“Charlie Numbers and the Man in the Moon”
2018 Summer Reading Reader’s Guide

Name: ___________________________

Boston Public Schools 2018
Generously sponsored by Vertex Pharmaceuticals, Inc.
Dear Reader:

“WOW! I can’t tell you how much I enjoyed reading the book! I totally didn’t expect it to end the way it did. I couldn’t stop reading it! I can definitely see this being an animated movie someday!”

- Daniel Miller, Fox News

We hope that Summer Reading Together will engage you and your classmates in the same grade as you share the experience of reading and talking about the same book over the summer and at the beginning of the school year.

This reading guide has been put together by the Boston Public Schools, in collaboration with STEAM (science, technology, engineering, art, and math) experts from across Boston.

Vocabulary:

While reading we know you may encounter some new words. Some are scientific terms like **tensile**, which means capable of being stretched out. You may stumble over others as you read this novel. If it’s really confusing you could ask someone to explain the meaning of the word or you can Google the word. Listed below are a few words that you will encounter in Chapter One. We looked them up for you.

- Predicament: a difficult, unpleasant or embarrassing situation.
- Vertigo: feeling as if you are spinning when you are standing still.
- Inadvertently: accidentally
- Knack: a natural skill for completing a task.

Your Assignment:

This summer, read your text for about 20 minutes per session for about three to four times per week. As you read, consider the following:

<table>
<thead>
<tr>
<th>What do you think the author wants you to know? What is the author’s message?</th>
</tr>
</thead>
<tbody>
<tr>
<td>How did the author create humor; suspense; sadness, and so on? (provide examples)</td>
</tr>
<tr>
<td>Is the language in the text inviting and engaging? (provide examples)</td>
</tr>
<tr>
<td>What surprised you while reading?</td>
</tr>
<tr>
<td>How does the writing in this text compare with other fiction texts you read this year?</td>
</tr>
</tbody>
</table>

Remember to highlight, underline, or use Post-it notes to support writing in the margins of the text. Use this guide as a reading log and answer questions about the book. Share with someone in your home what you found interesting or confusing, and discuss why. In September, bring your text and this guide to school. Be prepared to share your thoughts about the text you read this summer.

Share your summer reading adventures with us on social media by posting pictures and using #CharlieNumbersBPS!
The Whiz Kids:

As you read this novel, you will see example after example of Charlie and his team using their talents – tools they are good at to make up their team. Charlie’s team has five members. As you are reading make notes about his team, identify their skills. What is unique about each of the characters? Use evidence from the text to support your answer.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Charlie</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Crystal</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Kentaro</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Jeremy</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Marion</strong></td>
<td></td>
</tr>
</tbody>
</table>
Reading Responses:

Chapter 1:
*What is the author’s message? What do you think the author wants you to know?* Use evidence from the text to support your answer. Write a three to four sentence response.

Chapter 4:
*In Chapter 4 Jeremy says he does not have a good feeling about this…Why did he say that?* Explain what you think and use evidence from the text to support your answer.

Chapter 7:
*What do you think the author wants you to know? What is the author’s message?* Use evidence from the text to support your answer.

Chapter 11:
*What do you think the author wants you to know? What is the author’s message?* Use evidence from the text to support your answer.

Chapter 19:
*What do you think the author wants you to know? What is the author’s message?* Use evidence from the text to support your answer.
Your Opinion Counts:

What is your opinion of the text? Please answer the questions below.

1. What surprised you while reading?

2. How did the author create humor; suspense; sadness, and so on? (Provide an example)

3. How did the language in the text engage you? (Provide an example)

4. Please select and share a favorite quote from the text and explain why it is your favorite.

5. How does the writing in this book compare with other fiction books you read this year?

6. What do you think is the theme of this book?
STEAM Team Questions | Thinking Beyond the Book

Please answer the following questions. These questions have been created by Boston industry experts.

A successful paper airplane requires all the scientific forces that work on it to be in perfect balance. What are the four scientific forces that Charlie and his team discover must be in balance for a successful flight? - Keith Lockhart

In Chapter 10, Charlie makes an important engineering discovery to help the plane fly better. What does he realize they need to change and how do they do it? - Susan Roberts

In the novel, Charlie’s hero is the astronaut Buzz Caldwell. He thinks he is “a true American hero.” Who is someone that inspires you? If you had the chance to meet him/her, what would you ask them? - Corey Thomas

Charlie has multiple moments in the book where he is incredibly nervous. The feeling of being nervous is controlled by your brain. When you feel nervous, many people feel funny in their stomach, might shake a bit, or might sweat. What causes you to feel this way? - Brian Nahed

Kelly wears a perfume that Charlie is able to smell. How do you think perfume works? Why can we smell it if someone is wearing it? - Vanessa Kerry
<table>
<thead>
<tr>
<th>Date</th>
<th>Pages Read</th>
<th>Observations, Comments, and/or Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parent Signature: _____________________________________________________
STEAM Team | Reading Guide Contributors:

We hope that you enjoy reading Charlie Numbers and the Man in the Moon! We are looking forward to sharing more ideas with you in the fall.

This reading guide has been created by the Boston Public Schools with help of STEAM (science, technology, engineering, art, and math) industry experts from across Boston. You will see their pictures next to the questions that they have contributed.

Joanne Chang - Math
An honors graduate of Harvard College with a degree in Applied Mathematics and Economics, Joanne left a career as a management consultant to enter the world of professional cooking. She is the chef and co-owner of Flour Bakery + Café, with seven locations in the Boston area, and Myers + Chang. She is the winner of the James Beard Award for Outstanding Baker, as well as the author of many books including: Flour: Spectacular Recipes from Boston’s Flour Bakery + Café. She is currently working on her fifth book, Pastry Love, All of My Favorite Recipes, which comes out in Fall 2019.

