UNIT-SPECIFIC GOALS (highlighted)

1. GOD CREATED ALL THINGS
   1a contrast biblical accounts and beliefs about creation with those of other religions
   1b investigate Christian beliefs concerning the existence of a spiritual, unseen world
   1c identify and evaluate the different roles of science and religion in understanding creation

2. GOD TAKES CARE OF HIS CREATION
   2a consider what can be learnt from nature about God’s sustaining, preserving care for creation
   2b explore the Christian understanding of grace in relation to God’s care for his creation
   2c examine how Christians resolve the tension between God as carer and protector and the observable state of the world

3. GOD WANTS PEOPLE TO TAKE CARE OF HIS CREATION
   3a examine the biblical teaching on people’s responsibility for the natural environment
   3b explore the relationship between a person’s beliefs and care for the environment
   3c explore ways in which individuals can be coworkers with God in caring for the world
   3d evaluate and reflect on their use of resources and care for the environment

STUDENT ASSESSMENT (formative or summative)

ASSESSABLE STUDENT OUTCOMES

- Summary of various scientific and Christian approaches to creation. (1c)
- Presentation to class on the forces of darkness. (1b)
- Journal: Where does everything come from? (1b,1c)
- Written response to Psalm 65 and the First Article of the Apostles’ Creed. (2a, 2b)
- Retelling of story in Deuteronomy 8,9 through drama or illustration. (2b)
- Written personal response as an ode. (2b)
- Presentation of a global issue. (2c, 3c)
- Debate: Science and Religion. (1c)
- Nature study project. (2a, 3c)
- ALWS project. (3c)

ASSESSMENT STRATEGIES

- Work sample
- Student audience
- Journal
- Work sample
- Student audience
- Work sample
- Student audience
- Work sample
- Work sample

UNIT SUMMARY

Students develop an awareness of the different scientific and religious approaches concerning creation, an understanding of the existence of the spiritual realm and the way in which God acts as carer and preserver of creation.
INTRODUCTION

1. HOW THE WORLD CAME TO BE

Students share their ideas on the issue of evolution. Discussion on creation to be further stimulated by viewing a segment from the video Jurassic Park. After watching this video, students embark on an individual study project which seeks to record and explain various scientific theories of the origins of the universe (see Teacher Resource Sheet [TRS] D2/1). Findings are presented in open forum with various theories and their explanations being listed on the whiteboard.

GOD AS CREATOR OF ALL:
A guest speaker, such as the college chaplain, presents the biblical view that not only has God created all but through this act made the world of science possible. Students raise and discuss their questions on this matter. See Good Question! (B Schwarz).

Students record a list of the Christian responses to creation.

Students view the video Science Is Full of Surprises in which The Rev Dr J Polkinghorne, Queen’s College, Cambridge, puts forward the view that religion and science are compatible. Students respond through classroom discussion. (TRS D2/2)

DEVELOPMENT

2. WHAT OF THE SPIRITUAL REALM?

To help students formulate their views on the existence of a spiritual realm, which has been created by God.

FORCES OF LIGHT AND DARKNESS

Teacher input: Tell about the role of the forces of light and darkness in the Persian religion known as Zoroastrianism. Compare this with references to light and darkness in John’s gospel (TRS D2/3).

FORCES OF LIGHT

Consider ‘What does an angel look like?’

Students
• draw or use a word diagram to describe their perception of angels;
• look up the meaning of the word ‘angel’ in a dictionary;
• research Bible references to angels and feedback information to class:

| Job 1:6-12, | Nehemiah 9:6, |
| Deuteronomy 32:8 | Genesis 18:2 |
| 1 Peter 3:22 | Acts 5:19 |

• Teacher input: OHT of artwork depicting angels.

