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.

STEM
science, technology, engineering, and math

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

CLASSROOM SPOTLIGHT

Columbia Elementary teacher Rose Bruce shows students Jakayla Ford, Shawn Townsend, Cayden Stone and Jakya Price how to use the newspaper to find new STEM lessons. Columbia Elementary is in the Saint Louis Public Schools District.
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 CORNER

What Is Anthropology?

Anthropology is the study of humans. It comes from the Greek words "Anthropos," which means human, and "logia," which means study. Anthropologists study customs in communities, such as marriage traditions, languages spoken, tools used, etc. Anthropologists also study physical changes and trends in humans, such as average height and size and how that changes through generations. Often, anthropologists research by observing others, usually living among people for a long time. While living within a community, they are able to experience the culture and traditions personally. Many anthropologists return to that community many times throughout their career to observe how the culture has changed over time.

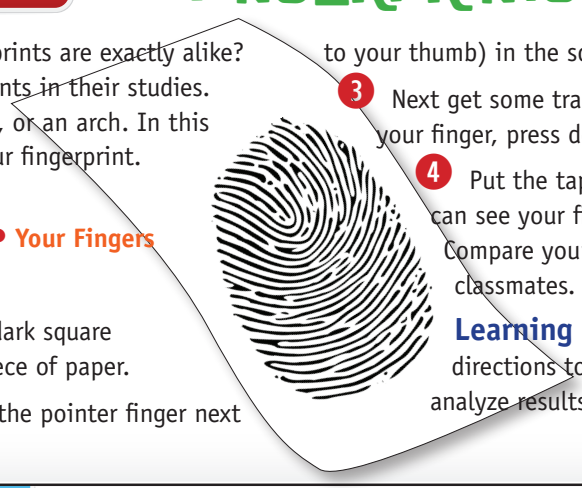
Anthropology majors are hired for jobs in medicine, public health, business, environmental protection, marketing, human resources, forensics, and museums. Google hires anthropologists to understand internet search patterns, Intel employs anthropology graduates to study how culture shapes customers' technology habits, and General Motors' anthropologists study the company's corporate culture.

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

SCIENCE INVESTIGATION

Fingerprints

Did you know that no two fingerprints are exactly alike? Anthropologists can use fingerprints in their studies. Fingerprints have a whorl, a loop, or an arch. In this experiment, you will evaluate your fingerprint.



Materials Needed:
• Paper • Pencil • Clear Tape • Your Fingers

Procedure:

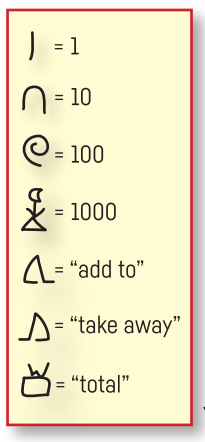
1. Take a pencil and create a dark square (approximately 2 inches) on a piece of paper.
2. Then rub your index finger (the pointer finger next to your thumb) in the square you created.
3. Next get some transparent tape. Put a piece of it over your finger, press down, and pull it off.
4. Put the tape on a piece of paper and you can see your fingerprint. What is your pattern? Compare your pattern with those of your classmates.

Learning Standards: I can follow sequential directions to complete an experiment. I can analyze results.

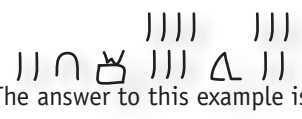
MATH CONNECTION

Hieroglyphics

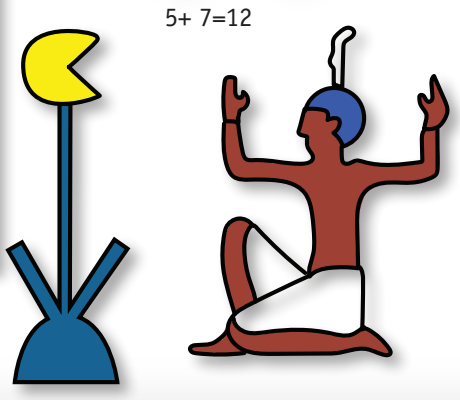
Directions: Did you know that anthropologists used math to decipher hieroglyphs? Egyptian hieroglyphics are solved reading right to left. A single line is used to represent each number 1-9 (1 has one line, 3 has three lines, etc.).



Look at the example.



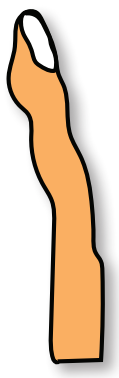
The answer to this example is:
5+ 7=12



Can you solve the following problems? Write the number sentences on the line below each problem. Remember to read right to left.