George Church - Science
Dr. George Church is a Professor at Harvard and MIT. He is widely recognized for his innovative contributions to reading, writing and editing genes and genomes. He also works on de-extinction, aging reversal and making neurons and organs for transplantation. He holds a Ph.D. in Biochemistry and Molecular Biology from Harvard University. He has co-authored 480 articles and one book (Regenesis). He was named one of Time Magazine’s 100 Most Influential People in 2017.

Vanessa Kerry - Science
Dr. Vanessa Kerry is the founder and CEO of Seed Global Health, a non-profit that invests in strengthening health care systems by training needed health professionals in resource-limited areas. Kerry has dedicated her work to train others and create a pipeline of doctors, nurses, and midwives for future generations. She stands as a physician at Massachusetts General Hospital and director in the Department of Global Health and Social Medicine at Harvard Medical School.

Keith Lockhart - Math
Keith Lockhart is an American conductor. He is currently the Conductor of the Boston Pops Orchestra, the artistic director of the Brevard Music Center (an educational institution in NC), and the chief guest conductor of the BBC Concert Orchestra in London. He is the second longest-tenure conductor in the history of the Boston Pops, starting his tenure there in 1995. Under his leadership, the Pops has participated in annual tours around the nation, conducted over 1,900 concerts, performed in high profile events like the 2008 NBA finals, Super Bowl XXXVI, 2013 Red Sox ring ceremony, and hosted the annually occurring July 4th Boston Pops Fireworks Spectacular.

Daniel Miller - Arts
Daniel Miller is an anchor for the Boston 25 Morning News. He joined Boston’s Fox affiliate in January of 2015. Before coming to Boston, he was a reporter and weekend anchor in Indianapolis, Indiana at WISH-TV. While there, he covered everything from breaking news to politics. Daniel had a passion for weather and chased storms on a regular basis in Indiana and built an expertise for covering severe weather. Daniel has received numerous awards and recognitions for his work and is a two-time Emmy award winner.

Brian Nahed - Science
Dr. Brian V. Nahed is a neurosurgeon who specializes in the surgical treatment of brain tumors and spinal disorders. He undergoes very difficult procedures working in the language and motor areas of the brain requiring patients be awake during the surgery. Dr. Nahed leads a research team at the Massachusetts General Hospital Cancer Center which first found evidence of brain tumor cells in the blood of patients. He is a faculty member at Harvard Medical School and also serves as a neurotrauma consultant for the National Football League.
Nicholas Negroponte - Technology
Nicholas Negroponte is an architect and computer scientist. A student in architectural design, Negroponte was a pioneer in the field of computer-aided design and recognized the integral role technology would play as a tool for creativity and progress. He was the founding director of the Massachusetts Institute of Technology (MIT) Media Laboratory. He also founded One Laptop per Child with the aim of providing laptop computers to children worldwide to promote “self-empowered learning™. An early investor in Wired Magazine, Negroponte contributed a monthly column there from 1993 - 1998. Those columns formed the basis for his 1995 bestseller, Being Digital.

Erin Robertson - Arts
Erin Robertson is a fashion designer, artist and Project Runway winner. In 2016, Erin made her transition into the cast of Project Runway season 15 and despite the heavy competition came out victorious. Erin went to the Massachusetts College of Art and Design, where she studied and received a BA in Fashion/Apparel Design and Fiber Art. A true advocate for sustainability, she holds interests in environmental and political issues, hoping to combine these disciplines with the arts. She currently works in collaboration with MIT, hoping to combine the arts and technology.

Susan Roberts - Engineering
Susan Roberts is Senior Director of Scientific Computing at Vertex Pharmaceuticals, Inc. She has over 17 years of experience in the biotech and pharmaceutical industry across many different disciplines including Connected Health, Scientific Computing and Medicinal Chemistry. She leads a team of software engineers and scientists who build custom software solutions, including data visualization and analysis, computational tools and scientific workflows. Susan has an MS in Chemistry and Biochemistry from Northern Illinois University, and a BS in Chemistry from Quincy University. She is committed to supporting STEM education, and supporting women and girls in science and technology fields.

David Sun Kong - Technology
David Sun Kong is a Synthetic Biologist regarded as a leader in the global community biology movement. He serves as the Director of the Massachusetts Institute of Technology Media Lab’s Community Biotechnology Initiative. David is also a musician, photographer, and community organizer. He is the founder of EMW, an art, technology, and community space in Cambridge, MA with the mission to empower communities and provide social justice through artistic expression.

Corey Thomas - Engineering
Corey E. Thomas is the president and CEO of Rapid7, a software company which develops security and information technology. He currently sits on the Massachusetts Cybersecurity Strategy Council and was elected to the Cyber Threat Alliance board of directors. Thomas received a B.E. in electrical engineering and computer science from Vanderbilt University and an MBA from Harvard Business School. Thomas has been on the forefront of leading multiple companies to successful product management and marketing.

Ting Wu - Science
Dr. Ting Wu is the director of the Wu Lab in the Department of Genetics at Harvard Medical School, specializing in chromosome behavior, gene regulation, and genome stability. Her laboratory also serves as the base for the Personal Genetics Education Project, which aims to increase public awareness of personal genetics. While a professor in the Department of Genetics at Harvard Medical School, Dr. Wu is also involved in teaching in high schools, contributing to online curricula and organizing conferences, and working with producers and writers in the entertainment industry.