

## 7th Grade School Supply List for STEM 2024-2025 school year!

Red is the 7th grade color.

### 7th Grade - General Supplies

Pens: blue and black ink

Highlighters

Mechanical pencils (.9) with extra led

Sticky Notes

Eraser tops - or eraser bar

Handheld sharpener

College ruled notebook paper

Crayola twistable colored pencils

glue sticks

1 Red folder (parent communication folder)

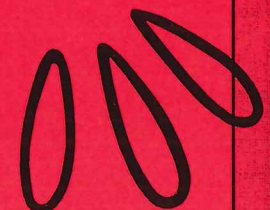
Language Arts - 1 Red folder - two pickets with 3 prongs

Social Studies - 1 red folder - two pockets with 3 prongs

Technology - 1 Red composition book - 100 pages

Math - 1 Red three subject spiral notebook, TI-30Xa Calculator

Science - 1 Red three subject spiral notebook, 1 Red folder 2 pockets/3 prongs





# Meet the teacher



## Mrs. Waller

STEM LANGUAGE ARTS

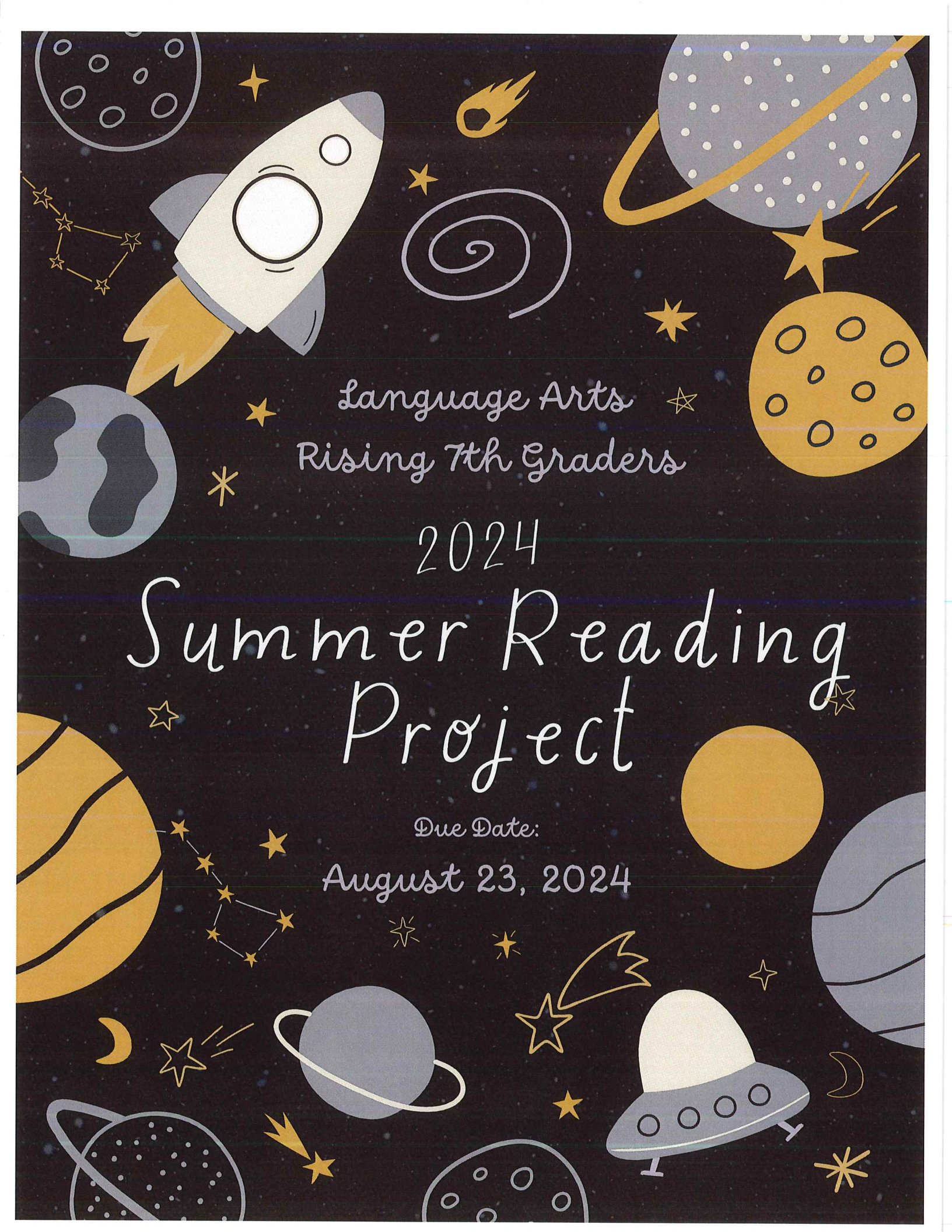
HI! MY NAME IS MRS. WALLER, AND I AM SO EXCITED TO BE A PART OF THE MADISON MIDDLE SCHOOL STEM TEAM! MORE IMPORTANTLY, I AM THRILLED TO BE YOUR LANGUAGE ARTS TEACHER FOR THE SCHOOL YEAR!

THIS WILL BE MY 22ND YEAR TEACHING. I WAS RAISED ON THE EAST COAST OF FLORIDA IN COCOA BEACH NEAR KENNEDY SPACE CENTER. WHEN I GRADUATED FROM HIGH SCHOOL, I CAME TO TAMPA TO ATTEND THE UNIVERSITY OF TAMPA... GO SPARTANS! I HAVE A BACHELOR'S DEGREE IN PSYCHOLOGY AND A MASTER'S DEGREE IN EDUCATION.

I CAN'T WAIT TO SEE WHAT THE NEW SCHOOL YEAR HAS IN STORE FOR US.

A FUN FACT ABOUT ME IS THAT I LOVE MINT CHOCOLATE ANYTHING!



The background is a dark navy blue space scene. It features various celestial bodies: a large yellow planet with black rings in the top right, a grey planet with white spots in the top left, a yellow planet with black spots in the middle right, a grey planet with black spots in the middle left, a yellow planet with black stripes in the bottom left, and a grey planet with black stripes in the bottom right. There are also several yellow stars of different sizes, a yellow comet with a long tail, a yellow spiral nebula, and a yellow crescent moon. A white rocket with a yellow flame is in the top left, and a grey UFO with a white dome is in the bottom right.

Language Arts ☆  
Rising 7th Graders

2024

# Summer Reading Project ☆

Due Date:  
August 23, 2024



# 2 Books...1 Project

## OBJECTIVE

All 7th Grade STEM students must read the novel **“Stargirl” by Jerry Spinelli** and one other SSYRA book of their choosing, then complete a project for ONE of the books.

