



Weather Facts Games Puzzles



PRESENTED BY





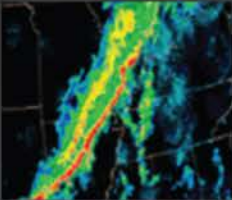
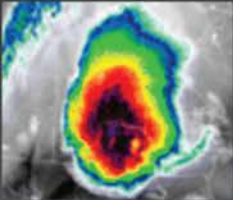

WELLS FARGO
CHAMPIONSHIP



PROMISING PAGES
The Charlotte Area Book Bank

THUNDERSTORMS

IN THE CAROLINAS

1	2	3	4	5
MARGINAL	SLIGHT	ENHANCED	SEVERE	EXTREME
CUMULUS CLOUDS	SINGLE CELL	SQUALL LINE	MULTICELL	SUPERCCELL
				
Isolated thunderstorms	Scattered thunderstorms	Numerous severe storms possible	Widespread, very severe	Widespread, very severe, long-lived

UNDERSTANDING WATCHES AND WARNINGS

WATCH

BE READY
TO MOVE TO A
SAFE PLACE

vs.



WARNING

TAKE ACTION!
GET TO A SAFE
PLACE NOW!

Think of it this way: A WATCH means the ingredients are there for something (to form). A WARNING means it has formed.



CUPCAKE WATCH



CUPCAKE WARNING

PREPAREDNESS CHECKLIST

Stock your emergency kit with these essentials

- ☐ First aid kit
- ☐ Medications
- ☐ One gallon of water per person per day for a total of at least three days
- ☐ Non-perishable food
- ☐ Flashlight
- ☐ Batteries, including ways to recharge cell phones
- ☐ Seasonal clothing, including blankets
- ☐ Cash
- ☐ Basic tools
- ☐ Books, games or cards
- ☐ Pet needs including extra food, water, and medicines



SUPERCCELL

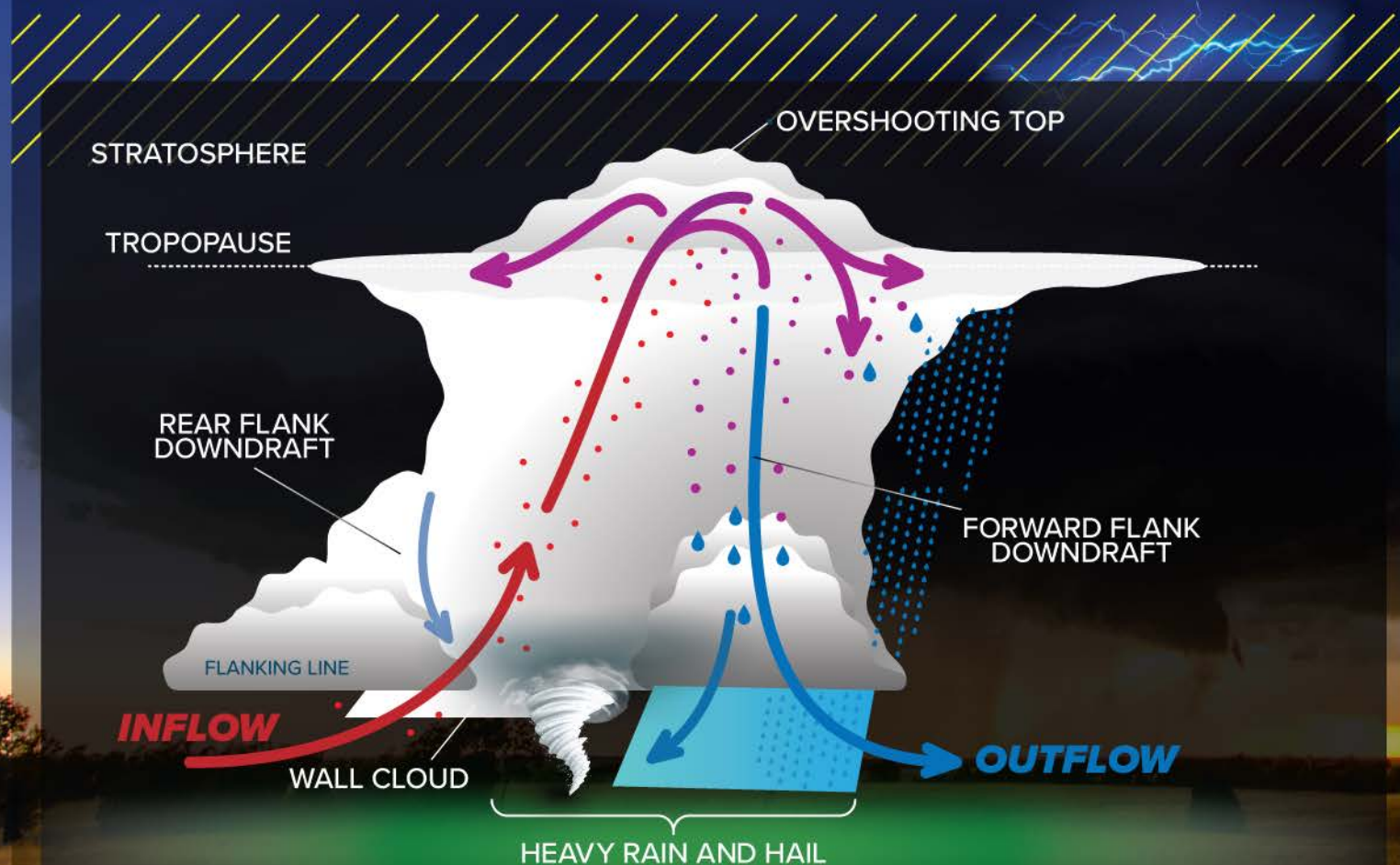
Supercell thunderstorms can produce any combination of **severe weather threats**

