

# Waterways and water cycle

## God is our Redeemer, Life and Peace

### **Spiritual Awareness: God gives abundant life**

Water is a biblical symbol of life, and rivers of water symbolize abundant life. Ezekiel 47 and Revelation 22 speak of the river of life. The living water that Jesus gives symbolizes eternal life, which we receive when we ask Him to be our Saviour.

### **Our response to 'God is our Redeemer'**

Because God is my redeemer I will...  
Ask Jesus to forgive me for my sin  
Invite Him to live in my life  
Make Jesus Lord of my life  
Live with Him forever  
Thank Him for what He did on the cross  
Thank Him that I am His child  
Tell others that they can have eternal life

### **Supporting devotional resource**

*Themes for Christian Studies 6, (Life): Jesus, the living water*  
*Themes for Christian Studies 7, (Life): God, the sustainer of life*

### **Biblical references**

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

John 4:5-30 - The woman at the well  
John 7: 38-39 – The living water, representing the Holy Spirit  
Acts 10:44-48, Acts 11:15-17 - The promise of the Holy Spirit is for us  
John 14:26 – Jesus' promise of sending a helper, the Holy Spirit  
Luke 11:5-13 – how much more shall your Heavenly Father give the Holy Spirit to those who ask Him?  
Ezekiel 47, Revelation 22: 1-2 - The River of Life with water as clear as crystal coming out from the throne of God  
Revelation 7:13-17 - Robes washed in the blood of the Lamb  
Exodus 17:1-7 - Water from a rock

#### **Memory verses**

Psalm 1:1-3 – How blessed is the man who does not walk in the counsel of the wicked, nor stand in the path of sinners, but his delight is in the Lord, and in His law he meditates day and night. He will be like a tree firmly planted by streams of water, which yield its fruit in season, and its leaf does not wither, and in whatever he does he prospers.  
John 37b-38 – “If anyone is thirsty, let him come to me and drink. If a person believes in me, rivers of water will flow out from his heart.”

#### **Key Questions**

Why is water so important?  
What does Jesus mean when He says that He is the Living Water?  
Can we have life without water?

Can we have life without Jesus?

## **Outcomes**

Students will

### *Knowledge*

- understand how rivers form and shape
- contrast the creationist view of river formation - a lot of water in a short time, compared with the evolutionist view - a little water over millions of years
- understand how rivers sustain life and are utilized by people
- use an atlas to locate major river systems in our country
- describe the sources of river systems
- interpret basic mapping terms
- compare river and glacier valleys
- discuss river erosion and transport of materials by river systems
- develop strategies for water conservation

### *Skills*

- analyze and communicate the major forms of water use
- use an Atlas to locate rivers
- research a major river, identifying its key features and the ways it has been utilized
- develop strategies for water conservation

### *Values*

- show environmental responsibility, show concern for protection of waterways
- show social and civic responsibility, showing concern for water conservation
- be thankful for God's provision

## **Activities**

- Explore local waterways. Observe river width, width of river-bank, speed of water, water temperature, types of materials the river is carrying, pollutants.
- Research and draw river sources.
- Use an atlas to locate rivers and reservoirs.
- Make a model of a river system in a sand-pit: pour water down slopes and create a river system from sources to the sea.
- Identify stages of river development (youthful, mature, old), and features such as flood plains, meanders, deltas and tributaries.
- Discuss erosion, deposition and appropriate land use.
- Discuss Noah's Flood and river formations. Do rivers need millions of years to form?
- Make a model of a glacier. Push a large piece of rock or ice through sand to create the features of a glacier valley. Compare this with a river valley.
- Observe the settling of sediments. Place dirt, rock and organic material and water in a large glass jar. Shake. Observe the time taken for different

sediments to settle. Relate this to the settling of sediments after Noah's flood.

- Discuss erosion and deposition.
- Identify stages of development of a river. Identify flood plains, meanders, deltas, tributaries and billabongs.
- Discuss major uses of water, and the importance of water to life.
- Locate on a map the world's largest river.
- Investigate a river settlement and write a description of the relationship between the river and the way of life.
- Discuss rivers that flow intermittently in desert regions.
- Draw a diagram of the water-cycle.
- Conduct evaporation-condensation experiment. Hold a saucer above steam from a kettle.

### **Assessment**

1. Produce a poster showing how the water cycle works. Make sure it has a glossary of terms used.
2. Draw up a table to show your water use in a typical day. Compare this with a person living in an African country where there is drought.
3. Design and write up an experiment that shows that water exists in three states of matter: solid, liquid and gas.
4. What have I learned from the study of water and waterways...
  - about God?
  - about doing what God wants me to do?
  - about the Bible?

### **Link with Australian Curriculum**

**Science Year 4:** Biological sciences: Living things, including plants and animals depend on the environment to survive;

### **Learning Connections**

**English:** Texts concerning the way water affects life; effects of flood and drought upon communities

**History/Geography:** traditional skills of people groups in finding and conserving water, e.g. Australian Aborigines, Africans; the Nile as a life source to the early Egyptians

**Social Studies:** water conservation; water as an energy source

**Art:** water scenes

**Music:** Sound picture creating water sounds; making a musical instrument that sounds like rain

**Mathematics:** statistics, percentages and graphs concerning rainfall around the world; local rainfall throughout the months and seasons of the year

**Thinking skills:** See the *Creative Thinking Skills* section of this website – “*Rivers, Glaciers, Water Cycle*” (Middle/Upper Primary).

**Related Beacon Media Resources:** Visual Language Unit: *Water – Science & Social Studies Student Activities*