## REQUIRED BOOK



Stargirl is a young adult fiction novel published in 2000 by the American author Jerry Spinelli. In a coming of age narrative, shy eleventh-grader Leo falls in love with Stargirl, a free-spirited newcomer at Mica High. When his fellow students turn against Stargirl—and Leo—he pressures her to become ordinary like everyone else.

## PROJECT CHOICES

### 1. A Timeline - A visual reference

Create a timeline of the main events in the book. Include the important and meaningful events and be sure to **introduce all main characters**. Include artwork to help illustrate the main events. Do not include the last chapter on the timeline so as not to give away the ending. Instead, end the timeline with a stimulating question to utilize the skill of predicting outcomes. This is a project, so be sure to present a neat and clean timeline. Your project can be completed on paper or you can present it digitally using PowerPoint, Word, Publisher, or another format of your choosing. See examples on the next page.

### 2. Diorama - Let the viewer “see” your scene!

Create a three dimensional representation of the book. The detailed diorama must depict an important scene from the book. you must turn in a typed paragraph describing he scene. Be sure to include an explanation as to why you chose this scene. Please include your name on the paper and on the Diorama. **Do not attach the paragraph to the project.** See examples on the next page.

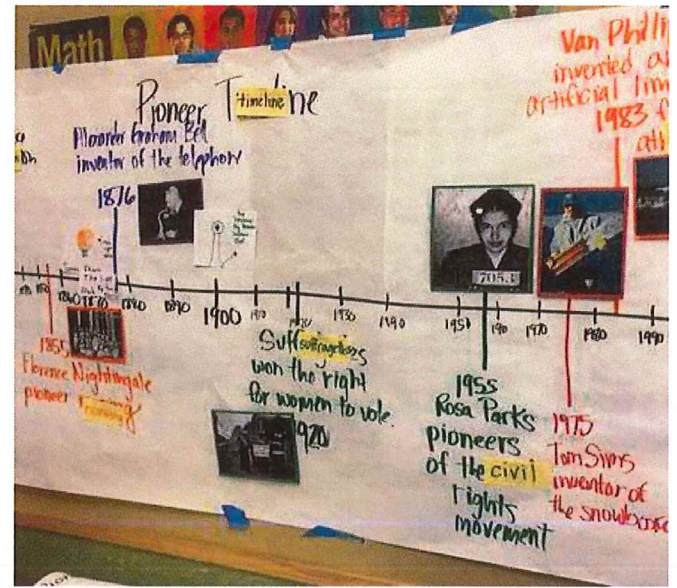
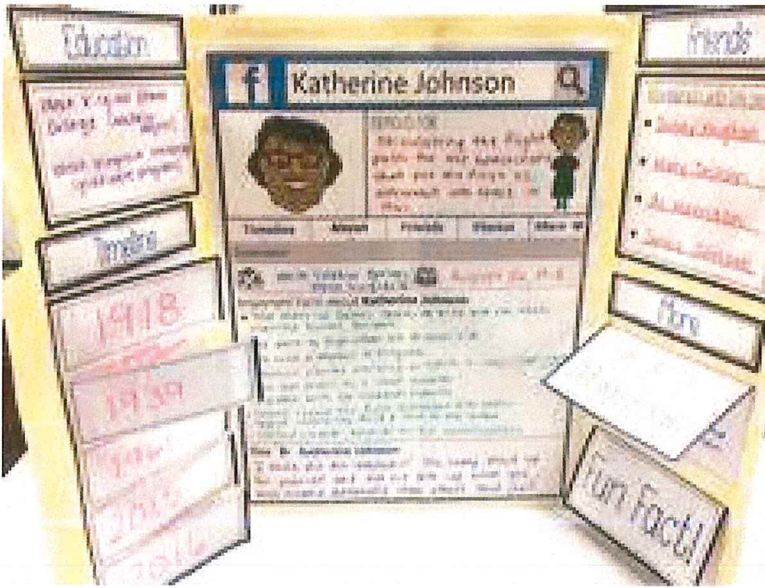
### 3. A Movie Poster - Coming soon to a theater near you!

Create a movie poster for your book. Be sure to view a variety of movie posters prior to creating your poster. You need to introduce your book and entice the viewer to read it! Use only copyright friendly images if you are printing from the internet. This is a project, so be sure to present a neat and clean poster. You can present your project on a large poster board, or you can create a digital poster using Publisher, Word, or another format of your choosing. See examples on the next page.

**Be creative and have fun with your project!**  
**Your project is due to Mrs. Waller by Friday, August 23rd.**

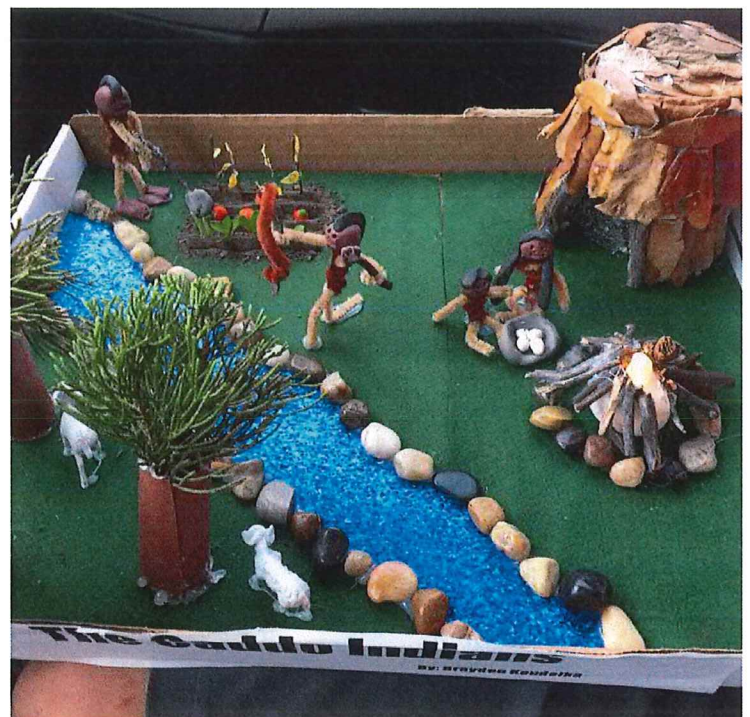
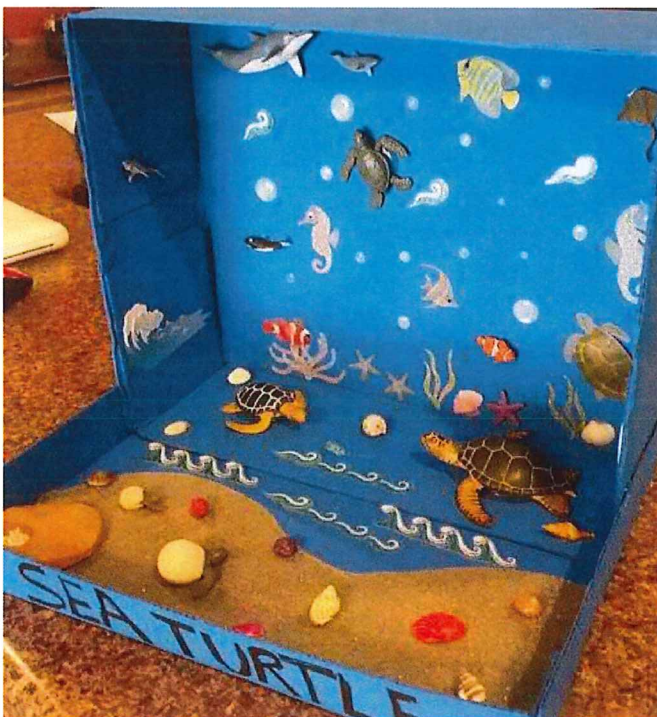


## Timeline Examples



This is a good example of a timeline. The introduction/descriptions of the characters are on the back of the timeline. You may have more major events on your timeline.

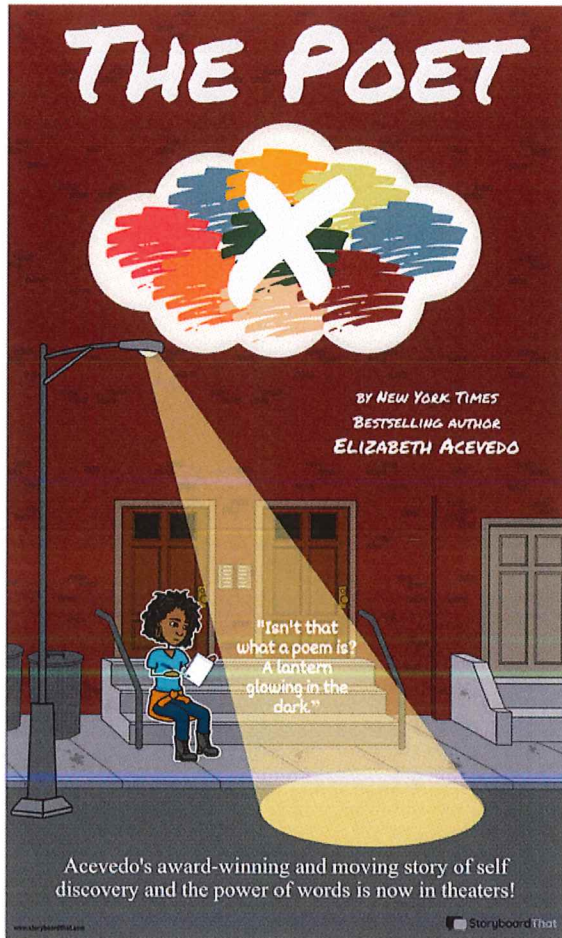
## Diorama Examples



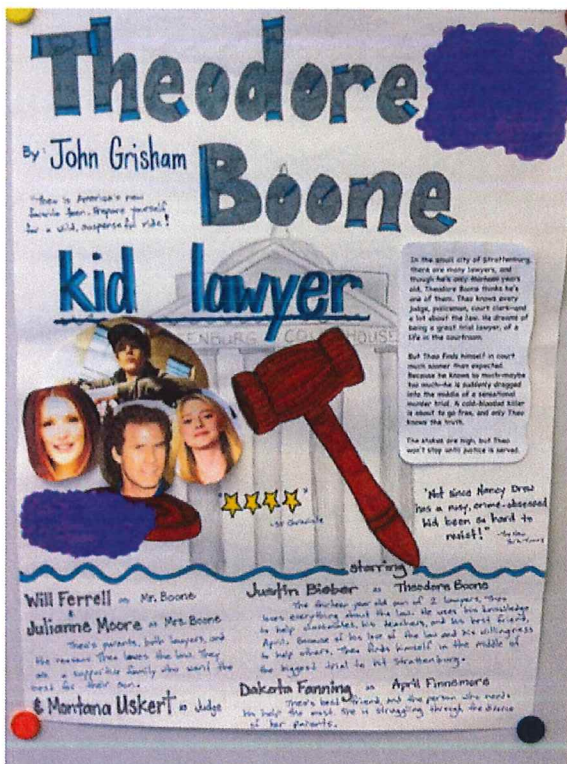
Please be sure your work is neat and thorough. This is a project, so your work should be formal.



## Movie Poster Examples



Please be sure your work is neat and thorough. This is a project, so your work should be formal.







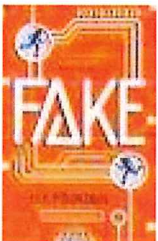
## Sunshine State Young Readers Award Books 2024-2025 List for Grades 6-8



**Adrift** by Tanya Guerrero

Ever since her father was lost at sea, Sophia has been moping around Aqualand, the marine theme park her dad and uncle created. But Sophia's world is turned upside down when an "aquanaut" breaks into the park's research lab.

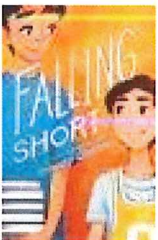
To her amazement, Sophia discovers that the aquanaut is not what it seems -- inside lives a band of four goofy sea creatures! And when they all realize that Aqualand has evolved into something much darker than Sophia's dad had envisioned, Sophia is determined to help the aquanaut crew free the park's captive marine life before it's too late.



**Fake: A thrillingly paced, timely novel about identity and our digital lives** by Ele Fountain

Imagine a world where your only friends are virtual, and big tech companies control access to food, healthcare and leisure. This is Jess's world. But when she turns fourteen, Jess can go to school with other children for the first time. Most of them hate the 'real' world, but Jess begins to question whether the digital world is 'perfect' after all. Back home, her sister Chloe's life-saving medication is getting ever more expensive. Determined to help, Jess risks everything by using skills forbidden in the cyber-world, only to stumble on something explosive. Something that will turn her whole world upside down.

It's up to Jess to figure out exactly what is real, and what is fake - Chloe's survival depends on it.



