

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.

STEM
science, technology, engineering, and math

CLASSROOM SPOTLIGHT

Buder Elementary School 4th grade teacher, Brittanie Clement,

shows students Jayla Law and Victor Berry how to research and design a water filtration system as a STEM lesson. Buder Elementary is in the St. 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

Most people love to spend time outdoors in the sun during the summer. In order to stay safe in the summer heat, remember these important rules from the Center for Disease Control and Prevention (CDC).

- > The temperature inside a parked car heats up very quickly. Never leave pets or children inside a parked car in the summer months, even if the windows are cracked open.
- > Wear loose, light-colored clothing (dark colors absorb the heat and raise your body temperature).



Staying Safe in the Heat

- > Wear clothing that covers as much of your skin as possible to protect against the sun's UV rays.
- > Choose sunscreen with a minimum of 15 SPF, with UVA and UVB protection. Remember water and sweat can wash away the sunscreen, so reapply sunscreen every hour.
- > Sunglasses are important to protect your eyes from damage.
- > Schedule outdoor activities in the morning and evening when the temperatures are not as severe.
- > Stay hydrated with plenty of water. This will allow your body to sweat and naturally decrease your temperature.
- > Stay cool with baths and showers.

For information about staying safe during the summer, visit:
<http://www.pbs.org/parents/summer/summer-safety-tips-for-kids/>.

Learning Standards:

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

SCIENCE EXPERIMENT

BUILD A THERMOMETER

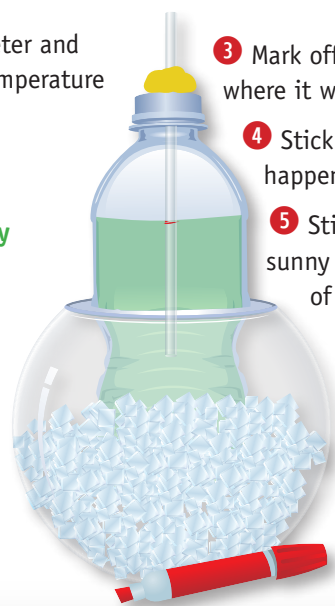
In this experiment, you will build a thermometer and watch what happens to water levels as the temperature drops.

Materials Needed:

- 16-ounce Plastic bottle
- Warm water
- Food coloring
- Clear plastic straw
- Clay
- Bowl of ice
- Marker

Procedure:

- 1 Fill the bottle to the very top with warm water and color it with a few drops of food coloring.
- 2 Put 1/3 of the straw into the bottle. Use clay to seal the bottle closed so that the straw sticks straight up. When you do this, you'll see some water go up the straw.



- 3 Mark off the water level in the straw so that you know where it was when you started.
- 4 Stick the bottle in the bowl of ice and watch what happens to the level of water in the straw.
- 5 Stick the bottle in a warm area (such as next to a sunny window) and watch what happens to the level of water in the straw.
- 6 Analyze: Why does temperature affect water level?

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

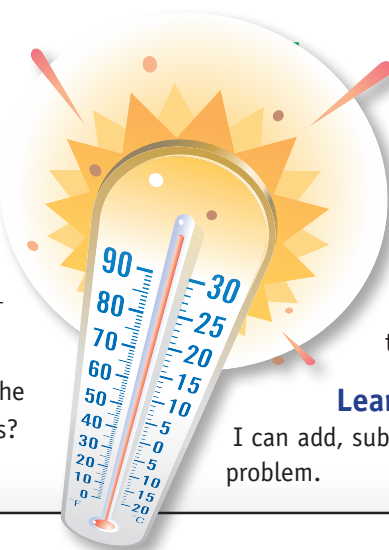
MATH CONNECTION

TEMPERATURE

1 If it is 86 degrees in St. Louis and 7 degrees warmer in Houston, what is the temperature in Houston? _____

2 If it is 73 degrees at 7 a.m. and the temperature rises 2 degrees an hour, what temperature will it be at 1 p.m.? _____

3 If the actual temperature is 87 degrees, but the heat index is 96 degrees, what is the difference between those two temperatures? _____



If it is 85 degrees in Chicago, 89 degrees in Memphis, 96 degrees in San Francisco, and 78 degrees in Portland, what is the average temperature? _____
Arrange the temperatures from least to greatest _____ What is the difference between the highest and lowest temperatures? _____

Learning Standards:

I can add, subtract, multiply, and divide to solve a problem.

