

Parent U

Science at home – making the connection

<https://bit.ly/2R5RpLf>



Donald Burken - Director of Science

Elementary Science --

Helping Your Child Become
Scientifically Literate



Science in the Home

- Walk outside and learn about nature.
- Ask for observations.
- Ask questions about the observations.



Science in the Home

- Talk about why things work
 - radio, television, magnets on refrigerator, circuits
- Talk about why plants and animals are able to survive
- Talk about the solar system
- Talk about how Earth changes
- If you do not know, research with your child.



Hands-on

- Investigate with your child
- Experiment together
- Record results
- Connect learning to science concepts



Ask Questions



- Have you ever seen it rain sideways?
- What do you think causes it to snow sideways sometimes?



Ask Questions



- Why?
- How come?
- Why does something work or not work?
- Why does something float?
- Why is a fork shaped the way it is?



Measurement

- Length
- Temperature
- Time
- Volume
- Weight



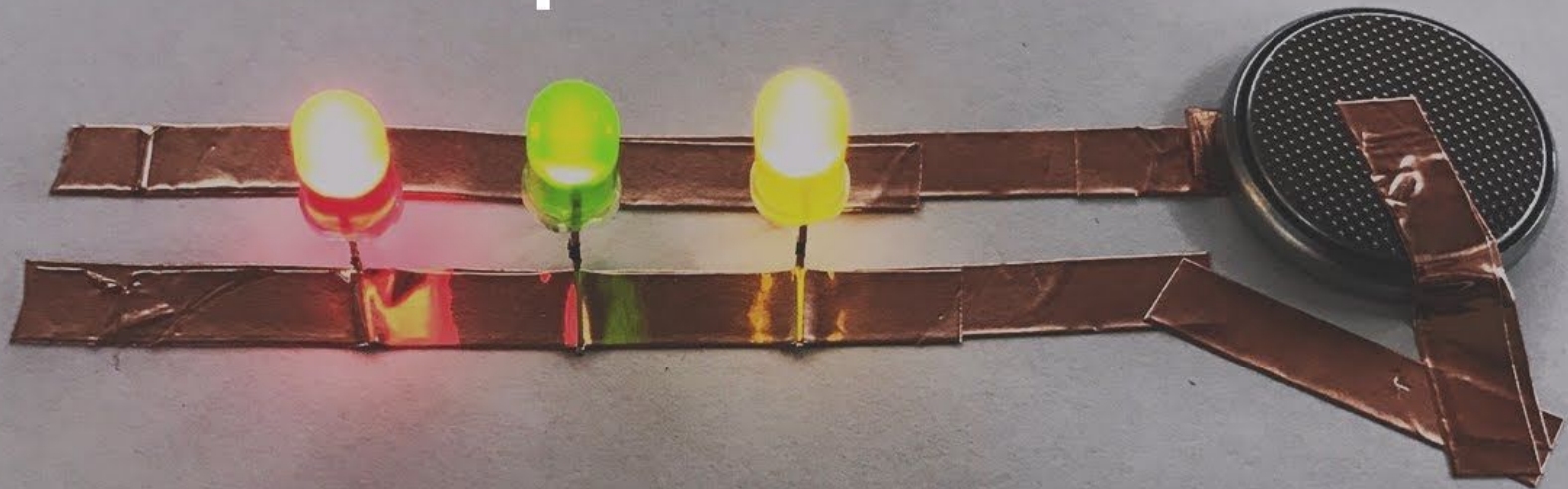
Oobleck

- Get 1 baggie
- Add three teaspoons of starch
- Add three drops of food coloring
- Add 2 teaspoons of water
- Close baggie and knead.
- Observe what happens.



Makr Circuits

Using Copper Tape with Paper Circuits



Claims, Evidence, Reasoning

- **Claim:** the water evaporated
- **Evidence:** the water was on the sidewalk after the rain, but 20 minutes later it is gone
- **Reasoning:** I know I can't see water evaporating, but it has disappeared. When water disappears in the water cycle, it has evaporated due to the addition of heat.



Collaborate with teachers

- Visit with your child's teacher to see how to help your child.