**Falling Short** by Ernesto Cisneros

Isaac and Marco already know sixth grade is going to change their lives. But it won't change things at home—not without each other's help. This year, star basketball player Isaac plans on finally keeping up with his schoolwork. Better grades will surely stop Isaac's parents from arguing all the time. Meanwhile, straight-A Marco vows on finally winning his father's approval by earning a spot on the school's basketball team.

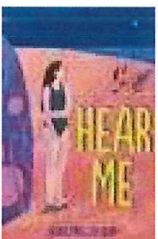
But will their friendship and support for each other be enough to keep the two boys from falling short?



**Girl in White** by Lindsay Currie

Mallory hasn't quite adapted to life in her new town of Eastport yet. Maybe it's because everyone is obsessed with keeping the town's reputation as the most cursed town in the US. And thanks to the nightmares she's had since arriving, Mallory hardly sleeps. Combined with the unsettling sensation of being watched, she's quickly becoming convinced there's more to her town. Something darker.

When Mallory has a terrifying encounter with the same old woman from her dreams, she knows she has to do something—but what? With Eastport gearing up to celebrate the anniversary of their first recorded legend Mallory is forced to investigate the one legend she's always secretly been afraid of.



**Hear Me** by Kerry O'Malley Cerra

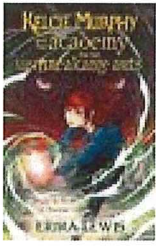
It's been a year since her diagnosis, and Rayne's hearing continues to decline, even with aids. It's a struggle to maintain friendships and keep up in school, surfing is now a wipeout, and she can't understand her favorite singer's lyrics. But worst of all, Rayne's parents are pushing for her to get cochlear implants, a surgery Rayne's not convinced is worth the risks and challenges. Rayne begs her parents to consider other options, but they're not budging. With the surgery looming, Rayne sets off on a bus journey that forces her to face her own assumptions about what her hearing loss means and what kind of life she could have. With the help of some new friends, Rayne realizes that even though her ears may be broken, she is not.



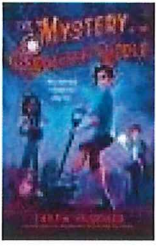
**How to Stay Invisible** by Maggie C. Rudd

Twelve-year-old Raymond Hurley has never had a place to call home. His free-wheeling parents move their family from town to town, and he's living in a trailer in a brand-new state when one day, they just up and abandon him. All alone with nothing but a duffle bag full of clothes and his reliable pup, Rosie, he is forced to live in the woods behind his middle school. With a fishing pole in hand and survival guide checked out from the library, Raymond scrapes by and doesn't tell anyone his secret. This isn't the first time he's had to rely on himself. However, when winter days get colder and finding food becomes nearly impossible, Raymond makes new friends, including a curious coyote, in unexpected places. Soon, he learns that his fate will depend not just on his wilderness skills, but on the people and animals he chooses to trust.





**Kelcie Murphy and the Academy for the Unbreakable Arts (The Academy for the Unbreakable Arts, 1)** by Erika Lewis  
The Otherworld is at war. The Academy for the Unbreakable Arts trains warriors. And Kelcie Murphy—a foster child raised in the human world—is dying to attend. A place at AUA means meeting Scáthach, the legendary trainer of Celtic heroes. It means learning to fight with a sword. It means harnessing her hidden powers and—most importantly—finding out who her parents are, and why they abandoned her in Boston Harbor eight years ago. When Kelcie tests into the school, she learns that she's a Saiga, one of the most ancient beings in the Otherworld. Secretive, shunned, and possessed of imposing elemental powers, the Saiga are also kin to the Otherworld's most infamous traitor. But Kelcie is a survivor, and she'll do whatever it takes to find her parents and her place in their world. Even if that means making a few enemies.



**The Mystery of the Radcliffe Riddle** by Taryn Souders

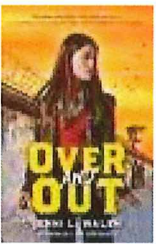
When Grady and his dad learn that the town oddball, Eudora "Kooky" Klinch left something for them in her will, they can only imagine what it might be. When it turns out it's an old scrap of 300-year-old tapestry, they are bitterly disappointed. But the cloth comes with a note saying, "This is no ordinary piece of needlework. It's a treasure map. Riddles and Clues. To the victor go the riches." Grady's dad dismisses it, but Grady thinks this could be the chance of a lifetime. With the help of his friends Thad, Clemmie, and the town dog Ophelia, Grady is determined to crack the clues and find the treasure.

But when someone tries to break into Grady's house one night, and then the local antiques expert who examined the tapestry is found unconscious, Grady realizes that he's not the only one who knows about the treasure map. There's more at risk than he bargained for, and solving this mystery just got a lot more dangerous.



**New Dragon City** by Mari Mancusi

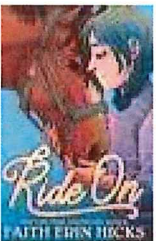
No one predicted the dragon apocalypse. The dragons came suddenly and decimated the world as we knew it, including New York City. Now, three years later, Noah, his hardcore survivalist father, and a ragtag group of survivors are barely scraping by in this new reality. Kids scavenge not only for materials in abandoned homes but also for leftover books at the library. Adults spend their time establishing a make-shift society and defending their shelter... with any means available. At least for the few months the dragons are hibernating, until it's no longer safe aboveground. The division runs deeper than scales versus skin because trying to follow his heart might just cost Noah his family too. If Noah and his father can't see eye to eye, can he really get humans and dragons to?



**Over and Out** by Jenni L. Walsh

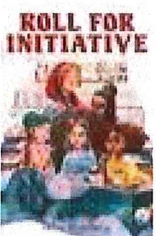
Sophie has spent her entire life behind the Berlin Wall, guarded by land mines, towers, and attack dogs. A science lover, Sophie dreams of becoming an inventor... but that's unlikely in East Berlin, where the Stasi, the secret police, are always watching.

Though she tries to avoid their notice, when her beloved neighbor is arrested, Sophie is called to her principal's office. There, a young Stasi officer asks Sophie if she'll spy on her neighbor after she is released. Sophie doesn't want to agree, but in reality has no choice: The Stasi threaten to bring her mother, who has a disability from post-polio syndrome, to an institution if Sophie does not comply. Sophie is backed into a corner, until she finds out, for the first time, that she has family on the other side of the Wall, in the West. This could be what she needs to attempt an escape with her mother to freedom -- if she can invent her way out.



