

Air and wind

God is a Powerful Creator

God is the sustainer of life

Spiritual Awareness

God's power is expressed in the greatness of the creation. We see this in the powerful weather forces, wind and air pressure. This powerful God cares about me individually. He is able to perform miracles on my behalf.

Air supports life. God gives the requirements for life, and spiritual life. We need God as we need the air we breathe.

God has placed within the creation powerful forces, which are available for the use of mankind. Air is a powerful force for moving objects.

God is...

- **the creator of the universe**
- **supernatural**
- **a designer**
- **a miracle worker**
- **a healer**
- **Lord and King of the universe**

Our response to 'God is a Powerful Creator'

Because God is a Powerful Creator, I will...

- Appreciate God's ability to supernaturally create.
- Ask God to help me create new things, so that I can bless others.
- Trust in a mighty, supernatural God.
- Care for the universe He has created.
- Appreciate the greatness of God and recognize that He is in control of all He has made.
- Thank Him for His provision of air, and recognize that I need Him as I need the air I breathe.
- Recognize that I am wonderfully made and thank Him for making me as I am.
- Recognize that God is Lord and King of the universe and has everything in control.
- Recognize that in order to be the person God wants me to be, I must make Jesus Lord and King of my own life.

Supporting devotional resources

Themes for Christian Studies 5 & 7, (Life): God is the sustainer of life (air)

Key questions

Who and what depend on air to stay alive?

What is air made from?

What does air do?

Why would we say that air is a powerful force? (*sustains life; moves things*)

Biblical references:

Bible stories and passages

- Genesis 1 The creation - God created the things we need to stay alive.
- Mark 4:35-41 Jesus calms the storm (wind)
- Acts 2 The disciples receive the Holy Spirit – (wind representing power).
- Exodus chapters 15-17: God sustained the Israelites in the wilderness. God sustains life through air.

Memory verses

- Matthew 6:25 “Do not be worried about the food and drink you need to stay alive, and don’t worry about clothes. Isn’t life more than food and clothes?”
- Matthew 4:4: “Man shall not live by bread alone.”
- John 15:5 Jesus said, “I am the vine and you are the branches; he who abides in Me and I in Him bears much fruit; for apart from Me you can do nothing.”
- John 10:10 Jesus said, “I have come that you might have life, and that you might have it abundantly.”
- Jeremiah 10:12 “It is he who made the earth by His power, who established the world by His wisdom; and by His understanding he has stretched out the heavens.”

Outcomes

Students will

Knowledge

- understand that living things depend on air to survive, and that God created the necessary things in our environment for life
- understand that air is a force
- understand that air exerts pressure
- understand that air can move solids and liquids

Skills

- observe effects of moving air
- make inferences about the ability of air to move things
- investigate and evaluate
- measure wind strength using a wind speed indicator.
- demonstrate ways in which air can move solids and liquids
- predict how an object may move depending on wind strength and direction
- record results
- construct models

Values

- pursue knowledge
- show interest and curiosity in experiments

- show creativity in producing their own experiments
- have respect and concern for others
- show responsibility
- trust in God and thankfulness for the life-giving forces within His creation

Activities

Experiment with dropping things from a height

- a flat piece of paper, a large ball, a small ball, a feather
- Which fall straight down?
- Which float?
- What makes some objects float?

Experiment to show that air exerts pressure:

- Fill a drinking glass to the brim and place cardboard over it. While holding the cardboard against the glass, turn the glass upside down. Take hand away and cardboard will remain.
- Make a parachute

Experiment to show that air can moves things:

- Blow ping pong balls across a table.
- Make a yacht and move it across water by blowing the sail.
- Make a kite.
- Make a wind sock, balloon rocket, pin wheel, glider (See *Themes for Christian Studies 7, God is Life* for these activities.)

Experiment to show how air pressure can move liquids:

- Make a siphon.

Observations of moving air

- Make a paper fan
- Measure and record wind strength on different days.
- Compare wind direction and direction of object's movement.
- Predict how an object may move, depending on wind strength and direction.
- Observe the effects of moving air in the environment.
- Measure and record wind strength on different days using a wind speed indicator.

Assessment

Science Worksheet

Name..... Date

Before the experiment...

Title of Science Investigation -

What do you want to find out?

What will you do to find this?

What will you need to use?

What do you think will happen?

After the experiment...

What happened?

Can you try to explain why this happened?

What did you learn from the experiment?

What have you learned about God from this investigation?

Link with Australian curriculum

Year 4 Science – Biological and Physical Science

Learning connections

English: Poems and stories about wind; reading, retelling and dramatizing the key Bible stories related to this topic; science reports; word banks

Social studies: compare air quality in cities and rural areas; discuss ways of solving air pollution problems; preparation for hurricanes and cyclones

Art: models of hot air balloons, wind socks, mobiles that move in the wind

Biology: the lungs

Health: the importance of fresh air to health; air pollution

Maths and Phys. ed: measuring breathing rates before and after exercise; calculating the number of breaths one would take in a minute, an hour, a day etc.

Thinking skills: See the *Creative Thinking Skills* section of this website – “Air, wind” (*Middle/Upper Primary*).

Related Building Blocks Unit: Birds and Flight