FORCES OF DARKNESS

Group activity: Select a topic from the following and consider the existence of the forces of darkness in this world. Included in research should be biblical references to the forces of darkness:

Matthew 8:31f Matthew 10:1
Matthew 25:41 Mark 5:2
Mark 7:25 Luke 8:27-29
1 Timothy 4:1 James 2:19
Revelation 16:13,14.

Suggested topics for research:
folk tales        witch trials
evil spirits and hell        the occult
artists’ impressions of the devil.

Report findings to the class.

JESUS VERSUS SATAN

Students investigate instances recorded in the gospels when Jesus confronted Satan:
• Jesus is tempted Matthew 4: 1–11
• Jesus exorcises demons Matthew 8: 28–34
• Jesus rebukes Peter Matthew 16:23

Discuss:
• What is Satan’s chief purpose?
• How does Jesus respond to Satan?
• Is Satan to be feared?

Journal response: Where does everything come from? Take into account the creation of the world and the forces of light and darkness. Include the religious and scientific approaches covered in class.

3. GOD TAKES CARE OF CREATION

To give students an appreciation of God’s role as provider and protector: Christians believe God is in control of all that happens in this world.

PSALM 65

Students read Psalm 65 and record what God does in each verse (TRS D2/4).

Consider:
• For what is God responsible?
• What does this psalm tell us about God’s continued care?
• According to the writer, what contribution have people made to the good things they enjoy?
• What is your contribution to the many good things you enjoy daily?
• How is this psalm similar to Luther’s explanation of the first part of the Apostles’ Creed (see Small Catechism)?

GOD’S GRACE

REMEMBERING GOD
Students retell the story of Deuteronomy 8 and 9 through drama or illustration. The Dramatised Bible is a good resource.
Focus questions:
• How does God show his grace and goodness to the people of Israel?
• What are they to remember?
Students research the meaning and significance of the RSL’s ode of remembrance. Report findings to the class. Students create their own ode, remembering the way God has blessed them.

4. GOD WANTS PEOPLE TO TAKE CARE OF CREATION

To develop student awareness and involvement in social issues

View a video that deals with global issues, eg
• The Lungs of Asia
• Pollution: World at Risk
• Right Whale: An Endangered Species

Group Work: Select a topic from those outlined below or one of your own choosing. Research in the library (Internet, CD-ROMs etc). Make a group presentation to the class. Include a Christian response to the issue and one that takes into account both the positive and negative courses of action.
Topics: nuclear war, poverty, human and animal rights, pollution, world population, waste management

STRIKING A BALANCE
Decisions relating to the environment often involve a struggle. Whose needs are the greatest? Students discuss statements which strive to present a balance, eg
• It is right to cut down trees for housing but wrong to cut them down to make a road, which could have been re-routed.

Students should explore the moral considerations, existing data where available and biblical guidelines (see Development Activities Menu for other possible statements).

RESPONSE
Students may complete one or more of the following:

(1, 2) DEBATE
Conduct a debate or an open forum. Invite another class to be the audience. Suggested topics:
• You can’t believe in God if you believe in evolution
• Science and religion are at loggerheads

To prepare for the debate, students
• write their initial response to their topic
• then research the relevant areas
• discuss in groups
• come to a conclusion, which they can argue and validate with a range of data
• rehearse their delivery.

(3) NATURE STUDY PROJECT
Students undertake a project in which they observe and record designs of nature (see TRS D2/5). Questions to consider:
• Is there order in nature?
• Can we speak of an intelligent design?
• If we see order and an intelligent design, how can we explain this?

Subject selection: various insects, plants, animals etc. The science department of your school may already have some of these subjects for study purposes.

(4) ALWS PROJECT
Students help care for God’s creation through an Australian Lutheran World Service (ALWS) project, eg conservation, water supplies, farming, sanitation, nurseries, rural development. They obtain information from ALWS magazines Project News, resource kits or a guest speaker.

