Summer Work for Rising 8th Grade

Hello Rising 8th grade!

June, 2022

We've picked out a few learning experiences for you to explore during your summer days. These should help you keep your skills fresh and also help us to get to know each other better at the beginning of the school year. Here's a checklist to help you track your progress as you work....

<u>CHECKLIST - (instructions for each step are below)</u>

1. I completed my math IXL practice for all the skills listed.
2. I read at least two books of my own choice.
3. I made a project (from the ideas given) for one of the books I chose.
4. I wrote a letter to my 8th grade teachers and I emailed or "snail-mailed" it to Kiri.
5. (For new students) I did some Spanish Duolingo practice.
6. (Optional) I read a science book and emailed John about it.

Please feel welcome to contact Kiri (kharris@greenestreetfriends.org) if you have any questions at all. We hope that you enjoy your summer!

MATH

To practice with some key math skills this summer, we'll do some practice using IXL. Pro tips: 1) do one or two skills a day now and then, instead of trying to do them all at once. 2) When you get an answer wrong, take a minute to look and see what happened – mistakes teach us a lot.

To get started on your home computer, please follow these easy steps:

- 1. Go to www.IXL.com
- 2. Enter your username and password in the upper right corner and sign in.
- 3. If you are a new student or forgot your username or password, email Kiri (kharris@greenestreetfriends.org) to get your sign in information.
- 4. Click on **Math** and select **7th grade**. Over the summer you'll review **7th grade skills** to stay fresh for 8th grade. You'll work on problems in the categories below.
- 5. Your assignment is to get to **70 Smartscore points** on the IXL skills listed below.

If you are using a tablet or smartphone, simply download the free IXL app and log in!

Grade level 7 skills to complete:

A (Number Theory)- A.5, A.6	H (Rational Numbers)- H.1, H.7		
B (Integers) - B.6	I (Exponents and Square Roots)- I.2		
C (Operations with Integers)- C.4, C.9, C.16	J (Ratios, Rates, and Proportions)- J.13		
D (Decimals)- D.1, D.4	L (Percents)- L.6		
E (Operations with Decimals)- E.3	P (Coordinate Plane)- P.1		
G (Operations with Fractions)- G.3	R (Expressions and Properties)- R.11, R.16		

READING

We hope you will read a ton of books this summer! Even if you don't love to read, we hope you will challenge yourself to read more than usual, because it really helps to build your understanding. If you'd like help finding a book you'll enjoy, please reach out to Kiri (our MS Learning Specialist, at kharris@greenestreetfriends.org). It's also great if you want to read graphic novels and/or listen to audio books!

- 1. Over this summer, please **read at least two books of your choic**e for school. There is a short suggestion list below, but you may choose any book for your general age group, even if it's not on this list.
- 2. Then, you will **complete one project from the ideas below**. When you finish, please share it with Cherine, your English teacher (<u>cmorsi@greenestreetfriends.org</u>) and/or bring your project with you on the first day of school.

Project Ideas (choose one to do on one of your books)

- An <u>illustration with captions</u> showing a scene, character, or theme in the book (poster, painting, drawing, collage, cartoon, etc.)
- A <u>written description</u> describing a scene, character or theme in the book (essay, poem, journal, letter, etc.)
- A <u>3-D (three dimensional) project</u> with captions showing a scene, character or theme in the book (model, sculpture, mobile, etc.)
- A <u>graphic organizer</u> showing a scene, character or theme in the book (chart, graph, table, web, map, etc.)
- A playlist or original song connecting to scenes, characters or themes in the book
- Your own creative idea showing a scene(s), character(s) or theme(s) in the book

Book Ideas

Here are some 8th grade book lists we like! These offer good suggestions with descriptions, just as possible ideas. Students may choose any books, even if not on these lists. If your student would like help choosing a book to read, feel welcome to reach out to Kiri (kharris@greenestreetfriends.org).

Book List #1: Read to Lead 2022 Top Summer Reading List for 8th grade
Book List #2: WeAreTeachers 50 Relatable and Refreshing Books to Teach in Middle School

Because they look so great, I'm ordering some of these books to have handy, so please let me know if there is a book from these lists that your student would like to borrow during the summer. Also, many titles are available in neighborhood libraries, or can be reserved there.

WRITING

Write a one-page letter (*either* on paper or in an email) to your team of teachers so we can get to know you. Your greeting can simply be "To my teachers." Send your letter *either* by snail mail or email to Kiri, our MS Learning Specialist, who will share them with your teachers..