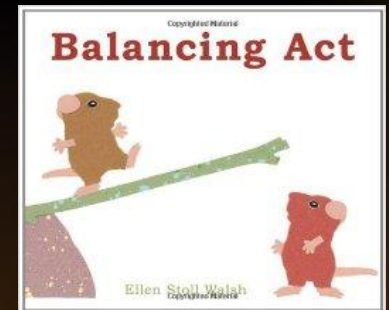
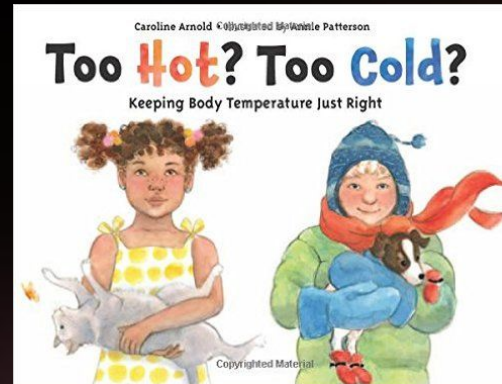
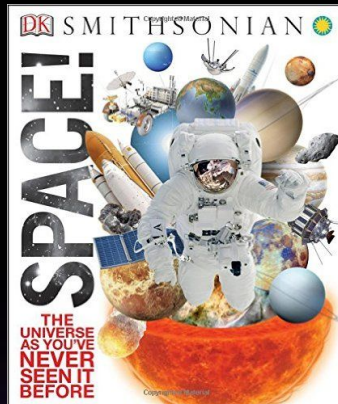
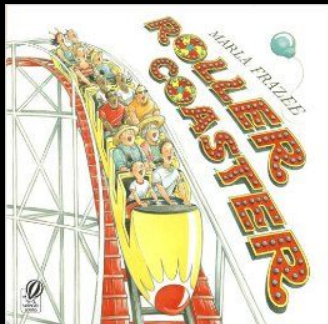
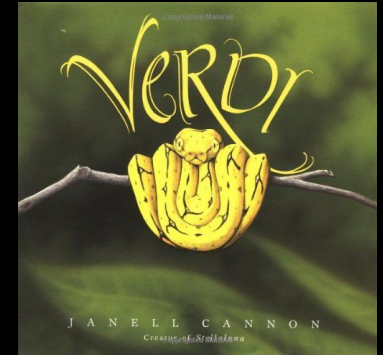
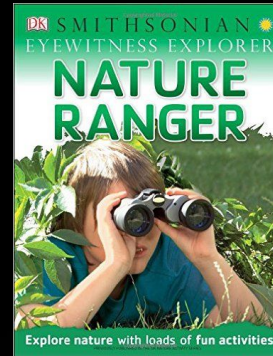
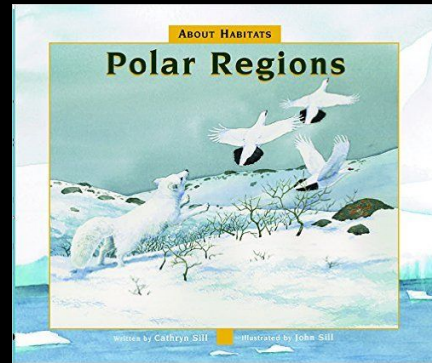


Read science

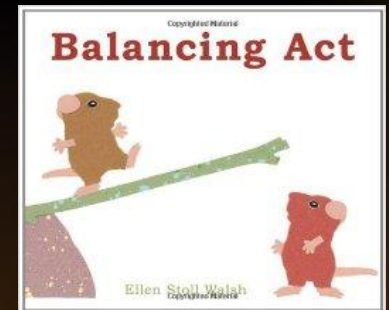
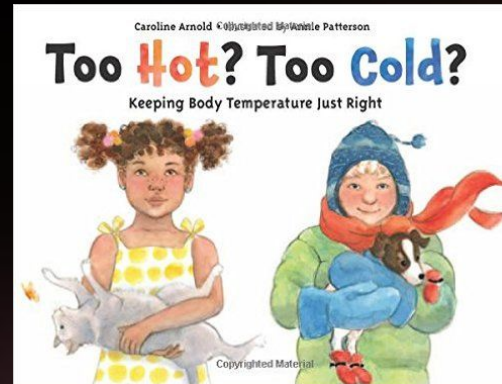
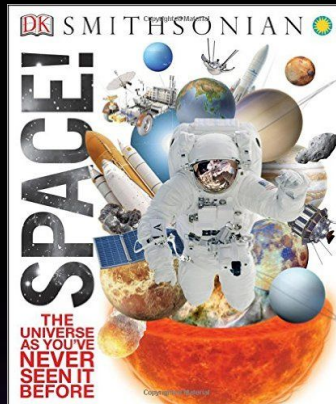
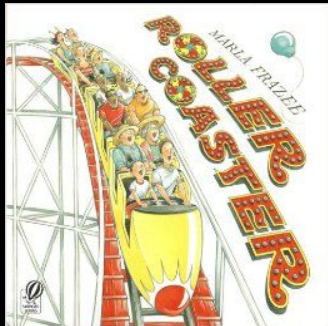
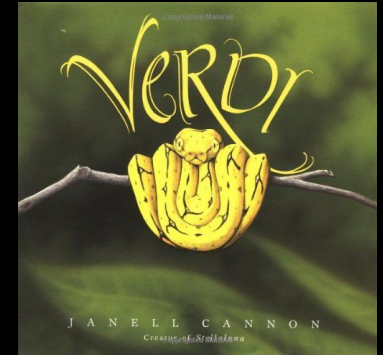
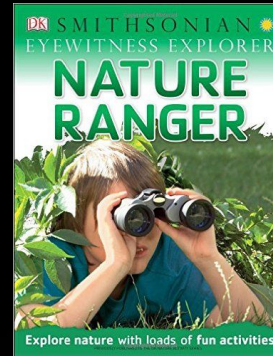
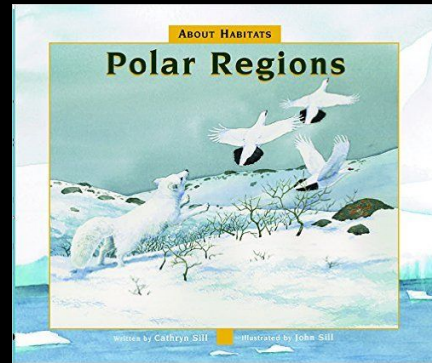
- Books
- News articles
- Magazines
- [Tumblebooks](#)