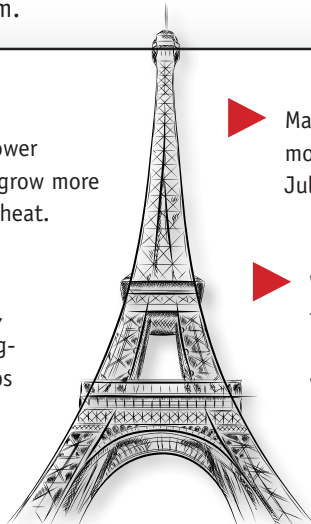
DID YOU KNOW?

▶ The iron in France's Eiffel Tower expands, making the tower grow more than 6 inches with summer heat.

▶ Marc Antony named the month of July, in honor of Julius Caesar.

▶ In the United States, over 650 million long-distance summer trips are made.

▶ When it is summer in the Southern Hemisphere, it is winter in the Northern Hemisphere.



SCIENCE STARS

African-American Inventions in the Summer



Lonnie Johnson

Super Soaker

Do you enjoy water gun fights on a hot day? Did you know the super soaker, the high-powered water gun that has reached nearly \$1 billion in sales, was invented by Lonnie Johnson?

Johnson began tinkering with inventions as a young child and is now a nuclear engineer and former NASA scientist, where he worked in the Jet Propulsion Lab and helped design the Cassini robot probe that flew to Saturn. He holds more than 80 patents. He is board chairman of the Georgia Alliance for Children and a member of the 100 Black Men of Atlanta, and mentors high school and college students. He was inducted into the State of Alabama Engineering Hall of Fame in 2011.



George Franklin Grant

Golf Tee

Golf is a sport enjoyed by people of all ages, especially in warm summer weather. Dr. George Franklin Grant received U.S. patent No. 638,920 for the golf tee on Dec. 12, 1899. Grant, a dentist, enjoyed playing golf with his friends. However, he did not enjoy having to pinch mounds of sand together to create a spot to hit the golf ball, especially after 18 holes. It created a mess and was tedious work. He invented the golf tee and patented it, but he never sold it to make money. He chose to give them to his friends. In 1991, the United States Golf Association gave him recognition for his invention.



Alfred L. Cralle

Ice Cream Scoop

What is summer without a sweet ice cream treat? Before the ice cream scoop was invented, ice cream was very difficult to serve. It would stick to the spoon or ladle and it required both hands and usually two utensils to serve.

Alfred L. Cralle was working in Pittsburgh as a porter, which is an employee who carries luggage for people as they enter hotels, when he noticed the street vendors who sold ice cream struggling with this problem. Cralle invented the ice cream scoop to allow people to scoop ice cream with one hand, making the process quicker, easier, and neater. On February 2, 1897, Cralle was granted U.S. Patent #576395 for the ice cream scoop.

Learning Standards: I can read biographies of African Americans who have made contributions in the fields of science, technology, engineering, and math.



MAP CORNER

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

Activity One —

Parts of Speech Headlines:

Choose ten headlines from the newspaper. Identify the part of speech for each word in the headline. Try rewriting the headline with more adjectives. How does it impact the headline?



Activity Two — Creating an Index:

Create a newspaper index for The St. Louis American. Similar to a table of contents, an index tells the reader where to find various sections of the newspaper. What sections are included in your newspaper? What types of information will you find in each section?

Learning Standards: I can use the newspaper to locate information. I can identify parts of speech. I can use an index.

Index	Birthdays	Classifieds	Comics	Horoscope	Local news	Lottery	Move ticket	Obituaries	Opinion	Real estate	Sports	Stocks	Weather
	B1	B2	B3	B4	A3	A2	B5	A4	A5	B6	B1	B7	A6

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

