

# **Weather and climate**

## **God is a Loving Provider**

## **God is a Powerful Protector**

### **Spiritual Awareness**

*God has power over creation; God provides through His creation*

God shows His love to us in providing the things we need. Rain and sunshine are essential to life. The world's climate was once perfect. However, with the Fall came a change in those perfect climatic conditions. Extremes in climate, and the problems caused by these extremes were not part of the original creation. Sin and man's intrusion have distorted both macro and micro-climates. Pollution and the destruction of forests have had a major impact. However we can be thankful that God has provided enough rain and sunshine to provide for our needs.

As Christians we can show compassion to those suffering in areas where there is drought and flood. We can also help to provide for these people in a practical way.

The Bible shows us that although we look to God for provision through the creation, He can also provide for us in supernatural ways if He chooses to.

*God rules His creation by His awesome power*

In the Garden of Eden there were no extreme weather conditions. The earth was a perfect temperature for maintaining life, and dew fell each morning to water the earth. However with the Fall of mankind, the weather conditions changed, eventually bringing about the Great Flood. Despite extreme weather conditions we now experience on the planet, God is still in control. He is our shelter and protector. We must put our trust in Him and not be afraid.

### **Our response to 'God is a Loving Provider'**

Because God is a Loving Provider I will...

- Love God
- Love others
- Forgive others
- Be kind and patient with others
- Help others
- Thank God for the things He provides
- Thank my parents for the things they provide
- Share with others the things that God has provided.

### **Our response to 'God is a Powerful Protector'**

- Because God is a Powerful Protector I will...
- trust God
- have faith
- have peace
- not be afraid because He is with me
- give my worries to God

- do what God asks me to do
- believe that God will do as He says
- put on the armour of God to protect me against the enemy

### **Supporting devotional resource**

*Themes for Christian Studies 1, (Protector) – God is a Father who protects us*

*Themes for Christian Studies 2, (Creator): God provides for His creation*

*Themes for Christian Studies 4, (Love): God is a loving Father*

*Themes for Christian Studies 6, (Provider): God is a miraculous provider*

*Themes for Christian Studies 7, (Life): God is the sustainer of life*

### **Biblical references**

#### **Bible stories and passages**

1 Kings 17:2-6 - Elijah fed by ravens in time of drought.

2 Kings 4: 42-44 - Elijah multiplies bread.

Exodus - 16,17 - Provision for the Israelites in the desert.

Genesis 6-8 - Noah and his family survived the flood.

Genesis 37-47 - Joseph's family survived the drought.

John 2:1-11 Jesus turned water to wine. (Miraculous provision)

Matthew 24 - signs in the heavens, (climate change) at the end of the age.

Mark 4 – Jesus calmed the storm.

Mark 4 – Jesus walked on water.

Acts 27 – God protected Paul in the storm.

#### **Memory verses**

Deuteronomy 11:13 - I will send rain on your land if you love and serve me with all your heart.

Isaiah 43:5 – Fear not for I am with you.

Job 36:22 – God does great things by His power. No other teacher is like Him.

Psalms 104:13 – From the sky you send rain on the hills, and the earth is filled with your blessing. (GNB)

Psalms 104:19 – You created the moon to mark the months; the sun knows the time to set.

### **Key Questions**

How does God provide for us through weather and climate?

How does the Earth's climate compare to that of other planets?

Were floods, droughts and hurricanes a part of God's original perfect creation?

How has man's sin interfered with weather and climate?

What effects has pollution had upon weather?

How can we prevent our waterways from becoming polluted?

How can we be wise in the conservation of water?

How long can we live without water?

Which parts of the creation are dependent upon water?

What was the weather like in the Garden of Eden?

Why has the weather changed?

How can we protect ourselves in bad weather?

Who is afraid of thunder and lightning? Pets?

What are the dangers of being out in an electrical storm?  
What is meant by “the storms of life”?  
How can we be protected in “the storms of life”?  
What should we do when we feel afraid?

## **Outcomes**

Students will

### *Knowledge*

- explain how weather affects man's lifestyle
- differentiate between 'weather' and 'climate'
- use instruments to predict weather
- study the weather patterns of the local environment
- study the weather patterns of my country
- explain the difference between pre and post flood weather as well as end times weather
- locate parts of the planet that experience extremes of weather
- appreciate that God has created order in the pattern of seasons
- study meteorological phenomena
- look at ways of protecting ourselves from the elements
- study Biblical examples of God's protection

### *Skills*

- describe weather patterns
- classify clothes, toys, games etc. used in different seasons
- compare seasons

### *Values*

- know that God protects us in fearful situations
- appreciate the different seasons and the provision of sun and rain
- show wisdom in preparing for seasonal weather conditions

## **Activities**

### **LOWER PRIMARY**

- Discuss changes in weather throughout the year: wettest, driest, hottest, coldest
- Make a graph or chart to show times of high/low rainfall.
- Observe the ways in which seasonal changes affect plant and animals life.
- Observe times of planting and harvesting.
- Make a chart showing how we can be wise in preparing for changes in weather, e.g. raincoats, sun hats
- Create a collage of weather pictures.
- Discuss dependence of living things upon rain and sun.
- Discuss ways of protecting ourselves in extreme weather, e.g. hats, sunscreen, staying indoors during electrical storms; our parents protect us so children need to obey parents in order to be protected

### **MIDDLE/UPPER PRIMARY**

- Compare climatic conditions of other planets and discuss the suitability of Earth's climatic conditions to life.

- Compare weather conditions associated with different seasons.
- Describe weather patterns.
- Make graphs to show times of high / low temperatures and rainfall.
- Observe ways in which seasonal changes affect plant and animal life, farming activities, sport and leisure activities, national calendars and economic activities.
- Set up experiment to show plant growth with / without sunlight / water.
- Make a chart to show clothing suited to different weather conditions.
- Set up a weather station. Make rain gauges; set up thermometer; erect wind vane or wind sock.
- Measure temperature, air pressure, wind strength and rainfall.
- Design and make a weather chart for daily recordings.
- Observe, classify and draw different types of clouds.
- Conduct evaporation / condensation experiments to show how rain forms.
- Interpret and construct weather maps.
- Watch T.V. weather forecasts and record information over a week.
- Write a dictionary of terms used for elements of weather, weather instruments and terms used in meteorology.
- Find out how rainwater gets to our taps.
- Discuss the effects of pollution upon our water.
- Research incidents of climatic extremes and natural disasters such as cyclones, floods and bushfires.
- Research pre and post flood weather accounts.
- Discuss man's interference through pollution of the atmosphere.
- Discuss ways of helping and supporting people who suffer from major disasters such as flood, drought and famine.
- Draw a diagram to explain the water cycle.
- Observe the ways in which seasonal changes affect plant and animal life, e.g. planting and harvesting according to seasons.
- Compare seasonal preparations in different countries, e.g. collecting firewood, storing food in cases of heavy snowfall; clearing vegetation and burning off to avoid fire risk.
- Discuss protecting ourselves during extreme weather.

## **Assessment**

### *Lower Primary*

Create a chart to show how you would dress in different weather conditions

### *Upper Primary*

Keep a diary to record rainfall, temperature and cloud cover over a period of x weeks.

Graph the rainfall and temperature; make a chart to show cloud cover.

### *All Levels*

What have I learned from the study of Weather...

- about God?
- about doing what God wants me to do?
- about the Bible?

## **Link with Australian curriculum**

**Science Foundation Level and Year 1:** Earth and Space Sciences – Daily seasonal changes in our environment including weather.

**Science Year 6:** Earth and Space Sciences – Sudden geological changes or extreme weather conditions can affect the Earth's surface.

## **Learning connections**

**English:** For Lower primary, read the story “Little Raindrop” from Themes for Christian Studies 2, (Creator).

**Mathematics:** Collect and measure rainfall. Make a chart or graph. Record daily temperatures. Conduct problem solving challenges such as finding the difference between rainfall/ temperature on different days.

**Art:** Draw suitable clothing; weather pictures

**Health:** safety in various weather conditions

**Thinking Skills:** See *Creative Thinking Skills – “Weather and Seasons”* (Lower Primary).

**Other Beacon Media resources:** *Weather – Science & Social Studies Student Research Cards*