Hail Balls of ice that fall from severe storms

Lightning Electric charge between a storm and the ground

Wind Air moving between different air pressures

Rain Moisture in the atmosphere turning to liquid and falling to the ground



**COOL
OFF!**
with

HOMEMADE Ice Cream



Here's a perfect at-home science experiment to do with your family indoors when it's hot outside!

What you'll need:

Sugar
Half and half
Vanilla extract
Ice
Salt
Gallon bags
Quart or sandwich-sized bags (anything smaller than a gallon)
Measuring cups and measuring spoons

Follow these three steps:

1. Prep your "ice cream bag." Add one tablespoon of sugar, 1/2 cup of half and half, and 1/4 teaspoon of vanilla extract to your small bag. Shake a little before sealing up tight!
2. Prep your "ice bag." Add four cups of ice to a gallon-sized bag with the salt on top. Seal up tight.
3. Place your ice cream bag inside your ice bag. Again, seal tightly!

It'll take about 15 - 20 minutes to get the desired impact. Shaking the bag every 5 minutes or so will help things quickly disperse.

Pro tip: this bag will eventually sweat out a lot of condensation. Placing it on a towel will result in less mess.





HOMEMADE Ice Cream

What will happen?

Due to the effect of the salt on the ice, allowing the ice to cool below the freezing point of water (32° F), the contents in the small bag will harden up and become ICE CREAM! Add sprinkles for a little extra taste.

What is the science?

Two things are constantly happening with ice in its solid state of water: the surface of the ice is melting and the melted water is refreezing.

To break that cycle, we add salt.

As the ice melts in our gallon bag, water molecules will mix with the salt molecules. This makes it harder for the ice to refreeze.

So, the rate of that refreezing goes down. This allows for the ice cubes to melt a lot faster. As the ice cubes melt, ice absorbs heat, lowering the surrounding air temperature in the bag.

Eventually, the temperature inside the bag drops below 32° F and freezes our ice cream. This process is called the freezing point depression. **Ta-da!**



LIGHTNING



Lightning is one of the most underrated weather phenomena and it is a frequent occurrence here in the Carolinas.

