



ST. LOUIS AMERICAN NEWSPAPER IN EDUCATION

The St. Louis American's award winning NIE program provides newspapers and resources to more than 7,000 teachers and students each week throughout the school year, at no charge.

Questions or comments? Contact Cathy Sewell
csewell@stlamerican.com or 314-289-5422

STEM

science, technology, engineering, and math

CLASSROOM SPOTLIGHT

Mrs. Ellis' 4th Grade Class Confluence Academy

At Confluence Academy - Old North Campus, 4th grade teacher Mrs. Deitre Ellis shows students Darrien Johnson, Rhianna Mack, Makayla Squalls and Eric Criss how to find STEM projects using the newspaper's STEM page. Photo by Wiley Price

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: csewell@stlamerican.com



SCIENCE STARS

GENETICIST AND WELLNESS EXPERT— Mary Styles Harris

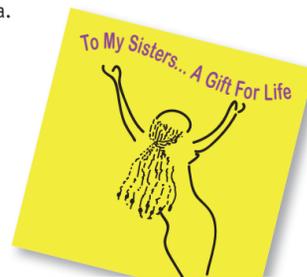


Growing up with a doctor for a father, Mary Styles Harris was naturally interested in science and medicine. Her background inspired her to become one of the most important women in science, educating minorities about health concerns.

Although Harris was born in Nashville, Tennessee, in 1949, she later moved to Miami. With hard work, she graduated 12th in her class of 350 students. After high school, Harris attended Lincoln University and earned the Ford Foundation Doctoral Fellowship Scholarship. In 1975, she earned her doctoral degree in genetics from Cornell University.

After graduation, Harris was a professor at Morehouse College in Atlanta, served as the executive director of the Sickle Cell Foundation of Georgia, and was an active member of the March of Dimes in Atlanta.

In an effort to reach African-American woman, she produced a documentary titled, "To My Sisters...A Gift For Life." Harris currently serves as president and genetic consultant of her company Harris and Associates, Ltd., and hosts a radio show called "Journey to Wellness."



Discuss: What was Harris' inspiration to study science and medicine? How has she used her knowledge to help others?

journey to wellness®

SCIENCE CORNER

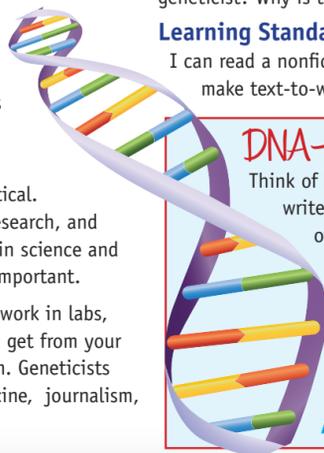
What Is A Geneticist?

Genetics is the study of genes.

Genes are passed from parents to their children, determining everything from physical appearance, personality, and overall health. A person who studies genetics is called a geneticist.

Geneticists must stay current on the latest scientific advances. Therefore, research is critical. They must read scientific journals, conduct research, and analyze results. In addition to a background in science and technology, reading and writing are equally important.

Where do geneticists work? Many geneticists work in labs, researching inherited diseases (a disease you get from your genes) and developing products to treat them. Geneticists may also choose a career in education, medicine, journalism, etc. Their knowledge is very important.



Discuss: What is a gene? What are genetics? What is a geneticist? Why is the study of genetics important?

Learning Standards:

I can read a nonfiction text to find the main idea. I can make text-to-world connections.

DNA—Deoxyribonucleic acid

Think of DNA as the letters that are used to write the chapters, or genes, in the book of information that defines a living organism, or genome.

DNA letters are: A, C, G and T. The genes of every living thing are written with a combination of these four chemical letters.