**Ride On** by Faith Erin Hicks

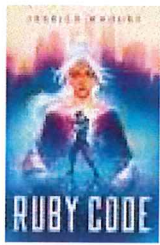
Victoria has always loved horses. But riding in competitions is high stakes, high stress, and shockingly expensive. And even though Victoria's best friend Taylor loves competing, Victoria has lost her taste for it. After a heartbreaking fight with Taylor, Victoria needs a new start—at a new stables. A place where she doesn't have to worry about anything other than riding. No competition, no drama, no friends. Just horses.



**Roll for Initiative** by Jaime Formato

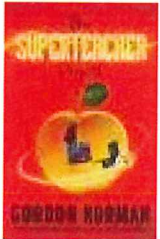
Riley Henderson has never taken a bus to school in her entire life. Or made an afterschool snack, or finished her homework on her own, or—ewww—done her own laundry. That's what her older brother Devin was for. With the help of her new D&D friends, Riley discovers that not only can she function without Devin, she kind of likes it. She figures out that bus thing, totes the clothes down to the laundry room and sets up her D&D campaigns right there on the slightly suspect folding table, makes her own snacks and dinner—the whole deal. But when Devin runs into trouble with his program and returns home, it's pretty clear, even to Riley, that since he can't navigate his own life, he's going to live Riley's for her. Now she has to help Devin go back to college and prove to her mom that she can take care of herself . . . all before the upcoming Winter-Con.





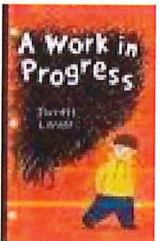
**The Ruby Code** by Jessica Khoury

Bullied at school and home, Ash finds respite from his unhappy life in virtual reality games. One night, he spends his meager savings to help a stranger, who thanks him with a copy of an old fantasy game called *The Glass Realm*. While exploring the game, Ash meets a seemingly humble shopkeeper named Ruby. But from the start, Ruby seems different than the other townsfolk—especially when she and Ash stumble across an in-game quest designed not for the player, but for Ruby to solve. When Ruby begins developing powerful abilities that can rewrite the very code of the game, they realize she is far more than a pre-programmed side character.



**The Superteacher Project** by Gordon Korman

Oliver Zahn, spitball champion and self-declared rule-wrecker of Brightling Middle School, is not a fan of his new homeroom teacher, Mr. Aidact. The guy is sort of stiff, never cracks a smile, and refers to them as "pupils." The worst part is he catches Oliver before he can pull any of his signature pranks! It's time for Oliver and his best friend, Nathan, to show the new teacher who's boss. But as the weeks go by, they start to realize that Mr. Aidact is not what they expected. He has an uncanny ability to remember song lyrics or trivia. When the girls' field hockey team needs a new coach, he suddenly turns out to be an expert. He never complains when other teachers unload work on him—even when it's lunchroom duty and overseeing detention. Against all odds, Mr. Aidact starts to become the most popular teacher at Brightling.



**A Work in Progress** by Jarrett Lerner

Will is the only round kid in a school full of thin ones. So he hides...in baggy jeans and oversized hoodies, in the back row during class, and anywhere but the cafeteria during lunch. But shame isn't the only feeling that dominates Will's life. He's also got a crush on a girl named Jules who he knows he doesn't have a chance with, because of his size—but he can't help wondering what if?

Will's best shot at attracting Jules's attention is by slaying the Will Monster inside him by changing his eating habits and getting more exercise. But the results are either frustratingly slow or infuriatingly unsuccessful, and Will's shame begins to morph into self-loathing.

Available at [www.itzbooks.com](http://www.itzbooks.com)



# Meet the teacher



Mrs Rafferty

Hello Madison STEM students!

I am Mrs. Rafferty, your Social Studies teacher and STEM Team leader for the 2024/2025 school year.

This will be my 32nd year teaching in Hillsborough County and my 9th year in the STEM program. I grew up in south Tampa and attended Monroe JH and Robinson HS. I have a bachelor's degree in social science education from the University of South Florida.

My master's degree is in teaching and learning from Nova Southeastern University.

I love planning fieldtrips and taking students on adventures outside the classroom!

A Fun Fact about me is my 5th great grandfather fought with George Washington in the Revolutionary War!



7<sup>th</sup> Grade Civics Summer Assignment

Name: \_\_\_\_\_ Date \_\_\_\_\_ period \_\_\_\_\_

**Middle School Social Studies Performance Task**

**U.S. Constitution Graphically Organized—“Constitution Tree”**

**Use your *Constitution Study Guide* book to complete this lesson.  
The U.S. Constitution begins on page 110.**

This performance task is meant as a tool for students to exhibit fundamental understanding of the organization of U.S. government and the components of the U.S. Constitution. The rigor of this activity builds with further placement of the “leaves” onto the basic graphic organizer of the three branches of government. The leaves represent individual powers and duties, which will take interpretation of the Constitution to identify and cite within the correct branch. Finally, students will analyze a scenario to make connections from the situation contained to the relevant branches of government.

**Student Performance Task:**

I will be able to identify, organize and interpret the components of the U.S. government by using the U.S. Constitution to create a Graphic Organizer illustrating the meaning and relationship between the components, duties and responsibilities of each branch.