1. Over 75% of the lightning strikes for the year in North Carolina happen in June, July, and August.
2. Lightning **CAN** strike the same place twice.
3. The odds of being struck by lightning are one in a million.



To tell how far away a thunderstorm is, simply count the number of seconds between the flash of lightning and the boom of thunder that follows. Divide this number by five and this tells you how many miles away you are from the storm.



Invite the WCNC Weather team to your classroom!

Email weather@wcnc.com



If you like weather, watch Brad Panovich and the WCNC Charlotte Weather Team (Brad Panovich, KJ Jacobs, Chris Mulcahy, Larry Sprinkle and Brittany Van Voorhees) on their Emmy Award-winning Weather IQ YouTube channel.

BRAD PANOVICH

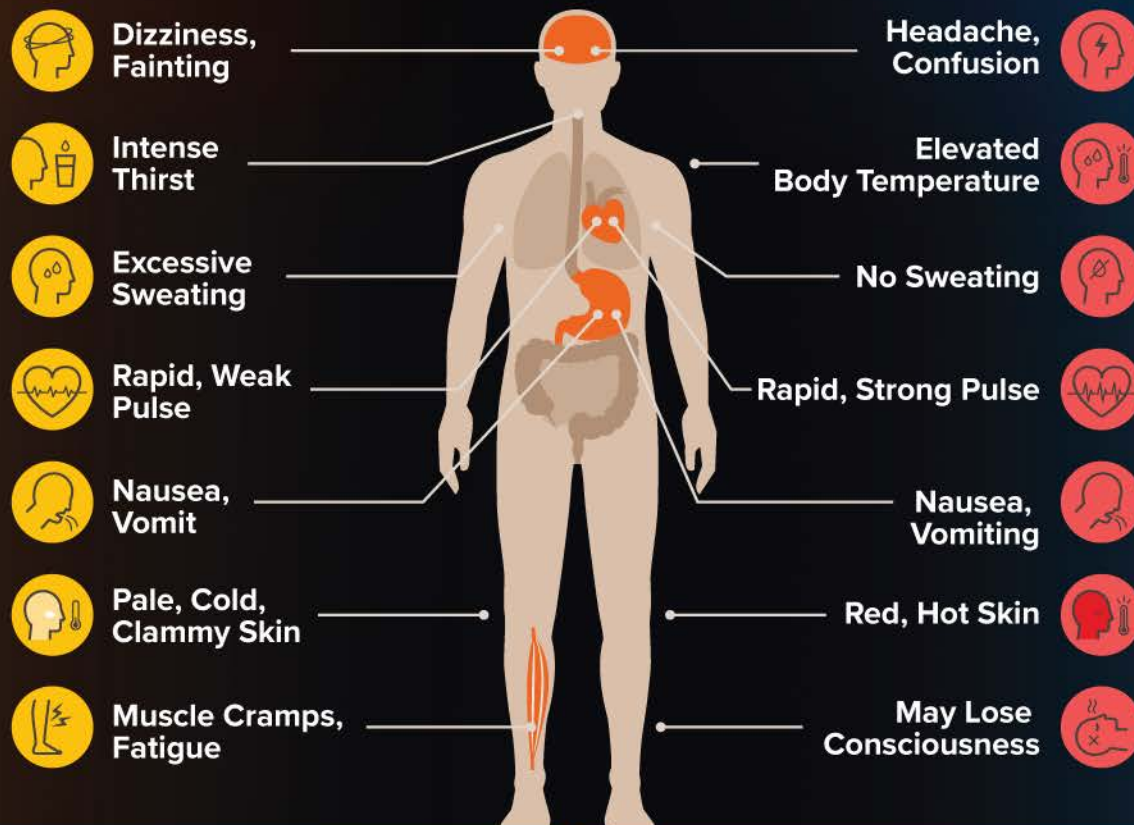


HOT AND COLD

**When the weather is hot,
you need to be aware of hyperthermia.**

Signs of heat exhaustion include dizziness, excessive sweating, clammy skin, muscle cramps, and nausea.