Encourage the class to become financial members of the Lutheran World Service Club and to pray for the work of ALWS and those they serve.
YOU WILL NEED

☐ Videos, such as:
  - Jurassic Park
  - Science Is Full of Surprises
  - The Lungs of Asia
  - Pollution: World at Risk
  - Right Whale, an Endangered Species

☐ Bibles

☐ TRS D2/1, 2, 3, 4

INTEGRATING INTO OTHER CURRICULUM AREAS

Find out what students are doing in other curriculum areas in relation to issues dealt with in this unit.

Topics

Theories about origin of the universe

The spiritual world

Skills

Scientific research/observation

UNIT EVALUATION

Which activities worked well in this unit?

Which resources were useful in the implementation of this unit?

How did I respond to the range of students' attitudes to science and religion?

How did I respond to the range of students' understanding of the Bible and Christian beliefs?

What would I do differently if I was teaching this unit again?

How will I use and build on knowledge, understandings, skills, attitudes, and values students have developed in this unit?
EXPLAINING ORIGINS

INFORMATION FOR TEACHER

BIG BANG

The Big Bang theory states that the universe originated in the explosion of a primordial fireball some 15–20 billion years ago. Everything in the universe was hurled outward and continues in this manner today. In this sense, the universe is still expanding.


EVOLUTION

Evolution is a biological approach to the origins of the universe which considers the genetic transformations of populations through time, resulting from genetic variation and the impact of environment on reproductive success.

Darwinism is the belief in the theory of evolution by natural selection. In 1858 Charles Darwin produced a joint paper with Russell Wallace to the Linnean Society. Darwin's own paper, The Origin of Species by Means of Natural Selection, was published in 1859. Its strength lies in the relationship Darwin was able to draw between theory and observation. The approach centres on the natural evolution of species. The selection process of nature focuses on those species that are best adapted to the environment because of desirable traits. These traits are then propagated in following generations.

The difference in the approaches of Charles Darwin and Russell Wallace is worthy of note. Darwin always wished to smooth over the apparent gulf between men and animals, maintaining that the phenomenon of man could be accounted for purely naturalistically, without invoking any non-material, spiritual, or psychic causes. Wallace, on the other hand, repudiated Darwin's agnosticism, and became deeply interested in spiritualism and psychic phenomena, maintaining that one could not account satisfactorily for all aspects of the world of living organisms... by a purely naturalistic description such as that implied by the doctrine of evolution by natural selection. (Oldroyd D R  Darwinian Impacts: An Introduction to the Darwinian Revolution, Sydney, New South Wales University Press, 1980, p 108)

CREATIONISM

Creationism is a religious concept that is based upon the existence of a creator. A major part of the teaching is showing that the creator exists through the use of the Bible or variations of philosophical arguments. Creationists hold to a literal interpretation of the Genesis account. They believe that the large-scale change from one organism to another is beyond the ability of mutation coupled with natural selection.

Creation Scientists have a world view for their science which is founded on the belief that an intelligent designer (‘God’) exists who has created everything in this world.

Biblical Creationists are a group of Creation Scientists who subscribe to the view that the first eleven chapters of the Bible are real history and should be interpreted in a literal manner, eg the creation of all things in six 24-hour days.

There is a lot of information on this topic available on the Internet and in the magazine Creation ex nihilo. Videos are also available on this approach to origins.

BIBLICAL

See Background Notes for Teachers including the references in For Further Reading.
A video viewing guide
‘SCIENCE IS FULL OF SURPRISES’
featuring The Rev Dr John Polkinghme, president of Queens College, Cambridge

Science is about understanding the physical world.
Science answers __ __ __ things happen. Religion tries to answer __ __ __.
Science and religion are not competitors, but complementary.
We need both to understand the world in which we live.

We see the universe with 100 billion galaxies each with 100 billion stars!
We think it existed 11,000 million years before life started,
Is it __ __ __ designed, to produce human life?
We now think stars and time were needed to make intelligent life.