1 _____

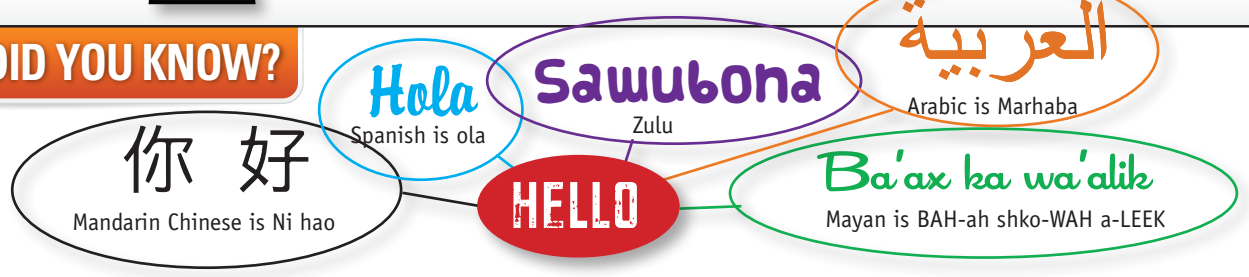
2 _____



Use the hieroglyphics to create a problem of your own. Trade problems with a friend and solve.

Learning Standards:
I can use symbols to add and subtract to solve a problem.

DID YOU KNOW?



- Although Americans eat 35,000 tons of pasta a year, rice is the main staple food for 50% of the world's population.
- The 3 most common languages in the world are Mandarin Chinese, Spanish and English.
- Did you know 10% of the world's food supply is consumed by insects, and 80% of the world's food crops are pollinated by insects?

SCIENCE STARS

African-American Biologistand Anthropologist Fatimah Jackson

Who she is: Fatimah Jackson is an African-American biologist and anthropologist. To learn about anthropology, read today's Science Corner.

What she does: She studies African plants used for food and medicine, such as tea, cassava, and sorghum. She travels to Africa and studies the plants in a lab to see how they work.

Why it's important: Jackson has learned that the cassava plant can help prevent diseases like malaria and sickle cell anemia. It can also be used to create insecticides so that other crops can grow without being eaten by insects. Sharing this knowledge can help people become healthier and keep them safe.

Her early influences: Jackson's family was very close growing up. She spent a lot of time with her extended family, as well. Her aunt would discuss a lot of topics with her, including biology. Their family often went to the library and she read as many books as she could because she wanted to learn as much as possible. At the age of 11, she requested a chemistry set and her parents bought her one to encourage her interests.

Education: Jackson wanted to attend college at Cornell University, but could not afford it. She was told she could receive money to help pay for college if she maintained A's in her classes. She earned three degrees from Cornell University—a B.A. earned in 1972, an M.A. earned in 1978, and a PhD earned in 1981. Her studies focused on anthropology and biology.

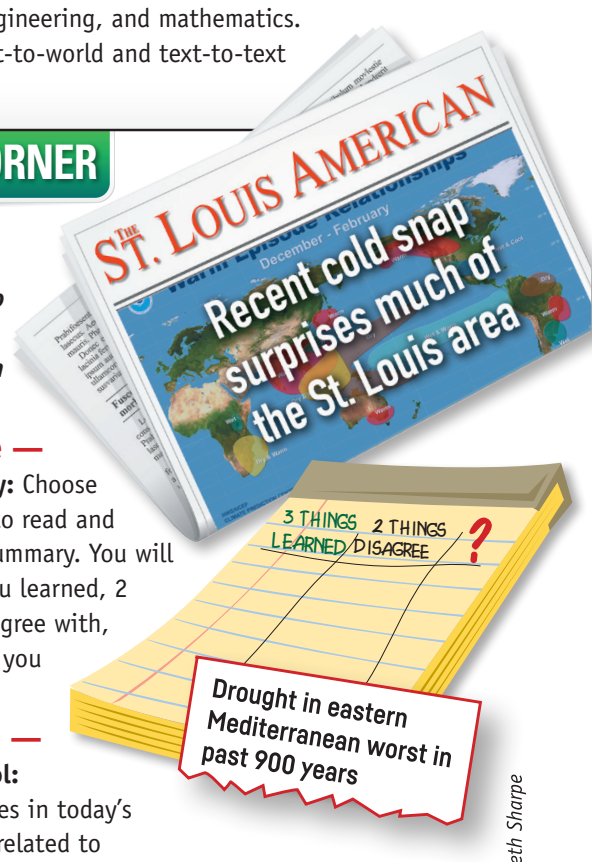
Career: Jackson worked at the University of Maryland teaching biological anthropology. She served as the director of UNC's Institute of African American Research. She was also the director for benefits for the New York African Burial Ground Project. Currently, she works in the Department of Biology at Howard University.

Awards: Jackson won the Distinguished Scholar Teacher Award at the University of Maryland and the Ernest E. Just Prize in Medical and Public Health Records.

For a free 16 page guide about Fatimah Jackson created for students, visit: http://wonderwise.unl.edu/02teach/afrplbio.pdf.

Learning Standards: I can read a biography about a person who has made contributions in the fields of science, technology, engineering, and mathematics. I can make text-to-world and text-to-text connections.

MAP CORNER



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

Activity One —
3,2,1 Summary: Choose a news article to read and write a 3,2,1 summary. You will list 3 things you learned, 2 things you disagree with, and 1 question you have.

Activity Two —
Climate Control: Find news stories in today's paper that are related to the climate in various regions of the Earth (for example, crop failure due to drought).

Diseases on the move because of climate change. Valley Fever, Lyme Disease among them.

Record annual increase of carbon dioxide observed at Mauna Loa

Learning Standards: I can use the newspaper to locate information. I can summarize information and make deductions.

Content—Jennifer Wirthwein • Design—Beth Sharpe

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