To avoid heat exhaustion, spend time indoors (preferably in the air conditioning), take breaks in the shade, drink plenty of water, and avoid the hottest part of the day.



HEAT EXHAUSTION

MOVE TO A COOLER PLACE
DRINK WATER IF ABLE
TAKE A COLD SHOWER,
USE COLD COMPRESSES

HEAT STROKE

CALL EMERGENCY SERVICES
TAKE IMMEDIATE ACTION TO COOL
THE PERSON

When the weather is cold, you need to be aware of hypothermia and frostbite.

Symptoms of hypothermia include shivering, confusion, exhaustion and drowsiness. These symptoms are caused by the body temperature dropping below 95 degrees. Treatment for hypothermia requires emergency medical attention.

To protect yourself, dress warmly when outdoors during cold weather. Winterizing your home by installing weather stripping and insulation can also help keep you warm. When traveling during cold weather, be sure to keep an extra jacket or blanket in the car.





The Wells Fargo Championship returns to Charlotte this May!



Bring the whole family out to the 2024 Wells Fargo Championship and stop by the Kids Zone, where you can enjoy concessions, fun games and interactive activities! Discovery Place, Atrium Health and First Tee of Greater Charlotte are hosting the fun and Harris Teeter will provide complimentary cookies.

Tickets are still available for the tournament and kids 15 & under receive free grounds admission with a ticketed adult, courtesy of Harris Teeter.

SEE YOU THERE

QUAIL HOLLOW CLUB | MAY 6 - 12, 2024



WELLS FARGO
CHAMPIONSHIP



FLOODING

IN THE CAROLINAS

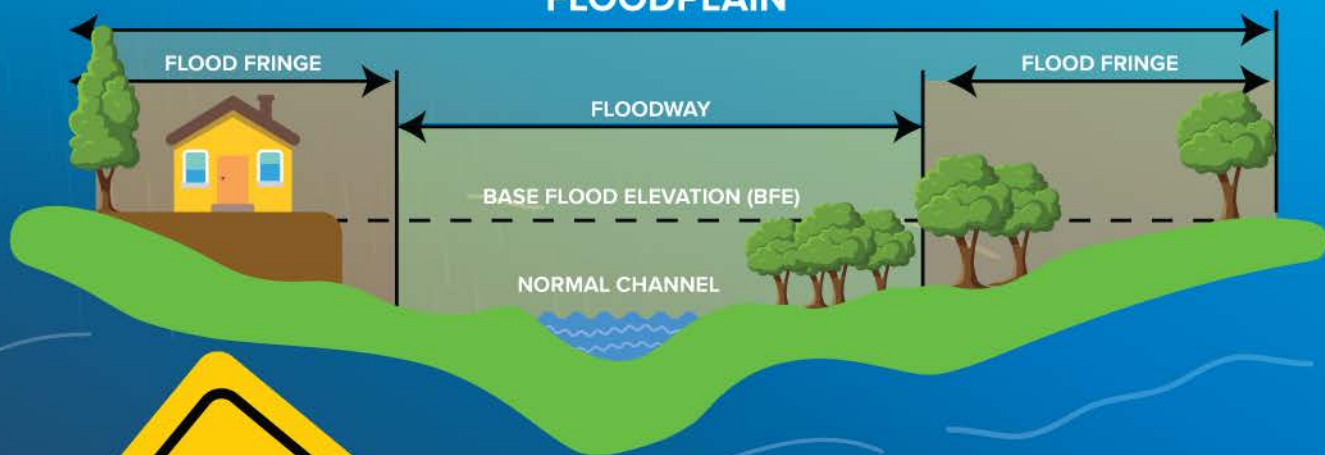
Flooding can happen anywhere. Know your flood threat and where to go if flooding occurs.

Never enter floodwaters. There could be unseen hazards, including downed power lines and chemical contaminants.

Mecklenburg County has over 3,000 miles of waterways, 1,000 of which are creeks that run through many neighborhoods.

When the National Weather Service issues a flash flood warning for your location, you should move to higher ground if your home is threatened by floodwaters.

CHARACTERISTICS OF A FLOODPLAIN



**WHEN
FLOODED
TURN AROUND**

6 INCHES OF FAST-FLOWING WATER CAN KNOCK OVER AND CARRY AWAY AN ADULT

12 INCHES OF FAST FLOWING WATER CAN MOVE A SMALL CAR

18-24 INCHES OF FAST MOVING WATER CAN CARRY AWAY MOST LARGE SUVS, VANS AND TRUCKS

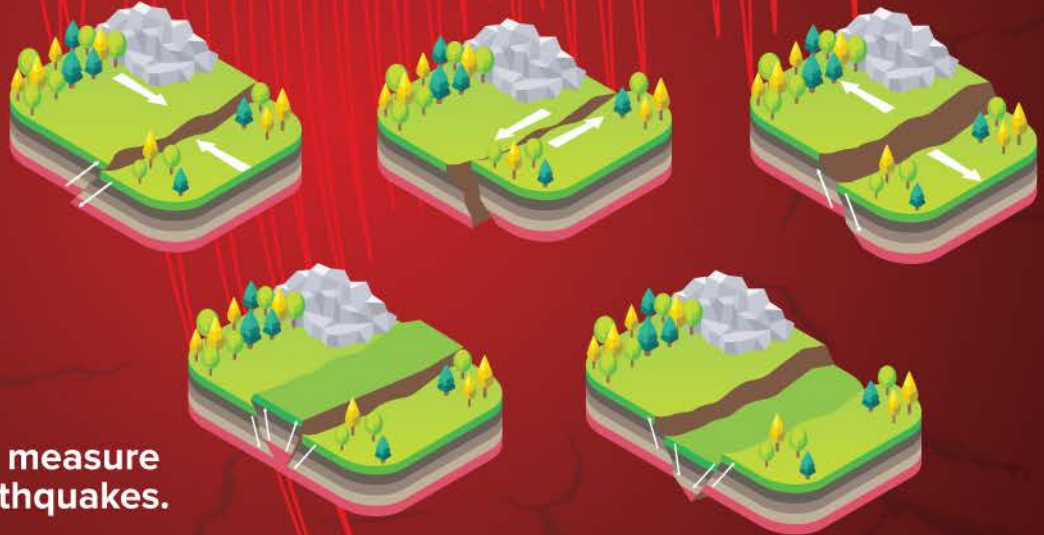


EARTHQUAKES

IN THE CAROLINAS

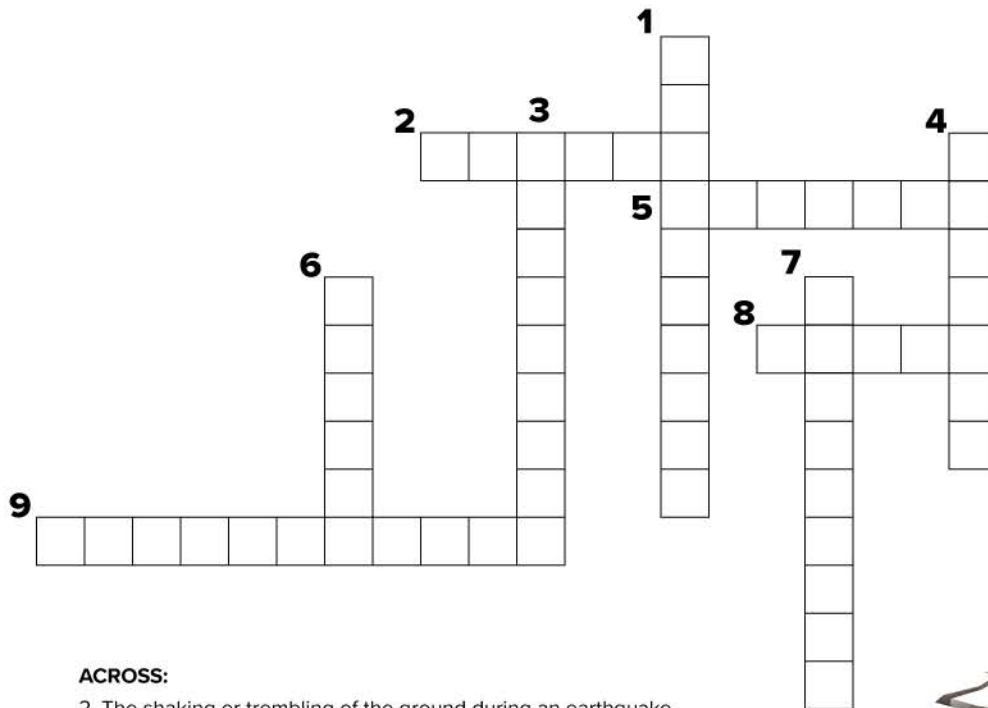
An earthquake is an intense shaking of the ground, caused by sudden movements under the Earth's surface.

The Richter scale is a measure of the strength of earthquakes.



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ACROSS:

2. The shaking or trembling of the ground during an earthquake.
5. The natural event that can occur after an earthquake in water, causing dangerous waves.
8. A large crack in the Earth's surface caused by the movement of tectonic plates.
9. A device that measures the strength of earthquakes.

DOWN:

1. A sudden shaking of the ground caused by the movement of rock beneath the Earth's surface
3. The underground point where an earthquake originates.
4. The scale used to measure the magnitude of earthquakes.
6. A material that can transmit energy waves, such as seismic waves during an earthquake.
7. The measurement of the energy released by an earthquake.

RAINBOW FACTS

Rainbows are made when sunlight is scattered by water droplets in the air.

Rainbows always form in the opposite direction of the sun.

Rainbows appear as arcs because they're actually full circles, but the ground usually gets in the way of seeing the bottom part.

The colors of the rainbow are red, orange, yellow, green, blue, indigo, and violet, often remembered with the acronym ROYGBIV.

Each color in a rainbow corresponds to a different wavelength of light, which is why they separate out.



BOOKTOBERFEST



Hundreds of organizations and 60,000+ children rely on Promising Pages as their main source of free books. As the Charlotte area's only book bank, we "re-home" hundreds of thousands of children's books each year, creating book-rich environments that offer children pathways to opportunity.

To ensure we have plenty of books to share with those that need them most, we host **a month-long community book drive** each October to collect new and gently used books. We call it **BOOKTOBERFEST!**

GET INVOLVED!

Individuals, community groups, and businesses are invited to join us!



Book Drive Captain

Whether you're an individual, business, neighborhood, or community organization we need your help collecting like new and gently used children's books. Click the link below to learn how you can sign up to be a book drive captain.



Donation Location

Businesses and public-facing organizations can serve as book drop-off locations during the month of October. Promising Pages will supply the bin, list your business on our drop-off location map, and you collect the books! Click the button below to learn more or sign up.



Event Sponsor

Interested in supporting the largest community book drive in the region? Booktoberfest sponsorship benefits are numerous but the most important benefit is the impact you'll be making on the 64,000+ children we serve. Click the button below to learn more about how to become a sponsor.



WORD SEARCH

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

Lightning
Thunder
Tornado
Clouds
Fog

Sunny
Storm
Rain
Snow
Hot

Hail
Wind
Cool



**KJ
JACOBS**

**CHRIS
MULCAHY**

**BRAD
PANOVICH**

**LARRY
SPRINKLE**

**BRITTANY
VAN VORHEES**

WCNC

WEATHER



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