Great thinkers like Newton, Cavendish, Kelvin, Maxwell, Rutherford were both scientists and C __ __ __ __ __ __ __ __ __.

The B __ __ B __ __ __ theory
Present theory of the universe is that it started 15 billion years ago with a tiny ball of energy which expanded, and continues to expand. It went from very simple to rich, complex, varied. How?
According to this theory there are f __ __ __ forces only in all of the universe:
1) weak n __ __ __ __ __ forces 2) Strong n __ __ __ __ __ forces
3) E __ __ __ __ __ __ magnetism 4) G __ __ __ __ __ y
If we change any of these, we get ___ life! eg
If the universe expanded faster ___ stars.
If the universe expanded slower > the process stops too soon, therefore ___ life.
If it’s just right > ME!

Einstein: ‘The only thing we can’t understand about the universe is that we can’t understand it!’
(Einstein predicted black __ __ __ __ __ ; E=Mc^2; light is bent by gravity; the universe is ex __ __ __ __ __ __.)

Perhaps the same mind made the universe and ___!

Science questions everything? ___! Science says: try some belief and check it, ie science needs commitment, faith and belief and then measures this against experience. Just like __ __ __ __ __ __, which listens to church/Bible, then measures them against experience.

Q How come the universe produced the human brain — the most complex thing; it gives us self-consciousness?
A 1. One universe in a million? Or
2. Designed by ___ to produce us.

Q Why evil?
A God made __ __ __ m, and therefore choice to us and nature; therefore murder and earthquakes.

Q Should religion be reasonable, ie commonsense?
A. Science is ___ commonsense, why should religion be? But religion is profound and ties in with experience, eg
1) God is above us, ie God the F __ __ __ __
2) God came alongside us, ie J __ __ __
3) God is in us, ie H __ __ __ S __ __ __ __

We need stars and super novas to make e __ __ __ __ __ for life,
eg in the sun: hydrogen > h __ __ __ __ > elements up to I __ __ __.
a star expands to R __ G __ __ __ then collapses, forming elements like Zn (z __ __) and I (I __ __ __ __) which are needed for life. It then explodes as a s __ __ __ n __ __ __, scattering these elements.

We are made of star ashes!
DUALISM

INFORMATION FOR TEACHER

ZOROASTRIANISM

An ancient Persian religion based upon dualism which dates to the 6th century BCE. Some scholars have traced its foundation back even further to 10th century BCE. The prophet Zoroaster is believed to have lived in the area which is present day Afghanistan. Zoroaster commanded a large following of people who were impressed by his wisdom and lifestyle.

DUALISTIC APPROACH  The religion has as its focus a battle which is waged between the forces of light and darkness in this world. At the end of time the forces of light are triumphant. The main deity is Ahura Mazda who is the one god, or as he is known, the Wise Lord. Ahura Mazda fathered two spirits:

Spente Mainyu: referred to as the Beneficent Spirit who is a force for light in this world.
Angra Mainyu: also called Ahriman the Hostile Spirit who is the god of darkness. Angra Mainyu is the adversary of all that is good in this world including Ahura Mazda and Spente Mainyu. He creates his own offspring to carry out his plan of destruction. Finally, the Hostile Spirit will be defeated and driven away.

CHRISTIANITY

DUALISM IN THE GOSPEL OF JOHN  The gospel of John often refers to the contrast between light and darkness and how these forces are opposed to each other. Christ is seen as the Light of the world and his followers as children of the light. Their role is to reflect the light of Christ and to dispel the darkness of this world.

Christ as Light:  John 1:4,5; 7-9;  3:19, 21;   8:12;   9:5;   12:35, 46
Children of Light: John 8:12;   12: 35, 36, 46
Darkness as spiritual blindness: John 9:39-41
Darkness as the opposite to light: John 1:5;   3:19-21;   8:12;   12:35, 46

OTHER REFERENCES

DEAD SEA SCROLLS  The concept of light and darkness is used in many of the texts of the Dead Sea Scrolls.

