EnviroKids!
Educational Tools for Tomorrow's Environmental Heroes

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NATIONAL WEATHER SERVICE

Summer Heat

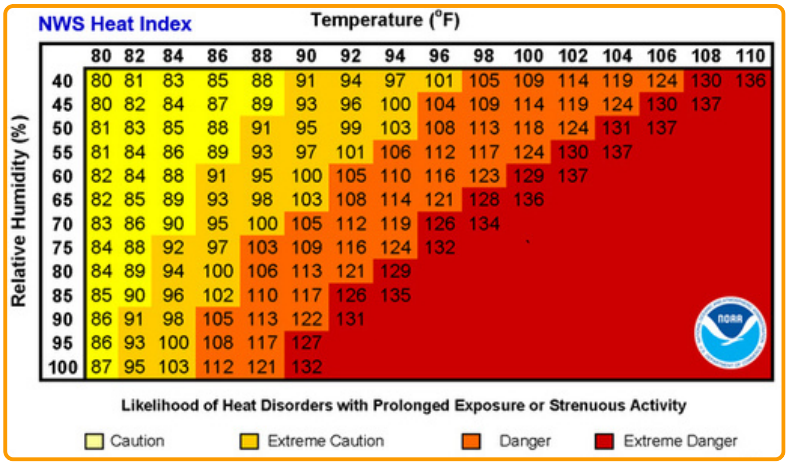
Summer is the hottest season of the year with the longest days and shortest nights. It occurs when the Earth is tilted towards the Sun and more direct sunlight reaches the Earth that leads to warmer temperatures.

A heat wave is a period of unusually hot weather that typically lasts two or more days. To be considered a heat wave, temperatures have to be outside the historical averages for a given area. Heat waves are generally the result of trapped air. As opposed to cycling around the atmosphere, the air simply stays put and warms like the air inside an oven. The reason is high pressure in the atmosphere. High pressure systems force air downward. This prevents air near the ground from rising and traps warm ground air in place. A heat wave might sound like a fun time to run around with a hose or into some sprinklers. In reality, heat waves are no laughing matter. Even though heat waves may not be as dramatic as thunderstorms or tornadoes, they are a serious weather phenomenon that can be quite dangerous to our health.

Extreme heat also impacts the world around us, from power to roads to clean water and even agriculture. Electricity usage increases as air conditioning and cooling units in homes and offices work harder to keep the indoors cooler. High heat can make the pavement on roadways buckle or crack. Water is in demand on hot days for cooling, drinking, and watering gardens or crops. Heat can damage crops too!

Everyone can be sensitive to heat, but some people are more impacted than others. Infants, small children, elderly adults, people with poor health and pregnant women can be more strongly affected by high heat. It's never a good idea to keep a person or pet locked in a car on a hot day, even for a few minutes. Too much heat can make you sick. Excessive heat poses a significant risk to people's health, including heat stroke and heat exhaustion, which can result in death.

Tools are available to determine the potential for heat stress from extreme temperatures. One tool is the **Heat Index.** It measures how hot it really feels when relative humidity is factored in with the actual air temperature. A Heat Index chart is handy to use.



There are many things you can do to protect yourself from the heat and the sun. Stay cool by wearing lightweight, light-colored clothes. Drink water. Enjoy outdoor play or activities in the morning or evening, not the middle of the day. If you feel too hot, find shade to cool off and take a break.

PET SAFETY ~ HEAT

Hot temperatures can be dangerous for your pets too! Use these tips to keep your furry friends safe from the heat.

FUN WEATHER FACT

Back in 2021, a heat wave gripped the Spokane area at the end of June with temperatures over 100 degrees for four days in a row. In fact, the high temperatures reached 109°F on June 29th which broke the all-time highest temperature for Spokane! A new all-time high temperature for Washington state was set that date as well, reaching 120°F in Hanford, Washington. On average, Spokane experiences 1 to 2 days of 100° heat a year, and in 2021, there were 6 days of 100° or hotter. Climatologically for Spokane, the warmest time of the year is late July, so that was about a month ahead of schedule.

WORD BANK:

DEHYDRATION
HOT
SHADE
SUNSCREEN
FAN
HUMIDITY
SIZZLE
SWEAT
HEATWAVE
LIGHTWEIGHT
SPF
WATER

HEAT SAFETY WORD SEARCH

G	D	B	K	U	X	P	U	K	I	L	I	N	D	H
T	S	E	C	A	U	N	J	Q	I	T	E	F	A	U
K	I	F	H	X	R	J	L	G	A	E	O	A	U	M
H	I	O	Q	Y	S	E	H	V	R	E	U	N	Y	I
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U	E	T	Z	E	T	N	A	T	G	I	O	E	Q	T
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S	E	G	F	S	I	G	V	E	I	D	Q	Z	K	O
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H	P	Z	R	R	K	V	E	X	L	W	L	F	Q	R
F	T	O	H	V	O	V	H	I	S	J	T	N	O	H

Celsius and Fahrenheit

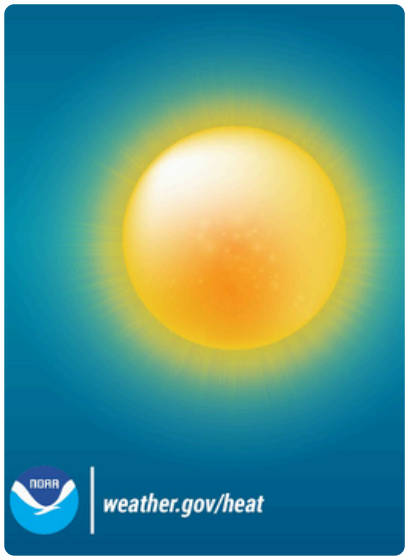
Thermometers measure temperature based on defined scales of measurement. The two most common scales are Fahrenheit and Celsius. These scales were created by scientists who identified two reproducible temperatures: the freezing and boiling points of water. Temperatures can be converted from one scale to another using simple math!

_____°F − 32 = _____ and _____ ÷ 1.8 = _____°C

a b b c

STAY SAFE IN THE HEAT!

- **Find air conditioning or a cool shady place during the peak heating of the day**
- **Drink plenty of water**
- **Wear light clothing**
- **Check on family and neighbors, especially infants and the elderly.**
- **Never leave people or pets in parked vehicles**
- **Don't feel good? Lie down and rest**



Engineering Challenge

Make a shade structure for an ice cube that slows it from melting in the sun. Try it inside or outside. Create a control by placing an ice cube in a bowl, without a shade structure, in full sun. Start a stopwatch. How long did your structure keep the ice frozen? Don't be afraid to redesign your structure and try again to see if you can keep it cold for even longer!

Envirokids is a collaborative effort among multiple environmentally focused agencies in the Spokane region working to provide locally relevant educational resources to teachers and families.