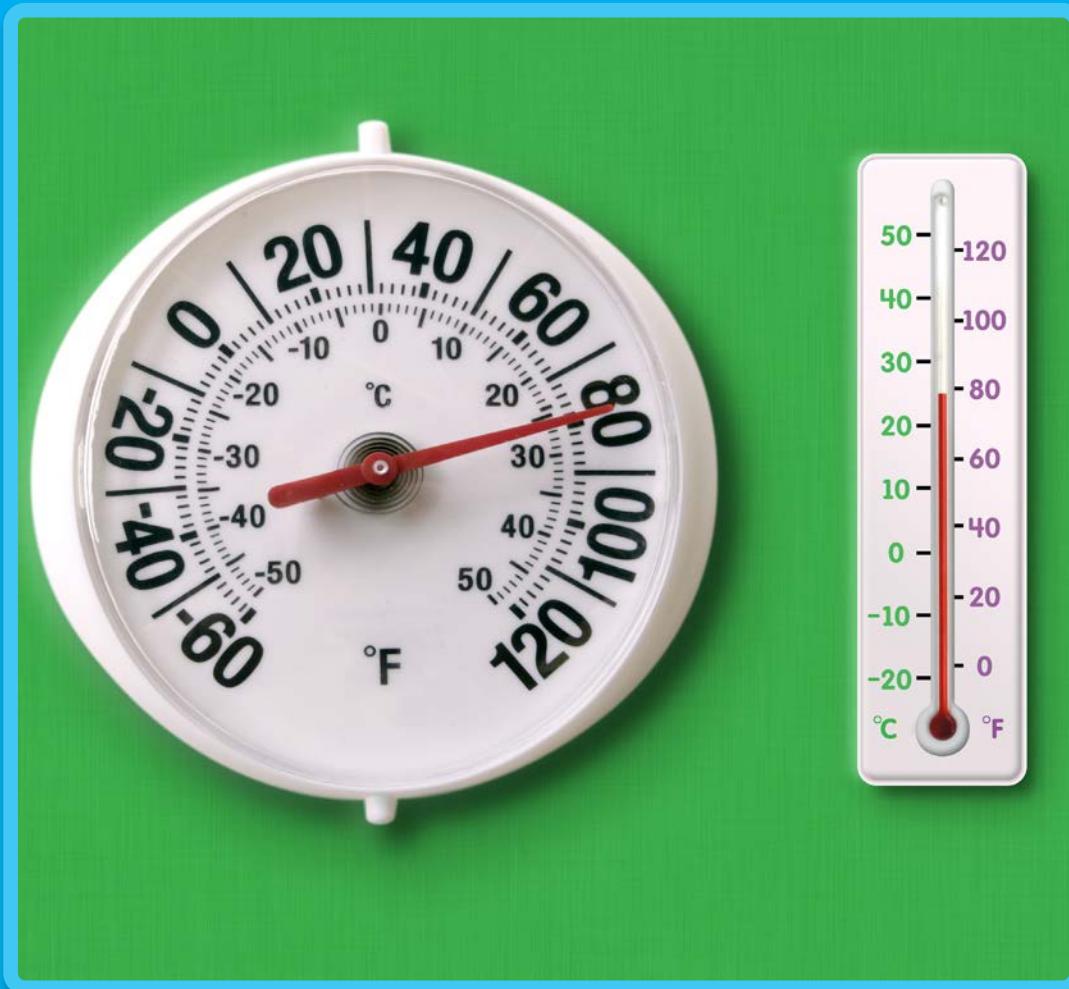


Thermometers



by Stephen Schutz



How hot is it? How cold is it? Check the thermometer to see!

We use thermometers to measure temperature. There are many different kinds. Look inside to find out more!

Starfall.com®

Begin with free reading and math activities for computers and mobile devices.

Discover even more interactive activities with a Starfall membership!

Find free worksheets, lesson plans, guides, and more on teach.starfall.com.

Shop at store.starfall.com for educational products.