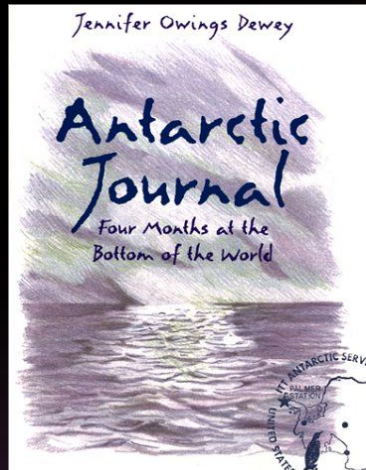
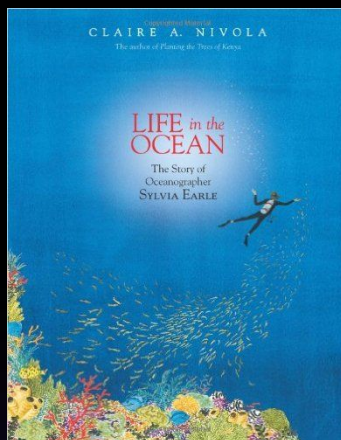
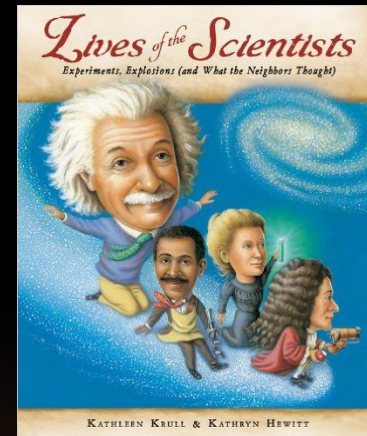
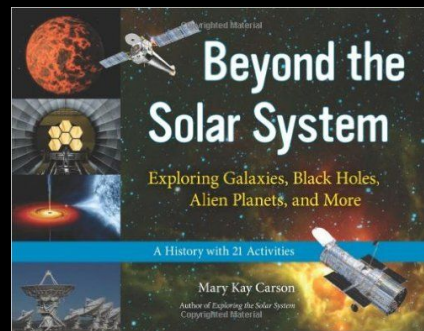
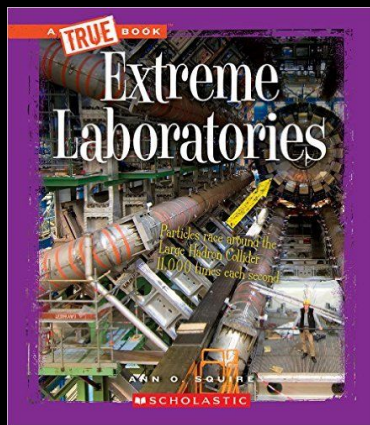
Literacy in Science (K-5)



Literacy in Science (K-5)



Literacy in Science (6-8)



Online Resources

- Study Jams
- Reading in Science
- Student science sites
- Khan Academy
- BBC
- PBS Kids



