodigy Game](#): Prodigy is a **free** math platform used by more than 3.5 million teachers and parents — and loved by 50 million students around the world. With 1,500+ math skills, it offers curriculum-aligned content from every math strand and covers 1st to 8th grade.
- [Khan Academy](#): In 2008, Salman Khan created Khan Academy, a non-profit educational organization whose mission is to provide free world-class education for everyone. Most people visit this website for one-off videos.
- [IXL.com](#): Gain fluency and confidence in math! IXL helps students master essential skills at their own pace through fun and interactive questions, built in support, and motivating awards.

Play Some Games Together

The following list of games, excerpted from *Games and Their Uses in Mathematics Learning* (Sharma, 2008), will help your child sharpen thinking skills, make inferences, draw conclusions, evaluate answers and strengthen reasoning. Beside each title are the skills and concepts which are reinforced.

- **Battleship** (spatial orientation, visualization, visual memory)
- **Cribbage** (number relationships, patterns, visual clusters)
- **Quarto** (spatial orientation/space organization, patterns, classification)
- **Chinese Checkers** (patterns, spatial orientation/space organization)
- **Pachisi** (sequencing, patterns, number relationships)
- **Checkers** (sequencing, patterns, spatial orientation/space organization)
- **Othello** (pattern recognition, spatial orientation, visual clustering, focus on more than one aspect, variable or concept of time)
- **Score Four** or **Connect Four** (pattern recognition, spatial orientation, visual clustering, geometric patterns)
- **Qubic** (pattern recognition, spatial orientation, visualization, geometrical patterns)
- **Krypto** (number sense, basic arithmetical facts)
- **Kalah** or **Mankalah** (sequencing, counting, estimation, visual clustering)
- **Master Mind** (sequencing, logical deduction, pattern recognition)
- **Four Sight** (spatial orientation, pattern recognition, logical deduction)
- **Card Games** (visual clustering, pattern recognition, number facts)
- **Dominos** (visual clustering, pattern recognition, number facts)
- **Hex** (pattern recognition)
- **Stratego** (spatial recognition, logical deduction, graphing)

Some Additional Favorites

- **Blockus**
- **Quirkle**
- **Prime Climb**
- **Set**
- **Chess**
- **Tangoes**
- **99 or Bust** (play with a regular deck of cards or purchase a special deck)
- **Rush Hour**
- **Sudoku puzzles**
- **KenKen puzzles**

Nurturing Curiosity this Summer

YouTube Channels that Channel our inner explorer:



Explorer Classroom

175 videos • 8,411 views • Last updated on May 8, 2020



Join us for live video events every weekday at 2:00 p.m. EDT! Events are free and open to the public. Register at <http://www.natgeoed.org/explorerclass...> for a chance at one of six on-camera spots to ask Explorers your questions face to face!

National Geographic Explorer Classroom [Explorer Classroom](#)

This YouTube Channel hosts a live Q & A session with National Geographic Explorers every day at 2 P.M. Subscribe to the channel and you'll get a reminder that tells you who will be on. If you miss the live broadcast, you can always watch the recorded version.

The link above takes you to the playlist of recorded sessions.

Exploring by the Seat of my Pants

Website:

<http://www.exploringbytheseat.com/>

The website has the schedule of the live programs that kids can watch and ask questions of scientists and other explorers from all over the world. They also have live daily broadcasts from different zoos. These daily broadcasts are also recorded. Type in "Exploring by the seat of my pants" into the YouTube search box and click on the icon that looks like this :

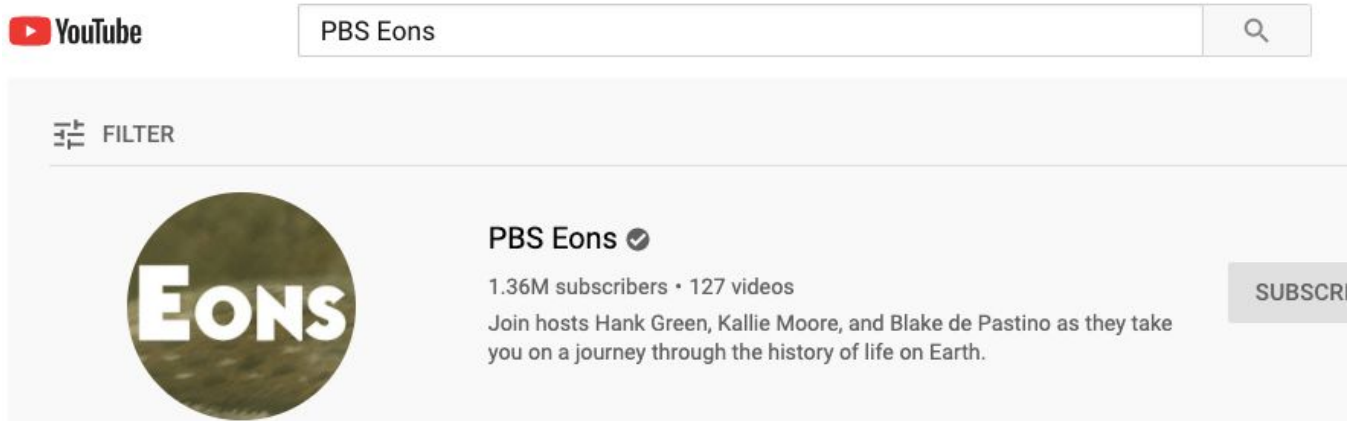


Exploring By The Seat Of Your Pants

6.17K subscribers

PBS Eons

This series of videos takes you through the history of Earth. It's great for kids (and adults) interested in dinosaurs!