Thermometers

by Stephen Schutz



Starfall Education Foundation
P.O. BOX 359, Boulder, CO 80306

Copyright ©2026 by Starfall Education. All rights reserved. Starfall® and Starfall.com® are registered trademarks in the U.S., the European Union, and various other countries.
This document may be reproduced by individuals for non-commercial use in their own school or home, but any other reproduction is not allowed without written permission from the publisher.

Starfall Education Foundation is a publicly supported nonprofit organization, 501(c)(3)

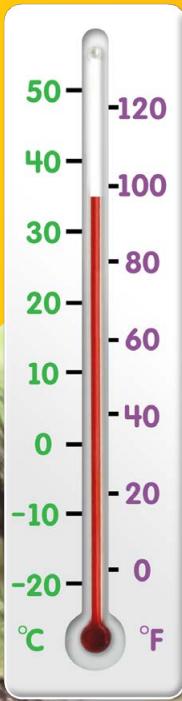
ISBN: 978-1-59577-062-2

A photograph of a desert sunset. In the foreground, several saguaro cacti stand tall against the orange and yellow sky. The sun is a large, bright white circle in the upper right corner. Distant mountains are visible in the background.

How **Hot?**

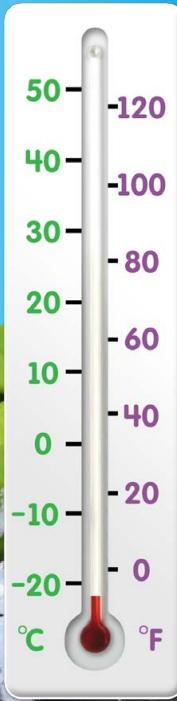


How
Cold?



You can feel hot.

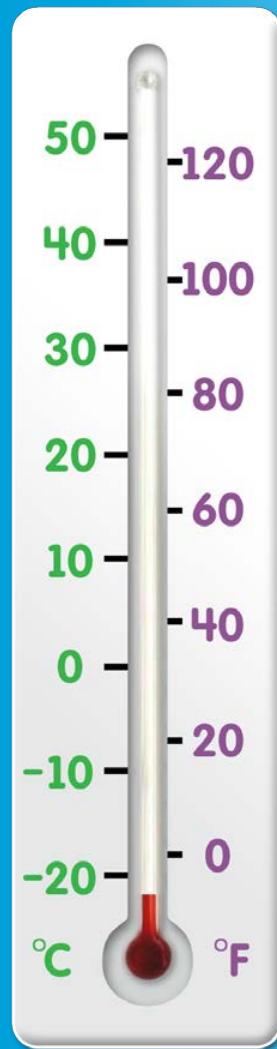
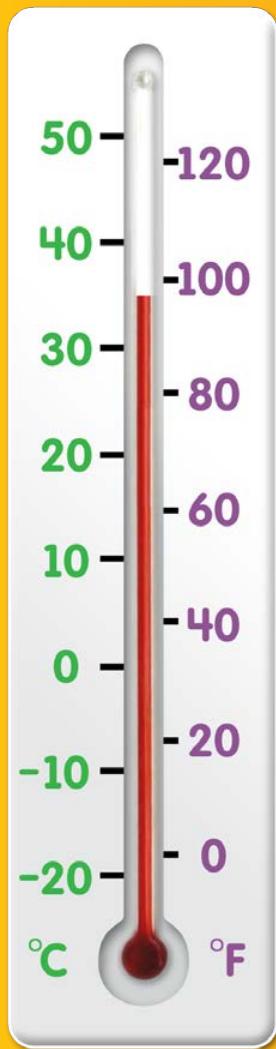
A **thermometer** tells you *how* hot.



You can feel cold.

A thermometer tells you *how* cold.