Adenine • Cytosine • Guanine • Thymine

SCIENCE INVESTIGATION

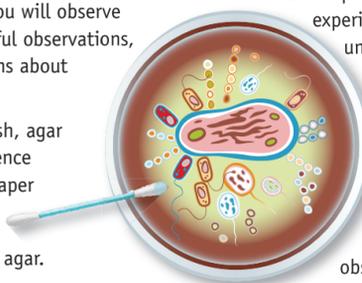
GROW YOUR OWN BACTERIA

Bacteria can grow anywhere and is responsible for many diseases. In this experiment, you will observe bacteria as it grows. Make careful observations, take notes, and draw conclusions about bacteria.

Materials Needed: Petri dish, agar (sticky substance sold with science supplies), cotton swabs, newspaper

Directions:

- 1 Prepare the petri dish with agar.
- 2 Rub the cotton swab in a corner of the classroom or under a desk.
- 3 Gently, rub the cotton swab against the agar and place the lid on the petri dish.
- 4 Place the petri dish in a warm area and observe it for 2-3 days. What changes do you see?



- 5 Prepare a second petri dish with agar and repeat the experiment. This time, you will rub the cotton swab under your fingertips.
- 6 Place the petri dish in a warm area and observe it for 2-3 days. How does this growth compare to the growth of bacteria from the classroom?
- 7 Wrap petri dishes in newspaper and discard.

Reflect: What conclusions can you draw after observing the two samples? Do you agree with the statement that bacteria is everywhere? Were you surprised with the growth of bacteria from your fingertips? Why?

Want to know more about germs? Check out: <http://kidshealth.org/kid/talk/qa/germs.html>

Learning Standards: I can follow step-by-step instructions to complete an experiment. I can draw conclusions based on observations.

MATH CONNECTION

BY THE NUMBERS

Want to play a fun computer game that uses math to stop the spread of germs? Go to: <https://homeschoolingintheburbs.info/cool-math-games-and-activities-xgerms/>

Use your math skills to solve these problems.

- 1 Germs and bacteria are everywhere, especially on your hands. Your hands come in contact with many surfaces throughout the day. Estimate how long you spend washing your hands.
- 2 Next, have a partner time you. How accurate was your estimate? Experts suggest scrubbing for at least 20 seconds to clean the germs from your hands. Did you meet that



limit? Use the rule of 20 seconds to solve these problems.

- 3 How many students are in your classroom? If there were only two sinks in the bathroom and each student washed their hands for 20 seconds, how many minutes would it take for the class to wash their hands?
- 4 How many times per day do you wash your hands? Keep track of this number for one day. Compare the number of minutes you spend washing your hands with your classmates. How do you compare? What is the average amount of minutes?

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



DID YOU KNOW?

Sickle Cells Are Shaped Like A Farm Tool

Mary Styles Harris is passionate about educating minorities about sickle cell anemia. Did you know this disease gets its name from a sickle, a curved tool used in farming? Healthy red blood cells are round, which is an effective shape to travel throughout the body carrying oxygen. People who have sickle cell anemia have red blood cells shaped like a sickle.

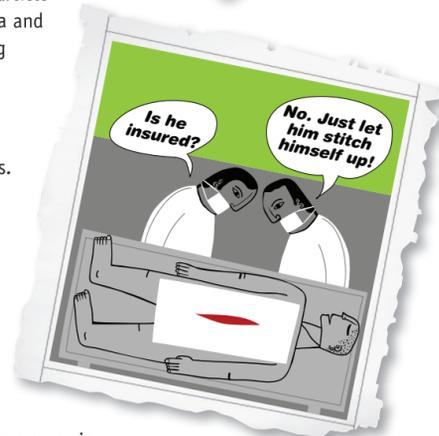


MAP PREP

Use the newspaper to find an article related to health.

- 1 What is the topic? What facts were presented? Were there any suggestions for the reader? Summarize the article with a main idea and three supporting details.

- 2 Editorials are written to persuade readers. An effective editorial must contain facts, as well as opinions, in order to persuade the readers. Editorials are published in newspapers in the form of editorial cartoons, columns, or letters to the editor. Choose one of the three formats and create an editorial that is health related. Who is your audience? What are you trying to persuade them to do?



Learning Standards: I can use a newspaper to locate information. I can write for a specific audience and purpose.

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