Kiri's email address for email letters is: kharris@greenestreetfriends.org
Kiri's mailing address for paper letters is: 1230 Edge Hill Road, Abington, PA 19001

In your one-page letter, please include three paragraphs using this outline:

- **Paragraph 1**: What are some things you love to do outside of school? Why do you enjoy them? What activities or hobbies are fun for you and why? How did you get started? Share details and examples with us so we can get to know you..
- **Paragraph 2**: What are some things you notice about yourself as a learner? What gets you interested in learning? What helps you learn? Do you ask for help? What's challenging for you and why? Share an example of a learning experience that went really well for you, or one that went really poorly, and why you think it did.
- **Paragraph 3**: What are some things you hope and wonder for this coming year? What are your questions about your classes, activities, clubs, teachers, spaces, recess, lunch, or anything else you're curious about? What do you hope the year will be like in terms of friendships, experiences, and learning for you and others?
- Be sure to add anything else at all you want to add, and then sign your letter.

SPANISH

This assignment is for new students. We encourage those who are new to Spanish to practice using duolingo as it will give you some Spanish experience before the academic year. Returning students are also welcome to practice!

New Students: Duolingo

- 1. Create a Duolingo account by clicking the above link.
- 2. Use your GSFS email account, or create a username which is your first name, last initial 2024 (for example, "KiriH2024" for Kiri) Make your password: gsfs2024
- 3. Take a placement test to test out of the skills you already know!
- 4. And have fun practicing! Try doing 10-15 minute sessions a few days in a row, a couple weeks over the summer.

SCIENCE: OPTIONAL (but encouraged) SUMMER READING

Hi Eighth Graders,

I want to start with a key point about science summer work--there is no mandatory science summer work. That said, the books below are all outstanding books that either review topics from seventh grade and/or cover the topics that we will be studying in eighth grade. I encourage you to read at least one of them because a) they are all really interesting/good books and b) each will provide a bit of background knowledge that may help you feel more prepared as we get into various topics in science this year. Again, this is not mandatory (or graded, or extra credit, or anything like that), but I think if you choose one of these books, you will not regret it because you will both enjoy it and learn something from it. Can you read more than one? Of course! If you do choose to read one, please write me an email (jdeininger@greenestreetfriends.org) and let me know what you thought.

If You Want Books Helpful for Eighth Grade:

Chemistry:

- The Ever-Changing Atom, by Roy Gallant
 - Looks at the history of the atomic theory, which we will cover in depth during the year
- A Short History of Nearly Everything, by Bill Bryson
 - Valuable for its information about astrophysics but also the atomic theory and quantum mechanics
- *Uncertainty*, by David Lindley
 - A very *high-level* book about the history of quantum mechanics and the idea that everything at the smallest scale is very unlike matter at a normal scale
- *The Disappearing Spoon*, by Sam Kean
 - An engaging history of the elements of the periodic table

Motion/Physics:

- Insultingly Stupid Movie Physics, or The Physics of Superheroes (or the Science of Superheroes), or The Science of Harry Potter, or The Science of Star Wars
 - All interesting books that connect great fictional worlds to real physical principles we will study, at the same time considering how realistic each phenomenon is
- Einstein's Dreams, by Alan Lightman
 - A fictional book about different ways that time can operate, expanding our mind to the possibilities of time that will prove helpful in studying relativity

The Universe/Astrophysics:

• *A Short History of Nearly Everything*, by Bill Bryson

- A brief overview of not just what we know about the universe from the largest galaxies to the smallest sub-atomic particles but also *how* we know it
- Astrophysics for People in a Hurry, by Neil deGrasse Tyson
 - An accessible overview that touches on many topics we will cover this year
- Cosmic Queries, by Neil deGrasse Tyson
 - An accessible question and answer book based on the Startalk podcast
- *Cosmos*, by Carl Sagan
 - o A broad, beautifully-written overview of what we know about the universe

General Scientific Knowledge:

- What If, by Randall Monroe
 - Using science to answer ridiculous questions, from the creator of the XKCD comic
- Thing Explainer, by Randall Monroe
 - A perhaps more relevant follow-up to What If

If You Want To Investigate More from Your Favorite Topics of Seventh Grade:

Climate Change:

- How To Avoid a Climate Disaster, by Bill Gates
 - An evidence-based approach to looking not only at the evidence for climate change but the most realistic and effective steps we can take to avoid the worst of it

The Human Body/Evolution:

- The Body: A Guide for Occupants, by Bill Bryson
 - Interesting stories of the human body
- *Sapiens*, by Yuval Noah Harari
 - o Why and how humans evolved and other, similar species went extinct
- Evolution Gone Wrong, by Alex Bezzerides
 - A look at what imperfections in the human body can teach about evolution
- The Immortal Life of Henrietta Lacks, by Rebecca Skloot
 - A fascinating true story about the origin of the cells that have played a key role in modern medicine and also how racism and white supremacy have pervaded the medical profession

The Brain/Cognition:

- The Man Who Mistook His Wife for a Hat, by Oliver Sacks
 - Fascinating stories about real neuropsychology (specific brain damage) patients and their deficits
- Blink, by Malcolm Gladwell
 - Many anecdotes about the power of subconscious processing
- Thinking Fast and Slow, by Daniel Kahneman
 - An investigation of the irrational ways that people make decisions