



Grade 5 Term 3 Geography Summary

Weather

Elements of Weather

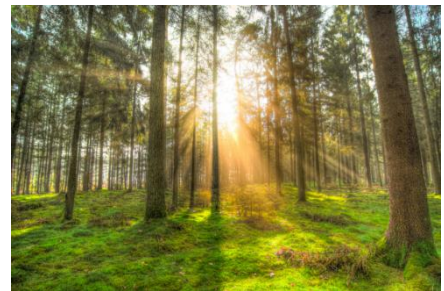
- Weather is what's happening in the sky around us each day.
- It includes things like sunshine, rain, wind, and temperature.
- We use the following words to describe the weather: hot, cold, warm, cool, wet, dry, sunny, rainy, cloudy, windy.
- Let's learn about the different elements of weather that we see and feel.

Temperature

- What is it? Temperature tells us how hot or cold it is outside.
- How do we measure it? We use a thermometer to measure temperature. The temperature is usually given in degrees Celsius (°C).

Sunshine

- What is it? Sunshine is the light and warmth we get from the Sun.
- How do we measure it? We don't usually measure sunshine with tools, but we can tell if it's sunny by looking outside.



Rain

- What is it? Rain is water that falls from the clouds in droplets.
- How do we measure it? We use a rain gauge to measure how much rain falls. The amount is usually given in millimeters (mm).

Wind

- What is it? Wind is air that moves across the Earth's surface.
- How do we measure it? We use an anemometer to measure wind speed, usually in kilometers per hour (km/h).

Clouds

- What are they? Clouds are made of tiny water droplets or ice crystals that float in the sky.
- How do we observe them? We look up at the sky to see what kind of clouds are there. There are different types of clouds, like fluffy white cumulus clouds or dark gray storm clouds.



Snow

- What is it? Snow is frozen water that falls from the clouds in soft, white flakes.
- How do we measure it? We measure snow by looking at how deep it is, usually in centimeters (cm).

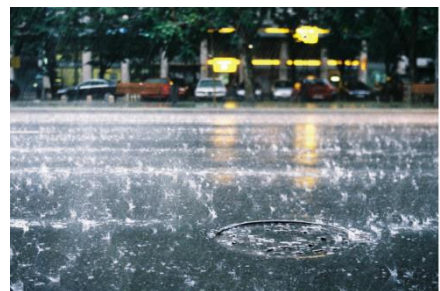
Thunder and Lightning

- What are they? Thunder is the sound we hear during a storm, and lightning is the bright flash of electricity in the sky.
- How do we observe them? We see lightning and hear thunder during storms.



Precipitation

- Precipitation is what we call the moisture from the air that reaches the surface of the Earth.
- It can come in different forms, such as liquid like rain or frozen like snow and hail.



Measuring Temperature and Rain

- Temperature and rainfall are two important elements of weather that we can measure to understand our environment better.

Measuring Temperature

- Temperature tells us how hot or cold something is.
- We measure the temperature of the air using a tool called a thermometer.
- The unit we use for temperature is degrees Celsius (°C).
- Thermometers: A common type of thermometer is a mercury thermometer.
- It has mercury, a dark grey liquid, inside a bulb and a thin tube.
- When the temperature rises, the mercury expands and moves up the tube.
- We read the temperature by looking at where the mercury stops on the scale.



We use different words to describe temperature:

- Hot: Above 25°C
- Warm: Between 20°C and 24°C
- Cool: Between 13°C and 19°C
- Cold: Below 12°C

Measuring Rainfall

- To measure how much it rains, we use a rain gauge.
- A rain gauge collects water in an open area and shows the amount in millimeters (mm).
- Rainfall in South Africa: On average, South Africa gets about 350 mm of rain each year.
- Wettest Place on Earth: Mawsynram in India, with about 12,000 mm of rain per year.
- Longest Drought: The Atacama Desert in Chile experienced a drought that lasted for 400 years until 1971.



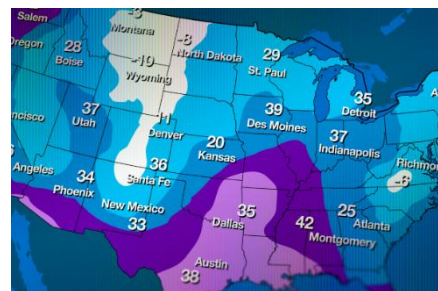
Measuring Wind Direction

- Wind is the movement of air, and we can describe its direction using compass points like north, south, east, and west.
- To measure wind direction, we use a wind vane.
- Wind Vane: This tool spins with the wind, and the arrow points to the direction the wind is coming from.



Weather Maps in the Media

- We often want to know what the weather will be like in the future, which is called a weather forecast.
- You can find weather forecasts in newspapers, on TV, and even on cell phones.
- Weather Maps: Newspapers usually have a map showing the weather for the next 24 hours in different regions.
- TV weather reports and apps on your phone can also give you this information.



How Weather Affects Daily Life

- Weather can greatly affect our daily activities, especially for people who work outside.
- Outdoor Workers: People who work outside, like construction workers or farmers, need to know the weather. Heavy rain can stop work, and farmers need rain



- to plant crops and sunny weather to harvest them.
- Travel: Bad weather, like heavy rain or fog, can slow down traffic, making it take longer to get to work or school.

Rainfall

Rainfall in South Africa

- Rainfall in South Africa varies greatly across different regions, influencing how often and how much it rains.

Rainfall Patterns

- In some parts of South Africa, like the dry desert regions, rain is rare and may only occur a few times a year.
- However, other parts of the country receive plenty of rain.

Seasonal Rainfall

- Most regions in South Africa experience distinct rainy seasons.
- This means that rain tends to fall heavily during specific times of the year.
- Using Bar Graphs: To understand rainfall patterns, we use bar graphs.
- Each bar on the graph represents the amount of rain that fell during a particular month. This helps us see:
 - How much rain falls each month, which we can read on the graph's scale.
 - The seasons when the most rain falls, whether it's in summer or winter.



Importance of Rainfall Patterns

- Understanding when and how much it rains is important for farmers, gardeners, and everyone who relies on water.
- It helps us plan when to plant crops, when to expect water shortages, and how to manage our water resources.

Rainfall patterns in different parts of South Africa

Western Cape

- In the Western Cape, rainfall mainly occurs during the winter months from May to September.
- This region relies heavily on winter rainfall to fill dams and reservoirs for drinking water and agriculture.
- The rest of the year tends to be dry, making water conservation important.

Eastern Cape and KwaZulu-Natal

- The Eastern Cape and KwaZulu-Natal experience a more balanced distribution of rainfall throughout the year.
- They receive rain both in summer (from November to February) and in winter (from June to August).
- This steady supply of rain supports farming activities and keeps the landscape green year-round.

Northern Cape and Karoo

- The Northern Cape and parts of the Karoo are known for their arid climate with low annual rainfall.
- Rainfall here is sparse and unpredictable, often occurring in short, intense bursts during summer thunderstorms.
- Water conservation and efficient use of water resources are crucial in these dry regions.

Highveld and Lowveld

- Inland regions like the Highveld (Gauteng, Mpumalanga, and Free State) and Lowveld (Limpopo and parts of Mpumalanga) experience a distinct summer rainfall pattern.
- Most of their rainfall occurs during the summer months from October to March.
- This seasonal rain is vital for agriculture and replenishing groundwater.

Coastal Regions

- Coastal regions, such as Durban and Port Elizabeth, benefit from a more moderate climate with rainfall spread throughout the year.
- They receive significant rainfall from both summer storms and occasional winter showers.
- This consistent moisture supports lush vegetation and diverse ecosystems along the coast.

Climate

The Difference Between Weather and Climate

- Weather and climate both talk about temperature, rainfall, cloud cover, and wind, but they are different in how they describe these things.

Weather

- Weather tells us about these conditions over a short time, like a day or even just a few hours.
- It describes what's happening right now or in the near future.
- For example, if it's sunny, rainy, windy, or cloudy today.
- Weather is specific to small areas like a village, town, city, or a part of a province.

Climate

- Climate describes the same conditions but over a much longer time and across larger areas.
- It tells us what the weather is usually like in a place over many years.
- For example, we might say that a place has a hot and dry climate or a cold and wet climate.
- Climate helps us understand the typical weather patterns in a region.

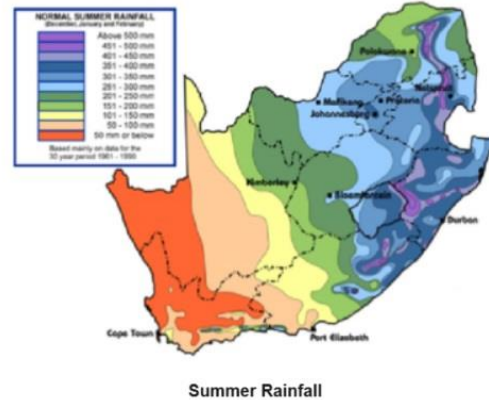
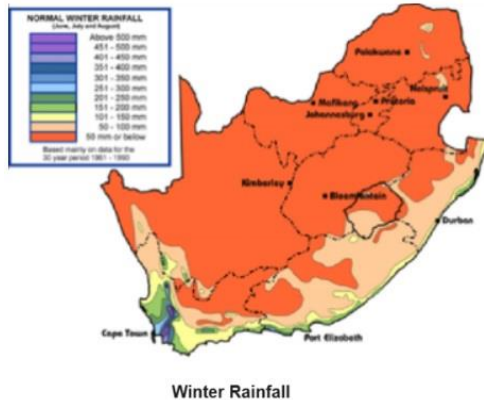
Looking at Different Climates in South Africa on Maps

Temperature Maps

- There are maps for January and July temperatures.
- The January temperature map shows the average temperatures for the hottest month of the year, while the July temperature map shows the average temperatures for the coldest month of the year.
- These maps help us understand how hot or cold different regions can get during these months.

Rainfall Maps

- You can also find maps that show how much rain falls in different parts of South Africa during the summer and winter months.
- These maps help us see which areas get more rain and which areas are drier during these seasons.



Natural Vegetation

What is Natural Vegetation?

- Natural vegetation refers to plants that grow naturally in an area without human intervention.
- These plants are called indigenous plants.
- For example, the natural vegetation along the coastal area of KwaZulu-Natal consists of subtropical forests.

Natural Vegetation and Climate

The type of natural vegetation that grows in a region depends on:

- The temperature.
- The amount of rain.
- The time of year when the rain falls.
- For example, forests will only grow naturally where there is over 800 mm of rain a year, and the rain falls throughout the year.
- In areas with indigenous forests, like those with yellowwood and ironwood trees, it rains all year round.
- These forests are found in a small section of the south Cape coast.
- Proteas, known as fynbos, are indigenous to the southwest Cape.
- These plants have adapted to hot, dry summers and cool, wet winters.



- The Karoo bush is indigenous to the Karoo, where it is hot and dry in summer and cold and dry in winter.
- The bushes store water in their stems and leaves to survive long periods without rain.

Savannah Grasslands Features

- Summers are warm and hot.
- Winters are cool.
- The rain comes in summer.
- There are six dry months with very little rainfall.
- There are two climate seasons: a hot, wet season and a cool, dry season.
- Vegetation in the savannah grasslands varies according to the amount of rain.
- The typical vegetation includes dry grasslands with scattered trees.
- In the drier parts, the vegetation is short grassland.
- In the wetter parts, the vegetation changes to tall grass and more trees.
- Even in the wetter parts, plants have to adapt to several months with little rain.
- Trees have adapted to this warm, dry period.



Savannah Wildlife

- A hundred years ago, huge herds of wild animals lived all over the African savannahs.
- Over the years, people killed most of the wild animals for food, so today, we can only see these animals in game reserves.
- The savannah vegetation is good for animals that eat plants, such as impala, kudu, giraffe, wildebeest, and elephants.
- Animals like lions eat the animals that feed on the plants.



National Parks and Game Reserves

- Many countries in the African savannahs have created national parks and game reserves where wildlife is protected.
- Tourists from all over the world visit these parks to see the wildlife.
- The money they spend helps the country's economy.
- In South Africa, we have the Kruger National Park in the eastern part of Mpumalanga and Limpopo.
- This park is home to many species of plants and animals, offering visitors a chance to see Africa's natural beauty up close.