Virtual Explorations

We may not be able to visit museums and other sites, but you can still visit them online:

Museum of Science, Boston

<https://www.mos.org/mos-at-home>

The Museum of Science has a daily schedule of live events that you can check out!

Framingham State University Christa McAuliffe Center

<https://cm-center.org/dometohome/overview>

They have a series called "AstroNights" which are virtual planetarium shows. They also have some films that can be streamed live.

Smithsonian National Museum of Natural History

<https://naturalhistory.si.edu/visit/virtual-tour>

They have a list of virtual tours you can take to explore the museum. These other Smithsonian museums have virtual tours as well;

Smithsonian National Museum of American History

<https://americanhistory.si.edu/exhibitions/online>

National Aquarium in Washington, DC

<http://samuraivirtualtours.com/example/nadc/index.html>

360 Pictures of different places

<https://www.360cities.net/>

If you have VR glasses you can use the VR view to make this a REALLY cool experience.

The Nature Conservancy

<https://www.nature.org/en-us/about-us/who-we-are/how-we-work/youth-engagement/nature-lab/>

Offers 11 virtual field trips with information guides.

Google Expeditions

The Google Expeditions App lets you go on virtual expeditions on your phone. Available for iOS and Android.

Live Zoo Webcams

Georgia Aquarium Ocean Voyager Webcam

<https://www.georgiaaquarium.org/webcam/ocean-voyager/>

San Diego Zoo Live Webcams

<https://kids.sandiegozoo.org/videos>

New England Aquarium

<https://www.neaq.org/visit/at-home-events-and-activities/>

JK Rowling's Fans

<https://www.theickabog.com/home/>

JK Rowling is releasing chapters of a new fairytale daily (it started on May 26) and there's a competition to create illustrations for the book, which will be published in November. Make sure you read the intro from JK Rowling and continue to find the following:

- To read the story from the beginning, click "Read the Story". The latest chapters appear first, but if you scroll to the very bottom of the page, you can start from the beginning.
- To learn more about the illustration competition, click "The Ickabog Illustration Competition".

Hands-on online

Learn to program a robot with VEXcode

<https://www.vexrobotics.com/vexiq/products/vexcode>

Coding

<https://www.tynker.com/>

Interactive Science simulations

PhET Simulations from Colorado State University

<https://phet.colorado.edu/>

PBS LearningMedia

Offers a whole bunch of videos, interactives, and full-length videos (Like NOVA) for free!

<https://mass.pbslearningmedia.org/>

Students can sign up for free...in fact, some teachers already use this site so your student may already have a sign-on. Some to try:

- Polar Lab:
<https://mass.pbslearningmedia.org/resource/nvpl-sci-polarlab/polar-lab-game/>
- Cyber Security Lab Game:
<https://mass.pbslearningmedia.org/resource/nvcy-sci-cyberlab/nova-cybersecurity-lab/>
- Sun Lab:
<https://mass.pbslearningmedia.org/resource/nvsl.sci.int.sun/sun-lab-interactive/>
- Making North America. As a bonus, you have access to the full 3-hour documentary:
<https://mass.pbslearningmedia.org/resource/nvmn-sci-interactivemap/wgbh-nova-making-north-america-interactive-map/>
- RNA Lab (may be good for review of genetics for 8th graders)
<https://mass.pbslearningmedia.org/collection/rna-lab/>

To do outside (Please make sure you're following proper safety guidelines as you explore):

- Visit the Dinosaur tracks in Holyoke:
<http://www.thetrustees.org/places-to-visit/pioneer-valley/dinosaur-footprints.htm>
!
- Then explore the geology of the Pioneer Valley:
<https://dinotracksdiscovery.org/special/feature/>, part of the Pocumtuck Valley

Memorial Association's online offerings. If you're interested in the history of the Valley, visit that website here: <http://www.memorialhall.mass.edu/>

- Once museums open, visit the Beneski Museum at Amherst College to see their dinosaur exhibit and look at the dinosaur tracks talked about in the presentation.
- Read "Letting Swift River Go" by Jen Yolen then visit Quabbin Reservoir or hike part of the Swift River at <https://www.alltrails.com/explore/trail/us/massachusetts/swift-river?mobileMap=false&ref=sidebar-view-full-map>
- Look up the history of the East Longmeadow quarries and take a hike to visit them. Take a picture and take a piece of rock. To start, here's a video made by two former BPMS Students, Bri Hannigan and Angelina Carando: https://youtu.be/Ks0ay2U7r_o
- Then hike to Goat Rock in Hampden and take a picture and a sample. Compare the rock there to the rock from the East Longmeadow quarries...what's the difference?
<https://www.alltrails.com/trail/us/massachusetts/goat-rock-trail>
- Explore the stream that starts at the Meadow Brook parking lot...where does it go?