Science in the community

- Zoo
- Museums
- Planetarium
- Aquarium
- Farms
- Arboretum
- UH



Children's Museum

- <http://www.cmhouston.org/>



Houston Museum of Natural Science

- <http://www.hmns.org/>



Museum of Health

- <http://www.mhms.org/>



Houston Arboretum

- <http://www.houstonarboretum.org/>



Johnson Space Center



- Student Activities

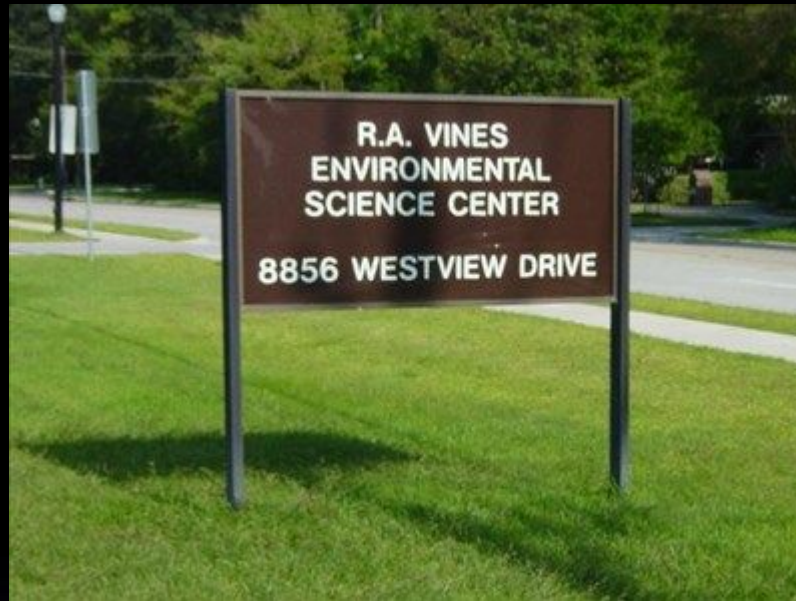


UNIVERSITYof **HOUSTON** | STEM

- Middle School
- High School



Robert A. Vines Environmental Science Center



Questions



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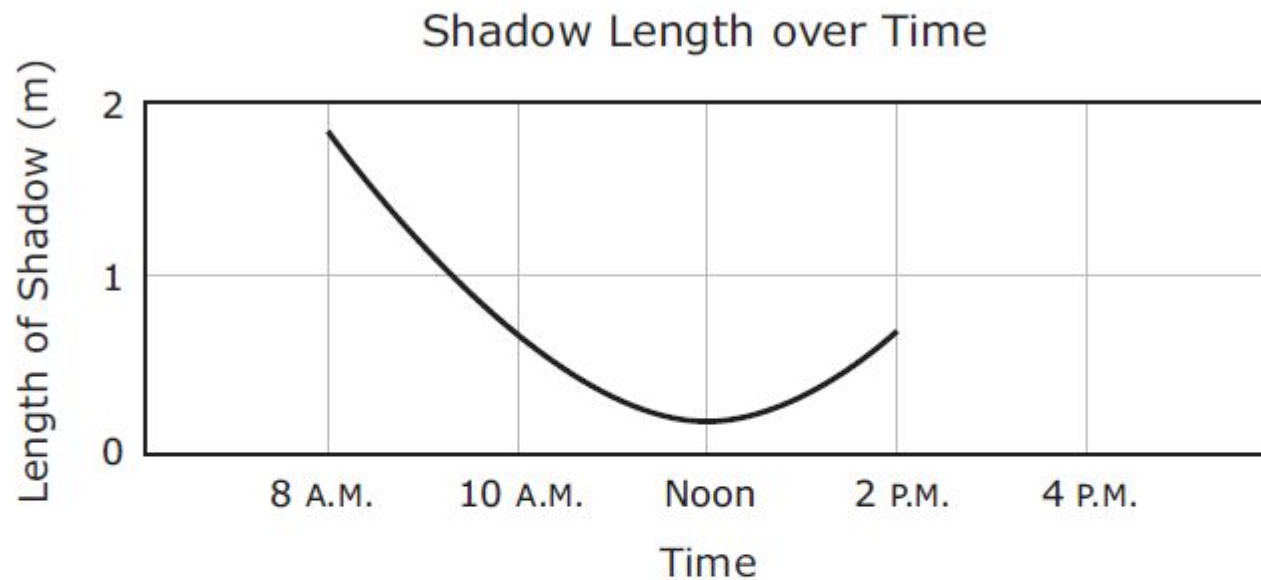


STAAR

- Matter and Energy
- Force, Motion, & Energy
- Earth and Space
- Organisms and Environments



- 7 The graph below shows changes in the length of the shadow of a tree during part of a day.