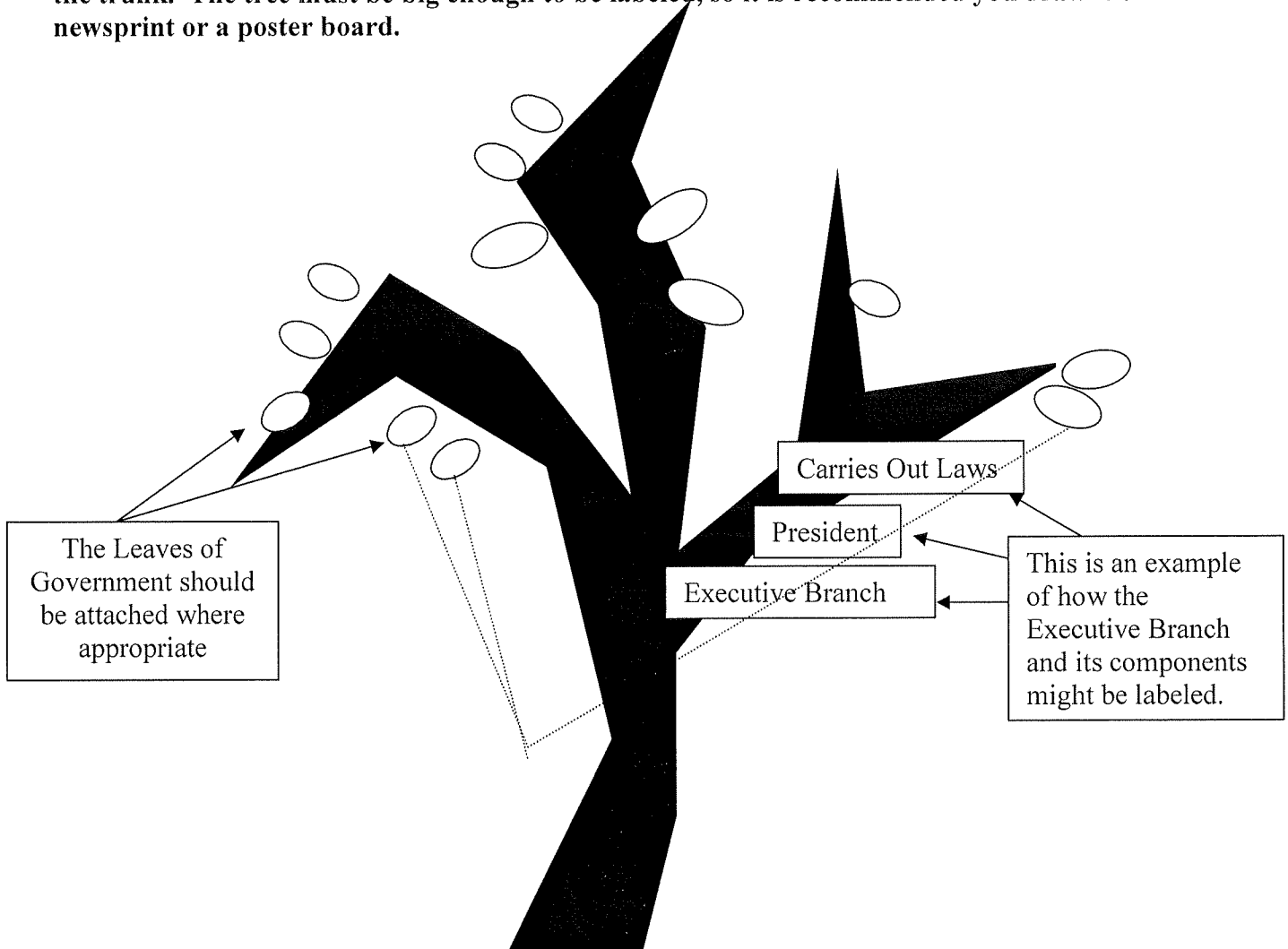
*It may help students to partially complete this task with help from their family.*

**Due to Mrs. Rafferty by Friday, August 23, 2024.**



## Constitution Tree Graphic Organizer

**Directions:** Make a basic tree outline with three **BIG, SEPARATE BRANCHES** growing out of the trunk. The tree must be big enough to be labeled, so it is recommended you draw it on newsprint or a poster board.



Parts of the tree to draw and label:

Executive Branch  
Legislative Branch  
Judicial Branch  
Congress  
Supreme Court  
President  
House of Representatives  
Senate  
Makes laws  
Interprets Laws  
Carries out Laws



## Leaves of Government

Sheet  
1

1. How long does a member of the House of Representatives serve?

2. How long does United States Supreme Court justices serve?

5. How many years is a President elected for?

3. Who has the power to suggest a law to raise money (taxes)?

4. How long does a Senator serve?

7. Who can make treaties with other countries?

6. Who can declare war?

8. How old does a Senator have to be?

9. How old does a Representative have to be?

10. At least how old must the President be?

11. How many members of the House are there? The Senate?

12. How many total members of Congress are there?

13. Who can nominate officials for office in the government?

14. Who is the commander of US forces?



## Leaves of Government

Sheet  
2

1) Who can try impeachments?

2) Who can solve problems with national laws?

3) Who settles disputes between the states?

5) How many members of the Supreme Court are there currently?

4) What happens if the president vetoes a bill?

6) Who reviews all laws and treaties?

8) Who approves treaties?

7) Who approves presidential appointments?

9) Who can veto a law?

10) Who suggests amendments?

11) Which branch can impeach judges?

12) Who approves Constitutional amendments?

13) How many Const. amendments have been made?

14) Which amendment gave women the right to vote?



## Leaves of Government

She  
et 3

1. Who can  
print and  
coin  
money?

2. What is the Supreme  
law of the land?

3. How  
does the  
Const.  
affect  
what  
states can  
do?

4. Why do states need  
to be concerned about  
laws in other states?

5. Who decides  
when the Electoral  
College votes for  
president?



# Leaves of Government Question and Answer Sheet

## Directions:

- 1) For each question, examine the U.S. Constitution to find your answer.
- 2) Write the answer next to the question in the “Answer” column.
- 3) On the leaf, write which **Article**, **Section**, and **Clause** (if there is one) you found the answer in. This will help you place the leaf on the correct branch of your tree.
- 4) Place an L (Legislative, **Article I**), E (Executive, **Article II**), or J (Judicial, **Article III**) in the “branch” column to indicate which branch the leaf belongs on.

**Finally:** When you finish labeling the leaves, color them, cut them out, and glue them onto the correct branch on your tree.

Turn in this answer sheet along with your “Tree”

Name \_\_\_\_\_ Date \_\_\_\_\_ per \_\_\_\_\_

CONSTITUTION TREE LEAVES QUESTION	ANSWER	BRANCH (L,E,J)
<b>SHEET 1</b>		
1. How long does a member of the House of Representatives serve?		
2. How long does United States Supreme Court justices serve?		
3. Who has the power to suggest a law to raise money (taxes)?		
4. How long does a Senator serve?		
5. How many years is a President elected for?		
6. Who can declare war?		
7. Who can make treaties with other countries?		
8. How old does a Senator have to be?		
9. How old does a Representative have to be?		
10. At least how old must the President be?		
11. How many members of the House are there? The Senate?		
12. How many total members of Congress are there?		
13. Who can nominate officials for office in the government?		
14. Who is the commander of US forces?		



<b>SHEET 2</b>		
1. Who can try impeachments?		
2. Who can solve problems with national laws?		
3. Who settles disputes between the states?		
4. How many members of the Supreme Court are there currently?		
5. What happens if the president vetoes a bill?		
6. Who reviews all laws and treaties?		
7. Who approves treaties?		
8. Who can veto a law?		
9. Who approves presidential appointments?		
10. Who suggests amendments?		
11. Which branch can impeach judges?		
12. Who approves Constitutional amendments?		
13. How many Const. amendments have been made?		
14. Which amendment gave women the right to vote?		
<b>SHEET 3</b>		
1. Who can print and coin money?		
2. What is the Supreme law of the land?		
3. How does the Const. affect what states can do?		
4. Why do states need to be concerned about laws in other states?		
5. Who decides when the Electoral College votes for president?		
6.		
7.		
8.		
9.		
10.		

## SCORING RUBRIC

CATEGORY	4	3	2	1	0
<b>Elements</b>	The student correctly and clearly labels all 11 required basic elements of the Constitution Tree.	The student correctly and clearly labels 9-8 of the required basic elements of the Constitution Tree.	The student correctly and clearly labels 7 - 6 of the required basic elements of the Constitution Tree.	The student correctly and clearly labels 5 - 1 of the required basic elements of the Constitution Tree.	Demonstrates little or no understanding of task or no attempt made
<b>Context and support</b>	All leaf questions are correctly answered and associated with the appropriate branch of organizer.	Less than 10% of leaf questions are correctly answered and associated with the appropriate branch of organizer.	Less than 25% of leaf questions are correctly answered and associated with the appropriate branch of organizer.	More than 25% of leaf questions are correctly answered and associated with the appropriate branch of organizer.	Demonstrates little or no understanding of task or no attempt made
<b>Detail and Citation (Article/Section)</b>	All leaves are identified with the correct Article, Section, and Clause (if there is one) where the answer is found.	90% or more of the leaves are identified with the correct Article, Section, and Clause (if there is one) where the answer is found.	75% or more of the leaves are identified with the correct Article, Section, and Clause (if there is one) where the answer is found.	50% or more of the leaves are identified with the correct Article, Section, and Clause (if there is one) where the answer is found.	Demonstrates little or no understanding of task or no attempt made
<b>5 Additional Leaves</b>	Five additional leaves, questions, and answers are added.	Four additional leaves, questions, and answers are added.	Three additional leaves, questions, and answers are added	Two additional leaves, questions, and answers are added	No additional leaves and questions added.

Project must include color (4 points)

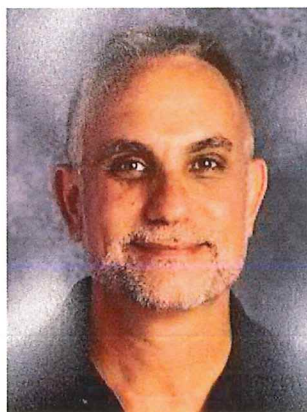
Project must be of high quality (That of an advanced, 7<sup>th</sup> grade, STEM, student) (5 points)

Total possible points (25)



A stylized illustration of a satellite with solar panels and a purple planet with rings in the top left corner.

# Meet the teacher



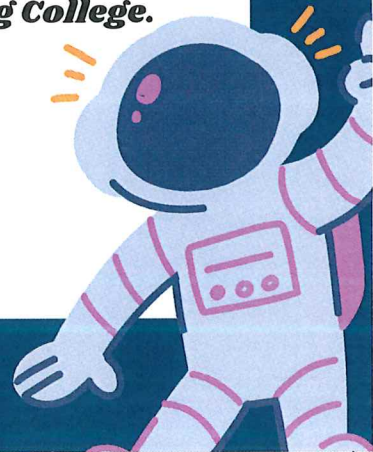
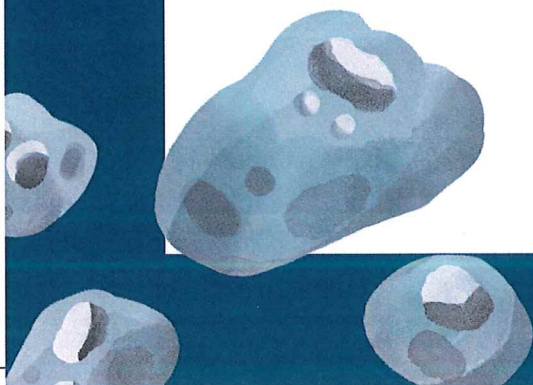
Hello Madison STEM students!  
I am Mr. Daniele, your Math Teacher and the Math Subject Area Leader for  
Madison Middle School.

This will be my 28th year teaching Math in Hillsborough County. I have  
been here at Madison Middle School since 1999. I have been the Math  
teacher for the STEM team since its inception.

I hold a Bachelor's and Master's degree from the University of Florida and  
I earned my Teacher Certification from the University of South Florida.

In 2016, I was Madison's Teacher of the Year.

***Fun Fact: I teach Economics at Saint Petersburg College.***



## **Madison STEM Summer Math Assignments.**

Use the link below or the class code for your Fall 2024 grade level class.  
Complete the assignments and you will be ready for Mr. Daniele's Math class.

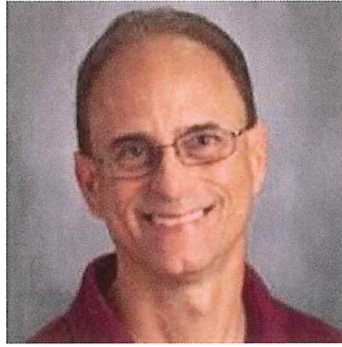
Assignments should be completed by August 9. A summer assignment grade will be entered as your first grade of the first quarter.

### **7<sup>th</sup> Grade STEM Math Summer 2024 Assignment**

<https://www.khanacademy.org/join/FSFS8YUT>

Students visit [www.khanacademy.org/join](https://www.khanacademy.org/join) and enter your class code **FSFS8YUT**





*Mr. Smith*

Greetings from Madison STEM!

I am Mr. Smith, your Aerospace Technology teacher. This upcoming year will be my 31<sup>st</sup> year teaching and my 2<sup>nd</sup> year in Madison's STEM program.

I'm originally from North Florida and graduated from the University of Florida (Go Gators! 😊). I have a range of certifications in the areas of science, gifted, English, exceptional student education, and elementary education. I love everything technology-related but particularly enjoy flying quads, building computers, rocketry, flight simulation, animation, and computer gaming.

I look forward to meeting and getting to know all of you!



## **7<sup>th</sup> Grade Technology Summer Assignment**

Research a topic related to technology which you find interesting and create an electronic presentation explaining your interest in the topic. Be creative!

Presentations will be shown in class.

What will you do with it?

