



ST. LOUIS AMERICAN NEWSPAPER IN EDUCATION

The St. Louis American's award winning NIE program provides newspapers and resources to more than 8,000 teachers and students each week throughout the school year, at no charge.

Questions or comments? Contact Cathy Sewell
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CLASSROOM SPOTLIGHT

Premier Charter School 8th grade teacher Mrs. McAdams-Velten shows students Ashky Naif, Derek Cariras, Tatiana Graf and Da'Nisea Longmire how to use the newspaper's NIE content for lesson ideas.

Photo by Wiley Price / St. Louis American



Teachers, if you are using the St. Louis American's NIE program and would like to nominate your class for a Classroom Spotlight, please email: nie@stlamerican.com.

SCIENCE STARS

Hidden Figures African American Women Space Pioneers



In 2017, the movie Hidden Figures earned three Oscar nominations. The movie told the story of three African-American women who worked at Langley Research Center completing computations that allowed John Glenn to travel safely in space. Due to discrimination that was prevalent at that time, these ladies did not receive credit for their work. The movie was based off a true story that was written by Margot Lee Shetterly. Although the book follows the story of four women, the movie features the story of three: Dorothy Vaughan, Mary Jackson, and Katherine Johnson. (The book includes Christine Darden).

The ladies were known as "computers" and they used pencils, slide rules, and adding machines, calculating complex equations by hand. They moved to Hampton, West Virginia, to work at Langley Memorial Aeronautical Laboratory due to labor shortages caused by World War II. Jim Crow Laws forced the "computers" to work in separate facilities, dine in separate areas, and use segregated bathrooms. They were referred to as "West Computers." Their skills allowed for a safe launch and return of the 1962 Mercury Friendship 7.

Jackson graduated with degrees in math and physical science and was hired in 1951 at Langley. Her supervisor encouraged her to become an engineer. Jackson fought for the right to learn along with white students and won. She became NASA's first African-American engineer. Vaughan became the first black supervisor and a FORTRAN programmer. Johnson graduated high school at the age of 14 and was the first African-American woman to attend West Virginia State University. She graduated at age 18. John Glenn specifically requested for Johnson to double check the math involved in his flights. In 2015, Johnson received the Presidential Medal of Freedom. NASA also has a research facility named in her honor. After Johnson's passing in February, NASA Administrator James Bridenstine said, "Our NASA family is sad to learn the news that Katherine Johnson passed away this morning at 101 years old. She was an American hero and her pioneering legacy will never be forgotten."

Learning Standards: I can read about people who have contributed to the fields of science, technology, engineering, and math connections.

SCIENCE CORNER

STEM Opportunities for Students

As you've read in many of the biographies, several of our STEM stars had experience in activities at a young age that encouraged them to choose a STEM based career. Did you know there are STEM opportunities in the St. Louis area? STEM scouts (<https://stemscouts.org/>) lists many local



together to provide STEM opportunities. There is even a field trip planning guide available. The Academy of Science St. Louis (<https://www.academyofsciencestl.org/>) is a good resource of information about STEM events in the St. Louis area. Visit the websites and learn about the many opportunities to get involved.



classes for a variety of age levels. Visit their page, click on St. Louis and read about the local groups you can join. STEMPact (<http://stempact.org/>) is a St. Louis based organization that allows schools and local businesses to work



Learning Standards: I can read nonfiction text for main idea and supporting details. I can make text-to-world connections.

SCIENCE INVESTIGATION

Paper Cup Weight Challenge

In this activity, you will put your critical thinking skills into action while you collaborate with a team to solve this challenge.

Materials Needed:

- 12-20 Small, plastic drinking cups
- 2 Pieces of cardboard (24" by 24")

Process:

- 1 Your task is to build a platform with the cups and cardboard that will support the weight of one member of your team.



- 2 Place one cardboard square on the floor, and put all of the cups face down on top of it. Place the other cardboard square on top.
- 3 Help your teammate carefully stand on the cardboard. Does it support their weight? If no, try adding more cups. If yes, try taking away cups. Find the exact number of cups necessary to support the weight.

Analyze: What surprised you about this activity? How well did your group work together?

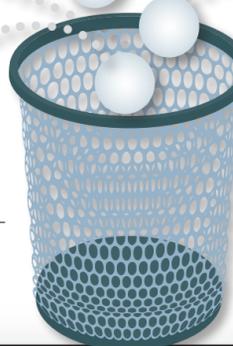
Learning Standards: I can follow directions to complete an experiment. I can analyze results and draw conclusions.

MATH CONNECTION

TRASH KETBALL

This game allows you to get up and active while learning about ratios, fractions, and decimals. You will need a small trash can, a small ball (such as a ping pong ball), a piece of paper, and a pencil.

- 1 Stand about 4-6 feet from the trashcan. Throw the ball 10 times and record how many times you successfully got the ball into the trashcan. _____
- 2 Next, write that number as a ratio. Ex: 3 out of 10 shots were successful. _____
- 3 Next, write that number as a fraction: $\frac{3}{10}$.
- 4 Finally, convert that fraction to a decimal $3 \text{ divided by } 10 = .3$ _____



Give it a try! Challenge your friends. Increase the throwing distance from the trashcan. Increase the number of throws. Try this game at home with your parents, too.

Learning Standards: I can calculate ratios, fractions, and decimals.

MAP CORNER

Enjoy these activities that help you get to know your St. Louis American newspaper.



Activities

Pronouns: In a news story, draw arrows from all pronouns to their antecedents.

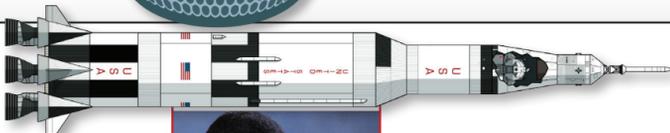
Entertainment: Using the entertainment section of the newspaper, find something you would like to do and a restaurant where you would like to eat. Determine the total cost of your outing for one person, for two, and for your whole family.

Learning Standards:

I can use the newspaper to locate information. I can identify pronouns and antecedents. I can

calculate cost for an event. I can make text-to-self connections.

DID YOU KNOW?



Bessie Coleman, also known as "Queen Bess, Daredevil Aviator," was the first female African-American aviator in 1921. She received her pilot's certificate and stunt training in France.



Mae Jemison was the first African-American woman in space.

Apollo 10's command module was called "Charlie Brown" and the lunar module was called "Snoopy."

Six Apollo missions landed on the moon: Apollo 11, 12, 14, 15, 16, and 17.



This special Newspaper In Education initiative is made possible, and delivered to classrooms, through The St. Louis American Foundation and its NIE Corporate Partners:

