

WILD Weather



Student Book

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Dear Wonder-Filled Families,

Welcome to our Weather Unit! We are thrilled to begin this exciting adventure through the skies as we explore the incredible systems God designed to govern the weather. Over the next ten weeks, your child will learn about the water cycle, wind, clouds, storms, climate, and weather instruments—discovering how each part works together with order and purpose, all pointing back to our amazing Creator.

Throughout this unit, your child will observe weather patterns, conduct simple experiments, record daily data, and create hands-on projects that bring learning to life. From making their own rain gauge and weather vane to painting clouds and tracking severe storms, each activity is designed to inspire wonder and equip them with a deeper understanding of how God's world works.

But more importantly, we will be grounding everything in biblical truth. As your child learns about lightning, snowflakes, wind currents, and sunshine, they will also explore how God uses weather in Scripture to teach, guide, protect, and show His glory. From the gentle dew to the mighty storm, weather reflects both God's power and His care. We'll study verses like Psalm 147:8 and Genesis 8:22, helping students see that weather is not random—it is part of God's faithful provision and wise design.

Each week includes a short devotion, advanced grammar focus for excellent writing, a daily weather journal prompt, and engaging discussion questions to help your child think deeply and spiritually about what they're learning. There's also space for creativity—poetry, painting, storytelling, and scientific drawing are all woven into the journey. At the back of their student journal, is their daily weather journal to fill in.

We encourage you to observe the skies together. Talk about the clouds, track temperatures, listen to the wind, and thank God for rain. Use this time to slow down and marvel at the wonder of His creation with your children. Your support and participation will make these lessons all the more meaningful.

Thank you for joining us on this beautiful path of discovery and truth. May this unit grow your child's love for science, Scripture, and the God who “brings the clouds from the ends of the earth” (Psalm 135:7).

With Prayers,

The Wonder-Filled Team

Living Books on Weather

Biblical and Wholesome Resources for Christian Homeschoolers

Parent Note:

This list blends Christian books that affirm a biblical view of weather with high-quality living books that, while not overtly Christian, contain no evolution or modern ideological content. These selections spark curiosity, cultivate awe for God's creation, and align with Christian values. They are especially chosen for

Years 3–8 (and beyond), and many are perfect as read-alouds or spine resources.

Christian Creation-Based Books

1. The New Weather Book (Wonders of Creation Series) – Michael Oard

- Recommended for ages 8+
- Covers the water cycle, wind systems, storms, and weather extremes—all from a young-earth, Bible-based perspective. Beautiful visuals and easy to understand.

2. Awesome Weather – Kyle Butt (Answers in Genesis)

- Recommended for ages 7–12
- Bright, engaging book filled with fun weather facts. Gives God glory for every aspect of weather and includes apologetics-based insights.

3. The Weather Book for Kids (Master Books)

- Recommended for ages 8–12
- Interactive workbook-style book with experiments, journaling prompts, and explanations of weather topics from a creation perspective.

4. Exploring Weather with Mr. Hibb – Jane L. Fryar

- Recommended for ages 6–10
- A gentle, story-style science book where Mr. Hibb the rabbit discovers how weather works, all with a biblical worldview and Scripture-based reflection.

5. God's Wondrous Weather – Susan Leigh (Little Blessings Series)

- Recommended for ages 4–8
- A sweet rhyming picture book that reassures young children that God controls every kind of weather. Great for little siblings.

6. Flood by Design – Michael Oard

- Recommended for parents & teens (ages 13+)
- Teaches how the global Flood shaped Earth's climate and explains Ice Age and post-Flood weather from a creation science viewpoint.

7. Wonders of Weather – Earl & Ruth Snellenberger

- Recommended for ages 5–10
- Rhyming, illustrated creation science reader that explains different weather types with Scripture throughout. Ideal for morning basket or family reading.

Wholesome Living Books (No Evolution, Align with Christian Values)

8. **Feel the Wind – Arthur Dorros**

- Recommended for ages 6–10
- Explains wind and air movement in an accessible, story-like way. Clear and gentle, no evolutionary content.

9. **Weather – Seymour Simon**

- Recommended for ages 8–12
- Stunning photography and rich scientific descriptions of weather. Neutral tone with no references to evolution or deep time.

10. **The Story of Snow: The Science of Winter’s Wonder – Mark Cassino & Jon Nelson**

- Recommended for ages 6–12
- An awe-inspiring book about snowflake formation and observation. Rooted in observable science, with no ideological content.

11. **Snowflake Bentley – Jacqueline Briggs Martin**

- Recommended for ages 5–12
- The beautifully told biography of Wilson Bentley, the first to photograph snowflakes. Celebrates God's design through a man's curiosity and perseverance.

12. **Thunder Cake – Patricia Polacco**

- Recommended for ages 5–10
- A living book that weaves family, weather, and courage into a charming narrative. No evolution, wholesome themes.

13. **A Drop Around the World – Barbara McKinney**

- Recommended for ages 7–12
- Follows a single drop of water through the global water cycle. Gentle rhyme and geography focus. No secular worldview.

14. **Water Dance – Thomas Locker**

- Recommended for ages 6–12
- Poetic and beautifully painted journey of water in all its forms—rain, mist, ice, etc. Inspires reverence and wonder.

15. **Cloud Dance – Thomas Locker**

- Recommended for ages 6–12
- A visual and poetic guide to clouds and sky. Richly illustrated and quietly profound—perfect for weather journaling or art.

16. **Flash, Crash, Rumble, and Roll – Franklyn Branley**

- Recommended for ages 6–10
- Explains thunder and lightning in simple terms. An enduring science classic that keeps to observable facts.

Weather Unit – Master Resource List

For 10-week unit | 4 lessons per week | Grades 3–8 (can be used with lower grades, they will just need more help and simplified activities).

Basic Supplies (Used Frequently)

- Weather Journal (notebook, printed template, or binder)
- Pencils, erasers, colouring pencils, crayons, markers
- Scissors, glue sticks, sticky tape
- Ruler, protractor (for compass directions), compass (optional)
- White paper, coloured construction paper, card stock
- Watercolour paints and brushes
- Access to a printer or photocopier (for student pages and charts)

Science and Experiment Supplies

Week 1–3

- Balloon
- Empty water bottles or jars (clear)
- Straws (regular and bendy)
- Bowl of warm water / access to warm water
- Ice cubes
- Cotton balls
- Fan (or hairdryer on cool setting)
- Ribbon, yarn, crepe paper (for wind sock)
- Skewers or pencils (for wind vane)
- Small container lids or paper plates

Week 4–5

- Large clear jars (for cloud and thunderstorm experiments)
- Shaving cream (for cloud demonstration)
- Blue food colouring or watercolour
- Hairspray (for cloud in a jar)
- Static electricity materials: inflated balloon, wool/fleece fabric
- Plastic bottle with cap
- Glitter or dish soap (optional for tornado jar)
- Water
- Map of the world or printed continent outlines

Week 6

- Clear jar or plastic bottle (for homemade thermometer)
- Modelling clay or plasticine
- Rubbing alcohol (or coloured water alternative)
- Straw (clear if possible)

- Ziplock bag (for barometer alternative)
- Cardboard, paper cups, or plastic container (for rain gauge)
- Permanent marker
- Ruler (for measuring rain)
- Compass or phone app (for wind direction)

Week 7–10

- Access to a Bible atlas or printable Bible maps (for Jonah, Exodus)
- Watercolour or acrylic paints
- Glue and scissors (for collage)
- Poster board or scrapbook paper
- Simple access to a weather app, radar site, or forecast video
- Optional: helium balloon (if making a weather balloon)

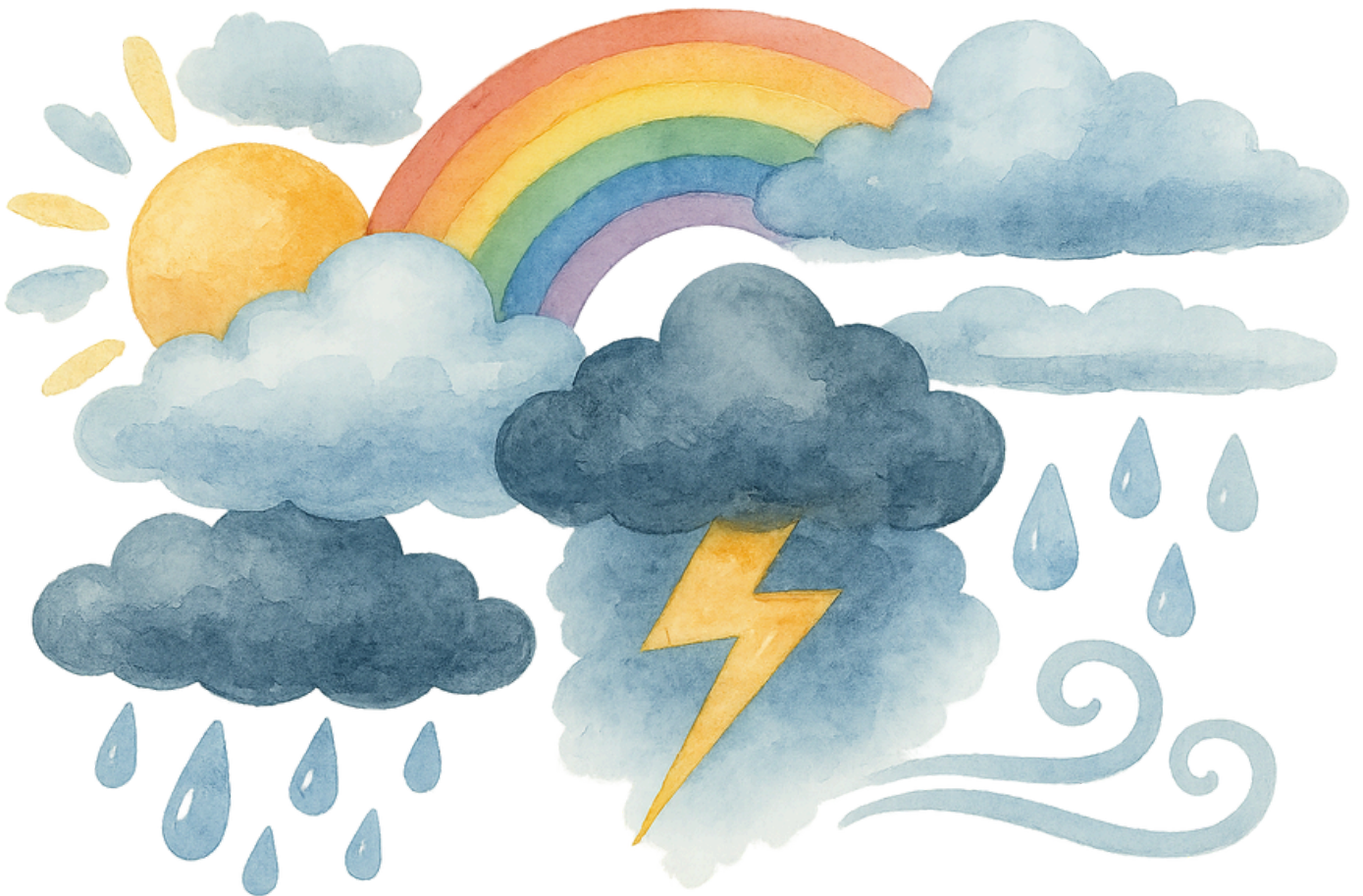
Books and Printables

- Student Weather Journal Pages (printable version or create-your-own)
- World Climate Map Outline (Week 8)
- Comparison Venn Diagram Template (Week 1, 4, 8)
- Timeline Template for Early vs. Modern Forecasting (Week 9)
- Final Project Templates or Notebooking Pages (Week 10)
- Optional: Printable copywork sheets (for weekly devotion verses)

Optional Resources

- Compass or outdoor weather station tools (if available)
- Bible atlas or globe
- Laminator (for reusable charts or vocabulary cards)
- Clipboards (for taking observations outside)

What Is Weather?



What Is Weather?

Have you ever woken up, pulled back the curtain, and paused just to look at the sky? Sometimes it's soft and pale with early morning mist. Sometimes it's bursting with golden sunshine. Other days the sky seems moody—filled with heavy, grey clouds that look like they could weep at any moment. And then there are the days when the wind howls, the trees sway, and lightning crackles across the sky like a flash of God's power.

All of this—the sun, the wind, the clouds, the rain—is part of something we call weather. But what exactly is weather?

Weather is the name we give to the constantly changing conditions in the air around us. It's not just one thing. It's many pieces working together. The temperature, the wind, the clouds, the humidity (how damp the air feels), the rainfall, and even storms—all of these are parts of the weather. You can't see air, but you can feel it. You know when it's warm or chilly. You know when it's still or gusty. That invisible blanket of air that surrounds our planet is always moving, shifting, swirling—and weather is what happens as a result.

Weather is a bit like God's orchestra in the sky. Each part plays its own role. The sun warms the earth, causing air to rise. Cool air rushes in to take its place, and this movement creates wind. The warm air carries water vapour up into the sky. As it rises, it cools, forming clouds. And when the clouds get heavy enough, they let go of their water as rain—or sometimes snow or hail. The air pressure, which changes depending on how warm or heavy the air is, helps to determine whether the day will be calm or stormy.

And God is the great Conductor of it all. In the book of Job, God speaks out of a whirlwind and asks Job questions that no human could answer:

“Do you know how God controls the clouds and makes his lightning flash? Do you know how the clouds hang poised, those wonders of him who has perfect knowledge?” (Job 37:15–16). These questions are not meant to embarrass Job. They are meant to draw him—and us—into awe. They remind us that the weather is not something random or chaotic. It is designed. It is governed. It is part of God's ongoing care for the world He made.

Long ago, on the second day of Creation, God said, **“Let there be an expanse between the waters to separate water from water.” He called the expanse sky (Genesis 1:6–8).** This was the beginning of Earth's atmosphere, the air that would one day carry clouds, stir up winds, and hold the breath of every living creature.



Clouds

What Is Weather?

Since that moment, weather has been part of how God rules His world.

- In Genesis, God used rain to flood the whole earth—and then gave the rainbow as a promise He'd never do it again.
- In Exodus, He sent hail and thunder to show His power to Pharaoh.
- In the New Testament, Jesus stood in a boat and spoke to a storm—and it obeyed.

The weather we see today is part of the same system God began at the very start, thousands of years ago. It's not a leftover from accidents or long, aimless ages. It is present tense: God sending the rain, God directing the clouds, God commanding the lightning. As **Psalm 135:7** says, **"He makes clouds rise from the ends of the earth; he sends lightning with the rain and brings out the wind from his storehouses."**



Stormy Sea

When we study weather, we are not just learning science—we are learning about the faithfulness of God. He sends rain to grow crops. He gives sunshine to warm the land. He puts snow on the mountains and mist on the morning grass. Even the strongest storm cannot move a single cloud without His command.

So when you step outside today, pause.

Stop and look up. What do you see? What do you feel? Is the air cool or warm? Is there wind on your cheeks or sun on your shoulders? Are the clouds thin and wispy or dark and bold?

You are standing in the middle of one of God's wonders.

Your job today is simple, but special: stop and consider it.

Discussion Questions

1. What is weather, and what are some of the things that make up weather?
2. Why do you think God asks Job (and us) to stop and think about the weather? What might we learn from doing that?
3. How is weather like a system or story that God is telling in the sky each day? Can you think of a time the weather told you something important?



What Is Weather?

Begin Your Daily Weather Journal

Today you will start a daily habit of observing and recording the weather. Just like a real weather scientist (called a meteorologist!), you'll track what's happening in the sky each day—rain or shine. This journal will help you notice God's amazing design in creation, and it will become a record of what He is doing day by day in your part of the world.

Instructions:

1. Step outside or look carefully through a window.
2. Use your senses:
 - What do you see? (clouds, sun, fog, rain?)
 - What do you hear? (wind, birds, raindrops?)
 - What do you feel? (cold air, warmth, breeze?)
3. Record today's weather on a chart, there is one in the appendix of this book, or, you can use your own book:
 - Day and Date
 - Temperature (estimate or read a thermometer)
 - Cloud Cover (e.g. clear, partly cloudy, overcast)
 - Wind (e.g. still, light breeze, strong gusts)
 - Rain or snow? (Yes/No or how much)
 - Your observations (draw the sky or write a few notes)

Do this each day from Monday to Thursday each week.

You'll begin to see patterns God has woven into the skies!

Optional for older students: At the end of each week, use your daily records to make a small summary chart or graph showing:

- Which day was warmest?
- Which day had the most cloud cover or strongest wind?



Devotion – God Made the Weather



Have you ever looked up at the sky and wondered who made the clouds?

Have you felt the breeze on your face or the warm sun on your skin and thought about where it came from?

The Bible tells us that God made the weather. He made the wind and the rain. He made sunshine and snow. He tells the clouds when to move and the rain when to fall.

Every morning when you step outside and feel the weather, you are feeling something that God planned and placed in the sky.

He made weather to help us—rain to grow food, sunshine to warm the earth, cool winds to bring relief.

The clouds you see floating by? He knows each one.

The lightning flashing in a storm? He commands it.

Even the snow, the dew, and the gentle mist are part of His perfect design.

The weather might change from day to day, but God never does. He is always in control, and He always cares.

What kind of weather do you like best? Why do you think God made it?

What do you see in the weather this week that reminds you of God's power or love?

How can you thank God when the weather helps you or makes something grow?

Prayer

Dear God, thank You for making the weather. Thank You for the sunshine, the rain, and the clouds.

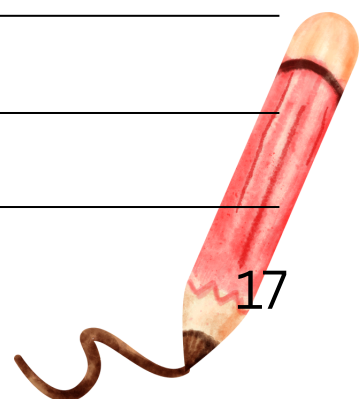
Thank You for sending what we need at just the right time.

Help me remember that You are always in control, even when the sky looks wild. I trust You. Amen.

Copy the verse below:

“He covers the sky with clouds; He supplies the
earth with rain and makes grass grow on the
hills.”

—Psalm 147:8



The Atmosphere

Have you ever wondered why the sky doesn't fall?

Why the sun shines during the day but doesn't burn us up? Why we can breathe, talk, fly kites, see clouds drift, and hear birdsong in the air? Why the Earth isn't just a cold, lifeless rock floating in space?

It's because of something marvellous that we can't even see: the atmosphere.

From the ground where you stand, all the way up to the edge of space, there is a huge, invisible blanket wrapped around the Earth. It doesn't look like much, but this thin shell of gases is what makes life on Earth possible. Without it, there would be no weather, no warmth, no water cycle—no you! On the second day of Creation, God spoke, and the atmosphere came into being. The Bible says He created an “expanse” to separate the waters above from the waters below. He called the expanse “sky.” In Hebrew, the word used means something stretched out—like a great dome or canopy. This wasn't just poetry. God was laying down the structure for air, clouds, and weather.

From the very beginning, the sky was part of God's careful design. It wasn't random or chaotic. It had a purpose. He was preparing a place where living things could breathe, grow, and thrive.

What is the Atmosphere?

The atmosphere is made of invisible gases, mostly nitrogen and oxygen. Though you can't see it, it's always around you. When you take a deep breath, you're drawing in air from the lowest part of the atmosphere—the part closest to the ground.

The atmosphere has five layers, each with a job to do. Let's take a journey through them:

1. **Troposphere** – This is the bottom layer, where we live and breathe. It stretches up about 10–15 km above Earth's surface. Almost all weather happens here—clouds, storms, wind, rain, and snow. The higher you go in the troposphere, the colder it gets. Birds, planes, and balloons all fly through this layer.
2. **Stratosphere** – Above the troposphere lies the stratosphere. This layer contains the ozone layer, which protects us from the sun's harmful ultraviolet rays. It's drier and calmer than the troposphere. Jet planes often fly here because it's more stable.
3. **Mesosphere** – This middle layer is harder to reach. It's where meteors burn up when they enter Earth's atmosphere—those bright streaks of light we call shooting stars. It's extremely cold!
4. **Thermosphere** – High above the Earth, this layer gets hot—really hot—because it absorbs energy from the sun. This is where the northern and southern lights (auroras) shimmer in beautiful colours across polar skies. It's also where the International Space Station orbits.
5. **Exosphere** – The final layer is barely part of Earth anymore. It fades slowly into outer space. There's almost no air here, but a few particles drift away into the deep blackness beyond.

Isn't it astonishing? God made five invisible layers to work together to protect us, provide for us, and display His glory in the skies.



The Atmosphere

Why the Atmosphere Matters

The atmosphere does more than give us something to breathe. It's part of how God sustains His creation every day.

- It regulates Earth's temperature, keeping it from being too hot or too cold.
- It holds in just enough carbon dioxide for plants to grow.
- It shields us from meteors, solar flares, and harmful radiation.
- It makes possible the water cycle, which brings us rain to grow food and refill rivers.
- It lets sound travel—so we can hear voices, music, and the gentle rustle of leaves.
- And it creates a home for clouds, birds, butterflies, and weather of all kinds.