### **Topic include:**

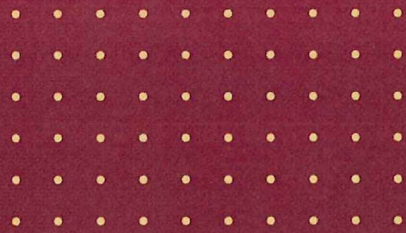
- 1. Energy**
- 2. Transportation**
- 3. Robotics**
- 4. 4. Manufacturing/Construction**
- 5. Environmental Technology**

### **Must have:**

- 1. Sources on each slide**
- 2. Pictures**
- 3. Live links**
- 4. Transition slides**
- 5. Content**

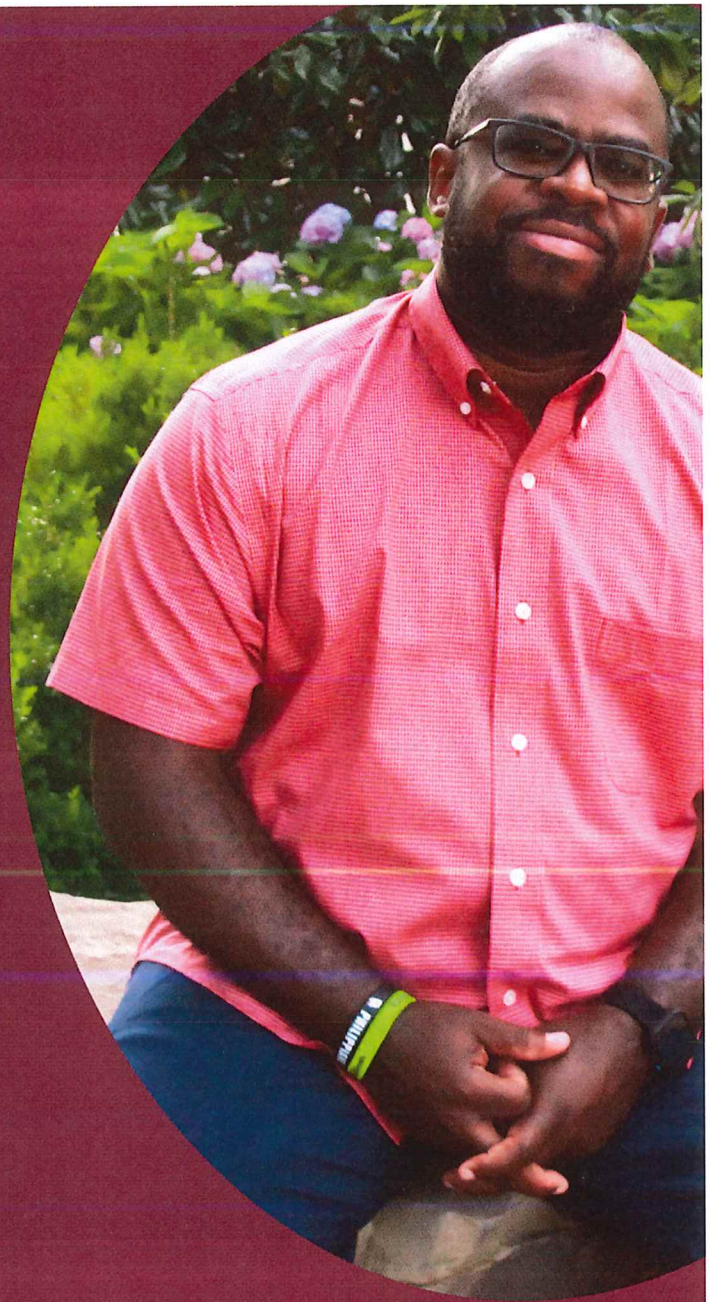


# MR. GRAY



## STEM SCIENCE

**FUN FACT: I AM AN  
INTERNATIONAL  
SUPREME COUNCILOR  
FOR MY FRATERNITY,  
ZETA BETA TAU!!**



Hello! My name is Mr. Gray, and I am thrilled for my next adventure teaching science in the Madison STEM program! I earned a Bachelor of Education in Science from Florida State University and am certified in Middle Grades Science, Technology Education, and K-12 Gifted. I come to Madison with 27 years of experience in the classroom. I've taught science most of my career; most recently, I taught robotics and technology at Monroe Middle School. I also have coached volleyball and track as well. I am excited to be back in the science world.



## STEM Fair Mind Map

This year, you will be submitting a project for the 2025 Hillsborough County STEM Fair. Your assignment this summer is to brainstorm ideas for scientific questions you want to investigate. Once you have decided on one question, fill out the mind map on the back of this page. Throughout the next school year, you will complete the following for your project:

- Risk Assessment
- Research Plan
- Scientific Journal Entries
- Research Paper
- Abstract
- Display Board

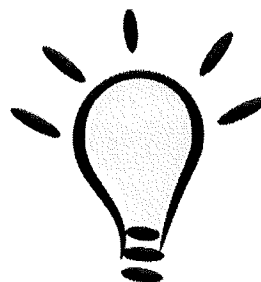
When brainstorming ideas, remember that STEM Fair is not just science but can include Engineering, Math, Computers...the possibilities are endless! Below you will find the STEM Fair categories and past project titles to get ideas.

### STEM Fair Categories

Animal Sciences	<input type="checkbox"/>
Behavioral & Social Sciences	<input type="checkbox"/>
Biochemistry	<input type="checkbox"/>
Biomedical & Health Sciences	<input type="checkbox"/>
Biomedical Engineering	<input type="checkbox"/>
Cellular & Molecular Biology	<input type="checkbox"/>
Chemistry	<input type="checkbox"/>
Computational Biology and Bioinformatics	<input type="checkbox"/>
Earth & Environmental Sciences	<input type="checkbox"/>
Embedded Systems	<input type="checkbox"/>
Energy: Sustainable Materials and Design	<input type="checkbox"/>
Engineering Technology: Statics and Dynamics	<input type="checkbox"/>
Environmental Engineering	<input type="checkbox"/>
Materials Science	<input type="checkbox"/>
Mathematics	<input type="checkbox"/>
Microbiology	<input type="checkbox"/>
Physics and Astronomy	<input type="checkbox"/>
Plant Sciences	<input type="checkbox"/>
Robotics & Intelligent Machines	<input type="checkbox"/>
Systems Software	<input type="checkbox"/>
Translational Medical Science	<input type="checkbox"/>

### Past STEM Fair Projects

- How Does Personality and Gender Affect Memory?
- Relationship of Age and Response Time in the Stroop Effect
- How Does Light Affect the Vitamin Content of Fruit Juices?
- Which Mask Can Help Reduce the Spread of Germs, Bacteria and Viruses?
- Bath Bombs and The Rate of Fizz
- Which Product is Most Effective in Blocking UV Rays?
- How Does the Age of a House Affect Its Lead, Copper and Nitrate Levels in its Tap Water?





My Hypothesis (What do I think will happen?)

If

then

Materials I will need:

Date:

My 5 Sources:

My procedure:

What is my question?

Things that I already know about my topic: