



## 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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# STEM

science, technology, engineering, and math

## CLASSROOM SPOTLIGHT

**Glasgow Elementary school fifth grade teacher Michale Ward** shows Peyton Valiant, Amir Harris, Amayi Cochran, and Cortez Davis how to use the newspaper's STEM page to find new lessons in science. *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

### African-American Entrepreneur & Inventor Janet Emerson Bashen



Janet Emerson was born on February 12, 1957, in Mansfield, Ohio. She went to college at Alabama A&M. While in college, she met her husband, became Janet Emerson Bashen, and moved to Texas. In Texas, she earned a degree in legal studies and government from the University of Houston. She attended Rice University

for postgraduate studies and is also a graduate of Harvard University's "Women and Power: Leadership in a New World." Bashen earned a master's degree in law from Northwestern California University School of Law.

In May 2000, Bashen testified before Congress regarding the effect of the Federal Trade Commission (FTC) investigations and was able to have the legislation changed. She became the first African-American female to hold a patent for a software invention. Her patent #6,985,922 was issued on January 10, 2006, for the software program Linkline. Linkline is used in Equal Employment Opportunity businesses to keep track of information online.

Bashen is also the founder, President and CEO of the Bashen Corporation, a human resources consulting firm named as one of America's entrepreneurial growth leaders by *Inc. Magazine* in its 2002 500 ranking of the nation's fastest-growing private companies. This title was earned because Bashen Corporation had a 552% increase in sales. In October 2003, Bashen was given the Pinnacle Award by the Houston Citizens Chamber of Commerce. She has also received the Crystal Award, presented by the National Association of Negro Business and Professional Women's Clubs, Inc. She was inducted into the Black Inventors Hall of Fame in 2007. In 2012, Bashen was on *Ebony* magazine's list of the 100 most influential African Americans in entertainment, politics, sports and business.

Bashen is very devoted to helping the community. She is on the Board of Directors for the North Harris Montgomery County Community College District Foundation, and chairs the Corporate Advisory Board of the National Association of Negro Business and Professional Women's Clubs, Inc. She is also a board member of the Prep Program, a non-profit organization which focuses on preparing at-risk student athletes for college.

**Learning Standards:** I can read a biography about a person who has made contributions in the fields of science, technology, engineering, and math.

## SCIENCE CORNER

### Software and Copyright Laws

Have you ever wondered what the term "software" means?

Software is defined as various kinds of programs used to operate computers and related devices. Software includes anything that runs digitally on a computer, such as word processing programs, media players, and games.

When you purchase a program, you are the only one with the right to use it. When you install the program, you must agree to the terms of purchase, which include not copying or sharing the program with anyone else. If you break this agreement, you are breaking copyright law. The person or company who created the software is the copyright owner.



If you receive a copy of software from a friend, download it illegally from the internet, or buy an illegally made copy, you own "pirated" software. Pirated means it is created without the permission of the copyright owner. Not only is pirated software unfair to the creators, it puts computers at risk of viruses that can damage or destroy the entire computer. Using pirated software at school, which is part of a network, could affect all of the computers in that network. Be safe and be sure you are following copyright laws.

#### Learning Standards:

I can read nonfiction text for main idea and supporting details.

## SCIENCE INVESTIGATION

### FILTERING WATER!

#### Background Information:

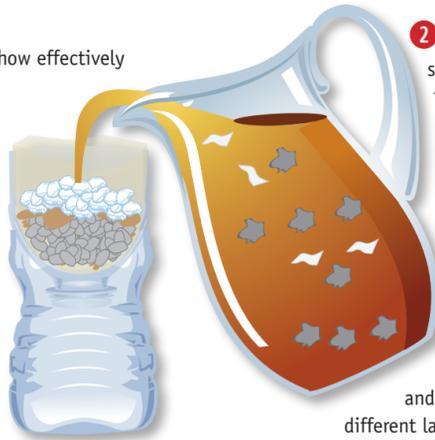
In this experiment, you will evaluate how effectively water is filtered.

#### Materials Needed:

• 2-Liter Soda Bottle (cut in half by an adult) • Napkins or Paper Towels • Gravel, Sand and Cotton Balls (for your filter) • Water Pitcher • Dirty Water (you can make it by adding cooking oil, food coloring, pieces of paper, and tiny pieces of styrofoam to water)

#### Process:

1 Put the top half of the soda bottle upside-down (like a funnel) inside the bottom half. The top half will be where you build your filter; the bottom half will hold the filtered water.



2 Layer the filter materials (gravel, sand, and cotton balls) inside the top half of the bottle.

3 Pour the dirty water through the filter. What does the filtered water look like?

4 Take the filter apart and look at the different layers. Can you tell what each material removed from the water?

5 Use the napkins or paper towels to wipe the bottle clean and try again. Try putting materials in different layers or using different amounts of materials. Evaluate the effectiveness.

**Learning Standards:** I can follow sequential directions to complete an experiment. I can make predictions and draw conclusions.

## MATH CONNECTION

### ANSWER ME THIS!

Use your math skills to answer these questions.

1 Samantha has purchased a book online and is waiting for it to download. If the book has been downloading for 15 minutes and is  $\frac{3}{4}$  finished, approximately how much longer will she need to wait? \_\_\_\_\_

2 Jermaine wants to buy a new video game for his laptop. If it costs \$49.95 and he has \$27.00, how much money does he need to save? \_\_\_\_\_ If he earns \$5/week in allowance, how many weeks will it take him to earn that money? \_\_\_\_\_

3 If your teacher purchases a game for the classroom that is licensed for 10 users, how many licenses will they need to purchase so that every student in your room can use the program? \_\_\_\_\_ (Remember there are 10 users per license. Answers will vary depending on class size.)

4 You receive a \$25 gift card to shop online. If you buy a book for \$9.95 and a journal for \$4.95, with \$1.50 added for tax, and \$2.50 added for shipping, how much money do you have left? \_\_\_\_\_

**Learning Standards:** I can add, subtract, multiply, and divide to solve a problem.

## DID YOU KNOW?

▶ The use of unlicensed software in the U.S. has a commercial value of over \$ 9.5 billion. That is revenue that should be going to the employees who created the program.

▶ In 2010, 20 percent of the software products running on U.S. computers were unlicensed.

▶ According to the Business Software Alliance (BSA), a company found to be using unlicensed software is forced to pay \$150,000 for every software program it has infringed.

## MAP CORNER

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

#### Activity One

##### — Science in the News:

Some of the top news stories in recent years have involved science-related topics, such as the weather, natural disasters, health and medicine, and space exploration. Find a science-related story about one of these topics. Identify the five Ws — who, what, when, where, and why. Complete some additional research so you can explain the "how" in writing. Share your news story with the class.

#### Activity Two —

**Bar Graph:** Newspapers have local stories, stories about current events in the state, and national news. Create a bar graph that represents the number of newspaper stories that are local, state, and national.

**Learning Standards:** I can use the newspaper to locate information. I can write for a specific purpose and audience. I can make text to world connections.



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