Daily Prayers: 4Q 503, p 409f.

HELLENISTIC LITERATURE, JEWISH LITERATURE, WRITINGS OF THE CHURCH FATHERS (Didache)

References in: The Interpreter's Dictionary of the Bible.

NEW TESTAMENT (apart from John)

Check Bible concordances and expository dictionaries.

REFERENCES


See also Microsoft Encarta and visit various Internet sites under heading of Zoroaster.
PSALM 65

A psalm of David: A song of praise and thanksgiving

O God, it is right for us to praise you in Zion and keep our promises to you, because you answer prayers.

People everywhere will come to you on account of their sins.

Our faults defeat us, but you forgive them.

Happy are those whom you choose, whom you bring to live in your sanctuary.

We shall be satisfied with the good things of your house, the blessings of your sacred Temple.

You answer us by giving us victory, and you do wonderful things to save us.

People all over the world and across the distant seas trust in you.

You set the mountains in place by your strength, showing your mighty power.

You calm the roar of the seas and the noise of the waves; you calm the uproar of the peoples.

The whole world stands in awe of the great things that you have done.

Your deeds bring shouts of joy from one end of the earth to the other.

You show your care for the land by sending rain; you make it rich and fertile.

You fill the streams with water; you provide the earth with crops.

This is how you do it:

you send abundant rain on the ploughed fields and soak them with water; you soften the soil with showers and cause the young plants to grow.

What a rich harvest your goodness provides! Wherever you go there is plenty.

The pastures are filled with flocks; the hillsides are full of joy.

The fields are covered with sheep; the valleys are full of wheat.

Everything shouts and sings for joy. (TEV)

A STUDY GUIDE

GOD TAKES CARE OF HIS CREATION

- Read Psalm 65. Highlight everything that God does.

- Answer in short paragraphs

1. For what is God responsible?

2. What does this psalm tell us about God’s continued care?

3. According to the writer, what contribution have people made to the good things they enjoy?

4. What is your contribution to the many good things you enjoy daily?

5. Read what Luther has written about the First Article of the Apostles’ Creed. How is Psalm 65 similar to Luthers’ comments?

CREATION

I believe in God the Father Almighty, maker of heaven and earth.

What does this mean?

I believe . . .

that God has made me and all creatures;

that he has given me my body and soul, eyes, ears, and all my members, my reason and all my senses, and still preserves them; also clothing and shoes, meat and drink, house and home, wife and children, fields, cattle, and all my goods;

that he richly and daily provides me with all that I need to support this body and life;

that he defends me against all danger, and guards and protects me from all evil;

and all this purely out of fatherly, divine goodness and mercy, without any merit or worthiness in me; for all which it is my duty to thank and praise, to serve and obey him.

This is most certainly true.
NATURE STUDY PROJECT
Group or individual project.

1. SKETCH of animal under observation and its environment.
   List of points on observation (setting time, natural / caged, communal / isolated)

2 COMMUNICATION
   Animals have varied approaches to communication, which can include use of sounds, sight, smell and touch and heat detection.
   Types of signals: (chemical: odour/taste, visual, acoustic, tactile)
   Reasons for signals: (social, territorial, mating)

3 FEEDING BEHAVIOUR
   Types of food:
   Feeding approach:(communal, rapid feeding, hunting, nocturnal/day, scavenger, gatherer)

4 COMMUNAL ACTIVITY
   Communal role:
   Communal relationships:

5 CONCLUSIONS
   Include in the report
   • the adaptability of the animal in relation to its design;
   • the worth of the animal for the environment;
   • its special features that have impressed you
   Its communal and individual characteristics (communication and feeding behaviours) should also be summarised.
   Any other aspect that you might consider significant in relation to its creation.
   
   Is there order in creation and can we speak of intelligent design?