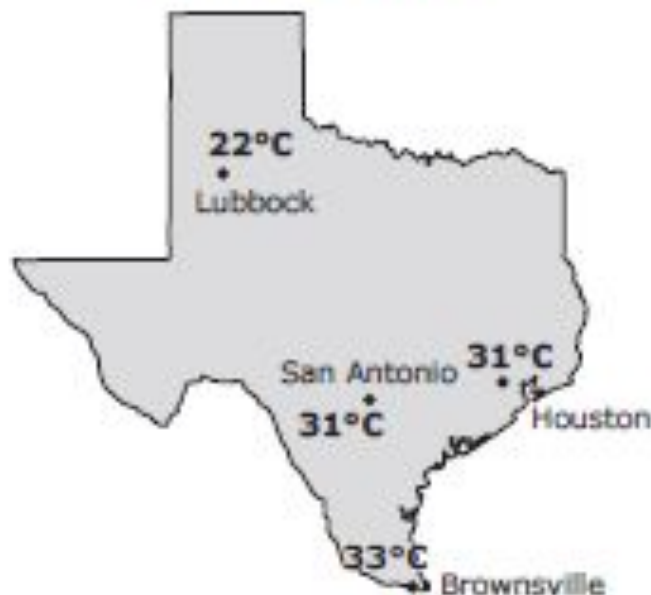


If this day continues to be sunny, what will most likely happen to the length of the shadow from 2 P.M. to 4 P.M.?

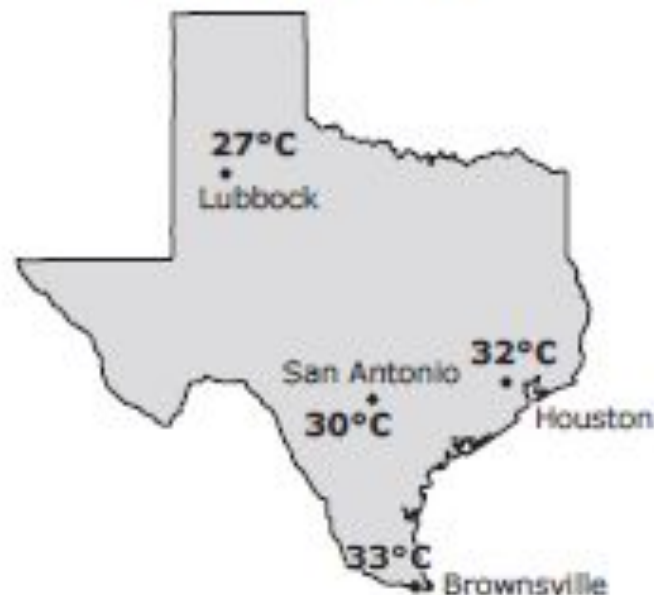
- A** The length of the shadow will stay the same.
- B** The length of the shadow will decrease and then increase.
- C** The length of the shadow will increase.
- D** The length of the shadow will decrease.

- 14 A student studies two Texas maps that showed some high temperatures for two days in October 2012.

High Temperatures
on October 5, 2012



High Temperatures
on October 12, 2012



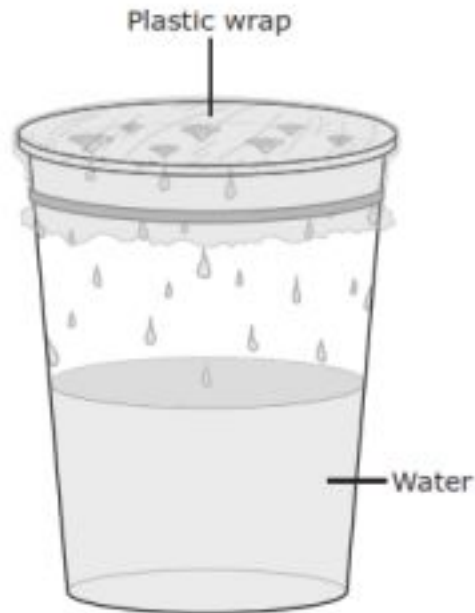
Source: *The Old Farmer's Almanac*

How many degrees Celsius did the high temperature increase in the city that had the greatest change in high temperature?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

2014 – Q7

- 7 A student makes a model of the water cycle by using a cup, some water, and plastic wrap. After the student places the model near a sunny window, moisture forms on the inside of the plastic wrap.



What change is the student most likely observing in this model?

- A Freezing
- B Condensation
- C The warming of air
- D The formation of clouds