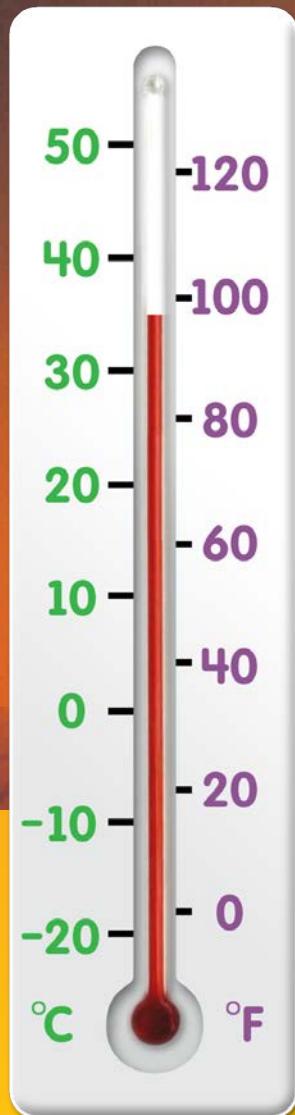
Hot



Cold

Thermometers tell us how hot or how cold.

This is the **temperature**.



High

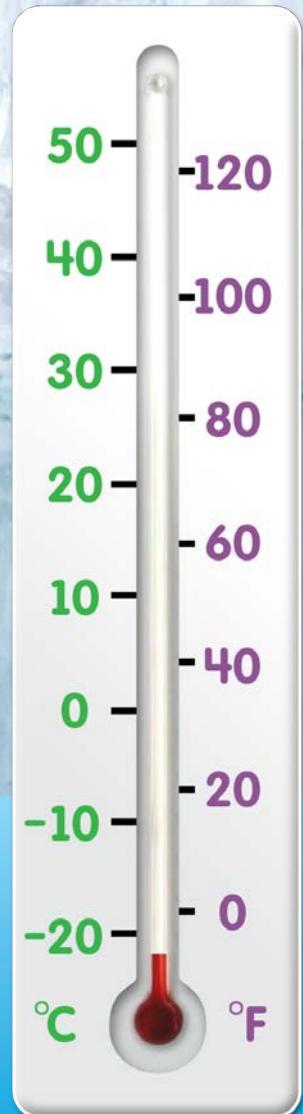
When it is hot, the line goes up.

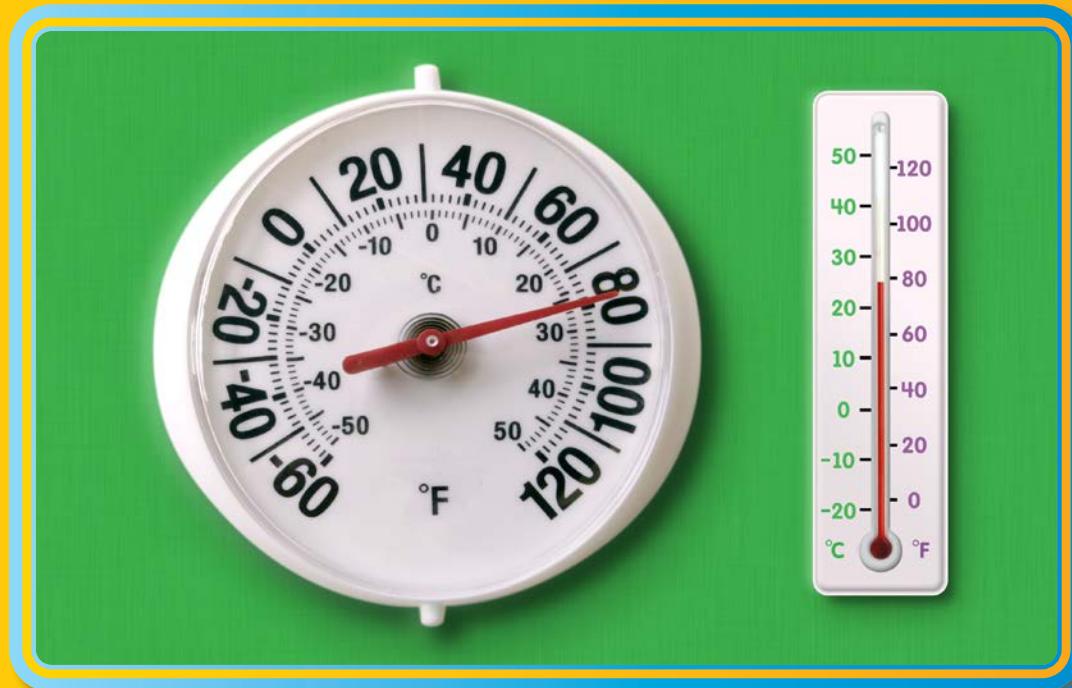
The temperature is high.