Without the atmosphere, Earth would be as barren and silent as the moon. But with it? We have gentle breezes, singing birds, puffy white clouds, and the blessing of breath itself.

Discussion Questions

1. What is the atmosphere, and why is it important for life on Earth?
2. How do the layers of the atmosphere show that God is thoughtful and purposeful in His design?
3. Which layer of the atmosphere do you think is the most interesting, and why? What would happen if it didn't exist?



Layers of the Atmosphere

The atmosphere is a band of air composed of multiple layers surrounding the Earth.

EXOSPHERE
satellites float here, as do low density particles

THERMOSPHERE
can reach up to 2500°C but lacks enough air molecules to transfer heat

MESOSPHERE
where meteors that enter the Earth burn up, protecting us from the effects of impact

STRATOSPHERE
has the **ozone layer**, which protects us from the Sun's ultraviolet rays

TROPOSPHERE
where most clouds are, and weather occurs

thermopause
oxygen, helium and hydrogen

mesopause
oxygen, carbon dioxide and nitrogen

stratopause
mostly nitrogen and oxygen

tropopause
mostly nitrogen and oxygen



The Atmosphere



Activity: Create a Layered Atmosphere Diagram

You will need:

- A blank A4 page or a page in your notebook
- Coloured pencils or markers
- A ruler (optional)
- A black pen for labels

Instructions:

1. Turn your page lengthwise (portrait).
2. Using coloured pencils, draw five horizontal bands or layers from the bottom up.
3. Label each layer from bottom to top:
 - Troposphere
 - Stratosphere
 - Mesosphere
 - Thermosphere
 - Exosphere
4. Add small symbols or sketches to show what happens in each layer:
 - Clouds in the troposphere
 - Jets and ozone in the stratosphere
 - Meteors in the mesosphere
 - Auroras and satellites in the thermosphere
 - Stars and fading air in the exosphere
5. Title your diagram: “God’s Sky: The Atmosphere”
6. At the bottom or back of the page, copy today’s Bible verse:
7. “And God said, ‘Let there be an expanse...’” – Genesis 1:6–8

Daily Weather Journal Reminder:

Don’t forget to record the weather for today in your Weather Journal.

Note:

- The temperature (estimate or measure)
- What kind of clouds are in the sky
- Is it windy or still?
- Any rain, mist, or sunshine?
- Draw what you see or write a short description

Each entry becomes part of your record of God’s care and design over time.

Expanding Your Sentences with Prepositional Phrases

Did you know that even a short sentence can be powerful—but a carefully expanded sentence can paint a picture in the reader’s mind?

This week, you’ll learn how to grow your writing by adding prepositional phrases. These are little word groups that tell where, when, or how something happens.

Example:

Let’s start with a plain sentence:

The rain fell.

That tells us something—but not very much. Now try adding more detail:

- **Where?** → The rain fell on the roof.
- **When?** → The rain fell during the night.
- **How?** → The rain fell with a soft patter.

Look what happens when you combine them:

The rain fell softly on the roof during the night.

Now the sentence has sound, time, place—and mood!

What Is a Prepositional Phrase?

A prepositional phrase starts with a little word like:

in, on, under, over, through, near, during, after, before, with, around, across

It’s followed by a noun to give more information.

Here are some examples:

- in the sky
- over the mountains
- during the storm
- with a loud crash

Your Turn:

Choose one of the sentences below and expand it by adding one or more prepositional phrases. Then try writing your own.

1. The wind blew.
2. Clouds moved.
3. God sent the rain.

Expanding Your Sentences with Prepositional Phrases

Challenge: Can you combine all three ideas into one strong sentence?

Why This Matters:

Adding phrases like these helps your writing come alive. It turns simple ideas into vivid, memorable sentences. Just like God filled the skies with detail and design, you can fill your writing with beauty and meaning too.



Temperature and Air Pressure

Have you ever sat beside a sunny window and noticed how warm it feels, even if it's chilly outside? Or opened a door on a summer day and felt a blast of hot air rush toward you like it had been waiting to escape?

That's temperature at work.

And have you ever stood in a room with all the windows closed, then felt a sudden gust of air rush in when someone opened the front door? That invisible push is something called air pressure.

Today, you'll discover how temperature and air pressure are two of the great forces behind the weather you experience every day.

Temperature: The Warmth of God's Light

The Bible tells us that God sends His word and melts the ice. He stirs up breezes. He controls the balance of cold and heat in His world. And the sun is a big part of how He does that.

Temperature tells us how warm or cool the air is. It changes throughout the day, usually warmer in the afternoon and cooler in the morning or evening. On sunny days, the sun's rays warm the ground, the buildings, and even your skin. The earth stores that heat and gently releases it back into the air, warming everything around it.



Heat

But not all parts of the earth warm up the same way.

Darker surfaces like asphalt roads absorb more heat. Lighter areas like snow reflect it. Forests, lakes, mountains, and cities all heat and cool differently—and that affects the air above them.

When the air gets warm, the particles inside it move faster and spread out. Warm air becomes lighter and rises. But when the air cools, those particles slow down and get closer together, making the air heavier and causing it to sink. This simple rise-and-fall motion causes much of the movement in our atmosphere.

You've felt this difference before, even without knowing it.

Have you ever walked into a room and noticed it felt warm near the ceiling and cool near the floor? That's warm air rising!

Have you watched steam rise from a cup of tea? That's warm, moist air heading upward.

Have you ever felt a sudden cool breeze after a hot day? That's heavier, cooler air moving in to replace the rising heat.

These gentle rises and falls are part of a constant dance in the skies—one that God set in motion when He created light and air.

Temperature and Air Pressure

Air Pressure: The Invisible Push

Air pressure is the weight of the air pressing down on the earth. It might sound strange to think of air having weight, but it does!

Imagine a pile of pillows. The more pillows you stack, the heavier the bottom one feels. That's a bit like air pressure. At sea level, there's a tall stack of air above us—stretching all the way up to the edge of space! That stack presses down on us and everything else. We don't feel crushed because God designed our bodies to match the pressure outside.

But when warm air rises, it creates a space with lower pressure. And when cold air sinks, it adds more weight and creates higher pressure. These changes in pressure are what help make wind, push clouds around, and even decide whether we'll get sunshine or rain.

Usually:

- High pressure = calm, sunny skies
- Low pressure = cloudy, wet, or stormy weather

When meteorologists (weather scientists) look at maps, they can often tell what kind of weather is coming by studying pressure patterns.

Isn't it amazing that God uses something we can't even see—like invisible air—to move great storms, stir gentle breezes, or hold clouds above our heads?

Discussion Questions

1. What happens to air when it gets warmer or cooler? How does that affect the weather?
2. How does air pressure help create wind or storms? Why is pressure something important, even though we can't see it?
3. Why might God have designed warm air to rise and cool air to sink? How could this be part of His plan for life and weather?



Temperature and Air Pressure

Warm Air Balloon Experiment

Today, you'll do a simple experiment to see warm air expanding and taking up space.

You'll need:

- 1 clean, empty plastic bottle
- 1 balloon
- 1 bowl of very warm water (not boiling)
- 1 bowl of cold water (optional)

Steps:

1. Stretch the balloon a few times to loosen it.
2. Carefully stretch the balloon over the opening of the empty plastic bottle. It should be snug with no gaps.
3. Stand the bottle upright in the bowl of warm water.
4. Watch the balloon for a minute or two. You'll see it begin to inflate slightly as the warm air inside the bottle expands and rises.
5. (Optional) Place the same bottle in cold water afterward and see what happens—the balloon may deflate as the air cools and contracts.

What's happening?

The warm water heats the air inside the bottle. The molecules move faster and spread out, taking up more space. This pushes into the balloon and makes it rise.

It's a small but powerful picture of how warm air moves in the atmosphere—rising upward, helping create wind and weather!



Daily Weather Journal

Take a moment to observe and record today's weather.

- What's the temperature today? (Use a thermometer or estimate: hot, warm, cool, cold)
- Do you feel any wind? From which direction?
- What kind of clouds are in the sky?
- Is there rain or sunshine?

Add a drawing or note in your weather journal. Write down anything interesting—did it feel warmer or cooler than yesterday?

Weather versus Climate

When you step outside in the morning, what's the first thing you notice?

Maybe the sky is bright blue and the sun is shining. Or maybe the wind is rushing past your ears and clouds are gathering. Perhaps it's chilly and grey, or warm and golden. Whatever the conditions are, that's the weather—what's happening in the atmosphere right now.

But if someone asked you, “What kind of place do you live in—hot or cold, dry or wet?” you'd be describing something different. You'd be talking about the climate—the usual kind of weather that happens in your area over a long period of time.

You see, weather and climate are not the same thing. They are connected, but they are very different.

Let's picture it like this:

Imagine you're reading a novel. Each page is a day. Some pages are stormy, some are calm. Some pages are full of sunshine, and others are covered in clouds. Those pages—that daily change—is the weather.

But when you finish the whole book and think back over the story—what the tone was like, how often things were peaceful or wild—that's like climate. It's the pattern that emerges over time.

Or here's another way to see it:

Weather is your outfit today.

Climate is your whole wardrobe.

If you live in Darwin, you probably own a lot of shorts and sleeveless tops—that's because the climate is hot and tropical. Even if today is rainy or a bit cooler, your wardrobe still tells the truth about the overall pattern of life where you live.

God's Patterns and Promises

After the great Flood, when Noah stepped out of the ark onto the cleansed earth, God made a promise. It wasn't just a promise to Noah—it was a promise to all people, for all time.

He said:

“As long as the earth endures, seedtime and harvest, cold and heat, summer and winter, day and night will never cease.” (Genesis 8:22). In other words, God promised that the earth would keep turning. The sun would keep rising and setting. Seasons would keep shifting. Though people might face storms and droughts, cold days and hot days, the larger patterns would remain—because God Himself is faithful. This promise reminds us of something very important: Even though the weather can be unpredictable, God is not.

We might not always know when the next storm will come. A summer might be unusually cool or dry. A winter might be warmer than usual. These short-term changes are all part of weather. But over time, God allows us to see consistent patterns. These are the climate zones He built into the earth after the Flood—tropical, temperate, polar, desert, and more.



Weather versus Climate

Even though the earth is only about 6,000 years old, there has already been great variety in weather and climate. Much of this likely changed dramatically after the global Flood described in Genesis. Volcanic eruptions, shifting ocean currents, and the movement of continents would have all had a powerful effect on how the atmosphere worked—changing wind patterns, temperature zones, and rainfall across the globe. Some areas that are dry today may once have been lush and green, while other regions may have gone from warm to cold in only a few centuries.

But through it all, God’s order remains. He continues to uphold the seasons, winds, and skies—just as He promised.

Why It Matters

If you only looked at the weather for one day, you might get the wrong idea about a place. You might visit Queensland during a rainy week and think, “Wow, this place is always wet!” But if you lived there for a whole year, you’d discover that most of the time, it’s actually warm and sunny. That’s why scientists study the weather over long periods of time to understand climate. It takes lots of little puzzle pieces (weather) to see the big picture (climate).

Understanding this helps us keep things in perspective. It reminds us not to panic over every heatwave or rainy day, but to look at what’s normal over time. More importantly, it helps us trust that God keeps His promises. While people argue over the state of the climate or fear what the future might hold, we can stand firm in the knowledge that the sun and seasons are held in place by the same hands that calmed the storm on the Sea of Galilee.

And every time we observe the weather, we’re gathering tiny pieces of a story—God’s story in the sky.

Discussion Questions:

1. What is the difference between weather and climate? Why is it important not to confuse the two?
2. How does God’s promise in Genesis 8:22 help us trust Him when the weather feels wild or unpredictable?
3. What could your weather journal teach you if you kept it for a whole year? How might it help you see patterns in your local climate?



Weather versus Climate

Weather versus Climate Venn Diagram

Turn to the Venn diagram on the next page.

Instructions:

1. Read the headings on each circle: one is for Weather, one is for Climate, and the overlapping section is for Both.
2. Think about what you've learned today.
3. In the Weather section, write or draw things that describe day-to-day changes in the sky, like:
 - "Rainy today"
 - "Storm coming"
 - "Sunny afternoon"
4. In the Climate section, write or draw things that describe patterns over many years, like:
 - "Hot summers"
 - "Dry inland regions"
 - "Rainforests are humid all year"
5. In the Both section, write or draw what they have in common:
 - "Part of God's design"
 - "Use temperature, wind, and rain"
 - "Involve the atmosphere"

Take your time and make your page neat and thoughtful—this will help you remember the difference between weather and climate as you go forward.



Weather versus Climate

