COLOR OUR WORLD | THIRD GRADE | S3P1. HEAT ENERGY

# **CONNECTIONS TO SCIENCE GUIDES**

GEORGIA YOUTH SCIENCE & TECHNOLOGY CENTERS, INC.

# THERMOMETERS BY: STEPHEN SCHUTZ



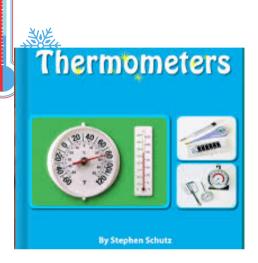
CAN'T FIND THE BOOK? Read-Alouds are available on youtube.

### **HAVE YOU EVER NOTICED...**

• that adults may check the weather to see if how you should dress for the day?

### **HAVE YOU EVER WONDERED...**

• how you can use a thermometer to collect weather data?



### **EXPLORE**

#### **TEMPERATURE MOSAIC**

#### **Materials:**

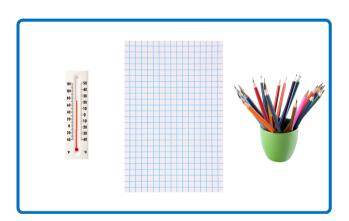
- A thermometer or another way to find out the temperture (i.e., cell phone, computer, television)
- Graph paper
- Colored pencils, crayons, or markers

#### **Directions:**

- Begin by observing the thermometer. Think: What do the numbers mean? The letters?
- Place the thermometer in an outdoor location where you can check it every day.
- At the same time every day, check your thermometer and record the temperature every day for a week to a month
- Using the graph paper, create a chart using the temperature data that you've collected.
- As you are exploring, think about:
  - How would this chart look different if the data was collected at a different time of year?

#### **Connection to Art:**

Once you have created your chart, assign a color to a temperature range.
 Color the bars of your chart according to your key.



# **EXPLAIN**

#### **TEMPERATURE**

Thermometers measure temperature, which is the transfer of heat energy. A typical thermometer contains a bulb filled with a liquid like mercury or alcohol that expands when it is heated and moves up the narrow tube to indicate a higher temperature. When cooled, the liquid contracts moving down the narrow tube in indicate a lower temperature. Temperature can be measured in degrees Celsius or degrees Fahrenheit.



# **EXTEND**COOL OFF AT A LOCAL SPLASH PAD



Summers in Georgia can be hot! Find a local park near you with a splash pad to cool off. No splash pad nearby? Sprinklers work great too!

# STEM CAREER THERMAL ENGINEER

A thermal engineer is an engineer who uses their knowledge of thermodynamics to work with heating and cooling systems. At work, thermal engineers design, monitor, and repair heating and cooling systems like evaporators, coolers, heaters, radiators, and condensers. If you are interested in working with heat, being a thermal engineer might be for you!





## **BACKGROUND**

The Georgia Youth Science and Technology Centers, Inc. provides quality programs for teachers of STEM subjects that improve the teaching and learning process at the kindergarten through eighth grade levels. We present programs that change students' perceptions and inspire an appreciation for science, technology, engineering, and mathematics subjects.

### **ABOUT US**

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