When it is cold, the line goes down.

The temperature is low.





There are many kinds of thermometers.

All thermometers tell us the temperature.
They tell us how hot and how cold.



I feel sick! Am I hot?

Mom uses this thermometer to see.



It looks cold today! Will I need a coat?

I use this thermometer to see.



That looks yummy! Can we eat it?

Dad uses this thermometer to see.



Look at this picture. Is the temperature high or low?

What do you think the thermometer will say?

Words You Know

Temperature The measure of how hot or how cold.

Thermometer An instrument that measures temperature.

Thermometers

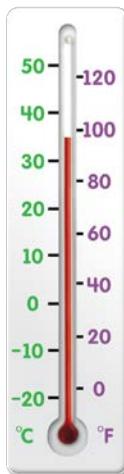


We use different thermometers for different purposes. Look at the groups of thermometers above. Do you know what each one is used for? Which group of thermometers will tell you if you have a fever? Which would you use for cooking? Which would you use to check the air?

Learn More About Thermometers

Celsius and Fahrenheit

We measure temperature in degrees. There are two sets of numbers (or scales) used to describe degrees, Fahrenheit and Celsius.



Look at this thermometer. The purple numbers on the right have an $^{\circ}\text{F}$ below them. The little $^{\circ}$ next to the F means degrees. This side of the thermometer measures the temperature in Fahrenheit degrees.

The green numbers on the left have a $^{\circ}\text{C}$ below them. This side of the thermometer measures the temperature in Celsius degrees.

The Celsius scale is the standard scale used around most of the world to measure temperatures. Only the United States continues to use the Fahrenheit scale.

How does a thermometer work?

All thermometers have something inside of them that responds to temperature changes in some way.

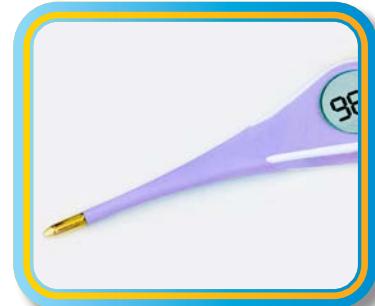
This thermometer has a red liquid inside of a glass tube. As the temperature rises, the liquid expands and the red line goes up!



This thermometer has a coil-spring inside of it. As the temperature rises, the spring expands and pushes the dial to the right.



This thermometer has a small electrical current inside that changes with temperature.



Index

C

Cold **3, 7, 8, 9, 11, 13, 17, 22**

H

High **10, 21**

Hot **2, 5, 8, 9, 10, 13, 15, 22**

L

Low **11, 21**

T

Temperature **9, 10, 11, 13, 21, 22, 23**

Thermometer **5, 7, 9, 13, 15, 17, 19, 21, 22, 23**

About the Author

At age 9, young Stephen Schutz was still struggling to read. What came easily for some children required many more hours of Stephen's work, and he was consistently toward the bottom of his class in reading. Now a Ph.D. in physics and a successful publisher and artist, Dr. Schutz wants to make sure children in his situation today have resources that can help. He turned to the Internet and conceived Starfall.com, an online educational resource available to children the world over.

Acknowledgments

Developed in cooperation with ELHI Publishers Services. The following photos were licensed from iStockphoto: *Siblings in the snow* on page 6 © Marzanna Syncerz; *Little happy boy* on page 20 © Grafvision.