Science, Social Studies, Health Teacher's Guide Year 3 A God-centred Curriculum

Based on the character and nature of God

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God is Love Teacher's Topic Guide Year 3

Topic: Families

Duration: 5 weeks

God cares for families

God is love. He loves every family and has provided families for love, care and protection. Living in families is God's plan. Every family is special. God provides for children and protects them, through the family structure. Children feel safe in the care of their parents. A family provides food, shelter and love.

People in families belong to one another. Parents love their children very much, and children love their parents. It is God's plan for family members to show love, respect, loyalty and support for one another.

Bible stories and passages

Luke 15:11-32 A story about a father who forgave his son. Luke 2:41-52 A visit to the temple. Jesus obeyed His heavenly Father. John 10- The Good Shepherd; our heavenly Father loves and cares for us. Matthew 2 Baby Jesus was protected by the flight to Egypt Exodus 1-2 Protection of baby Moses Psalm 68:5-6 God cares for the orphans and protects widows; He gives the lonely a home to live in.

Bible Verses

2 Corinthians 6:8 I will be your Father and you shall be my sons and daughters.

1 John 3:1 See how much the Father has loved us! His love is so great that He has called us His children.

John 1:12 Those who receive Him are called children of God

1 Corinthians 13:4 Love is patient and kind.

Ephesians 6:1 Children obey your parents in the Lord.

Joshua 24:15 As for me and my family, we will serve the Lord.

Key Questions

What is a family?

Why did God choose to place us in families?

How does living in a family help us to get the things we need?

What are some of the problems that family members may have in getting along together?

What should we do when we have family disagreements?

How can family members help each other?

Who made the rules for families?

What are some of the rules?

Activities

- Describe the family life of Jesus as a boy.
- Make a photo collection of your family.
- List members of your immediate family. List other members (extended family).
- Find out information from grandparents. What was different when they were young?
- Create a timeline of the history of your family, from grandparents through to the youngest family member.
- Draw / discuss the things that are special to your family house, pets.
- Discuss the ways in which families celebrate special events together.
- Draw or write about a special family outing that you have enjoyed.
- Describe family members, their roles and occupations. Write about them.
- Discuss the advantages / disadvantages of being the oldest or youngest family member.
- Discuss different types of families: large, small, single parent.
- Discuss the ways in which missionaries have provided homes for children who have been orphaned (Ps. 68:5).
- Measure and graph heights of family members.
- Discuss the way that God wants us to treat our family members: *loving; obey parents; be helpful; express thanks; play peacefully with brothers / sisters; forgive*
- Describe how your family shares in activities with other families.
- Discuss ways in which family members work together, and the value of working together.

Values education Year 3 God is Love Loyalty

Loyalty is ...

- not choosing the opposite side
- sticking with someone through difficult times
- caring about people
- doing what you say you will do
- commitment
- helping the people closest to you, like your family and friends
- faithfulness

Loyalty is like tape or glue that is really strong. It doesn't come apart easily. When your friends or family go through difficult times, you can practice loyalty by encouraging them and finding ways to help. Difficult times could be when people are sick, when they have a lot of work to do, when they feel stressed, or when things go wrong.

Practice loyalty and you will be a better friend, a better family member, and a better student!

Your family members are like your team. You need to stick with them, help and care for them for the whole of your life.

Questions

- 1. When did you stick up for someone in your family?
- 2. How do parents show loyalty to their children?
- 3. How can children show loyalty to their parents?
- 4. How can you be loyal to your brothers or sisters?
- 5. Who and when has someone helped you or your family through a difficult time?

What does the Bible say about loyalty?

Proverbs 21:21 He who pursues righteousness and loyalty Finds life, righteousness and honor.

Romans 8:35-39 Nothing can separate us from the Father's love.

Matthew 26:33-35 But Peter told him, "Even if everyone else turns against you, I certainly won't!" Jesus told him, "I tell you with certainty, before a rooster crows this very night, you will deny me three times." Peter told him, "Even if I have to die with you, I will never deny you!" And all the disciples said the same thing.

Proverbs 18:24 There are "friends" who destroy each other, but a real friend sticks closer than a brother.

Proverbs 17:17 A friend loves at all times.

Art Year 3

God is Love Topic: Families

Biblical connection: Jesus lived in a family. God made us to live in families. **Bible art as a wall display:**

Children's drawings of their family.

2 Corinthians 6:8 I will be your Father and you shall be my sons and daughters.) (See footnote)

1. Drawing

- Draw your family, including yourself. Write the names of family members.
- Frame the drawing to look like a family portrait.
- Draw things you like to do together with family members.
- Draw your family members doing activities: walking to the shops; sweeping the floor; digging in the garden etc.

2. Painting

• Paint two pictures of your home: one looking at the outside; one showing a room on the inside.

3. Construction

- Make something as a gift for Mum or Dad.
- 4. Modelling
- Make a cup or a bowl that you could use in your house.

Making the "God is" sign

Children play a part in making a colourful wall sign, "God is Love". The teacher provides large open letters for children to decorate with colours and patterns. One letter can take up one A4 sheet of paper. The finished letters are put together collectively to make the sign. Art work related to the theme as well as an appropriate Scripture verse is displayed under the sign. This is the procedure for each subsequent theme studied.





	Thinking Skill	s Love Yr 3	
Families Draw your h Now change B – Make one part A - Add something R – Replace one p something else.	s 1 oome. e it by: bigger g extra part with	Fai Name 10 would NEV	milies 2 things that you ER find at home.
Families Brainstorm 5 v helping your p	s 3 ways of parents.	Fan What if there at home? Give 3 ideas answer.	nilies 4 e were no rules s for your
Families Write an acrostic using the word: F A M I L Y	s 5 poem	Fai Work out 5 o that this pict you about yo	milies 6 different things ture could tell our family.

Families 7	Families 8
Dinner time has been cancelled. Give 3 reasons for this.	How is the lifestyle of a family of ducks different to your family life? What are some similarities?
Families 9 You have to judge the "Father of the Year" competition. Give 3 rules that you would use.	Families 10 Make up 3 rules that will help families get along well together.
Families 11 Make a model of an activity your family likes doing together. Use straws, boxes and rubber bands.	Families 12 "Primary school children should not have to help at home." Give 3 bad points for this idea

God is Provider Teacher's Topic Guide Year 3

Topic: The Sea / Marine Life

Duration: 5 weeks

God provides through His creation (Creation Day 5)

As God made the living creatures to inhabit the Earth, He first made those that could exist in water and in the air. Some Christians accept the theory of evolution, believing that if each day was millions of years, then the 'lower forms' of life, birds and fish, existed millions of years before 'higher' land animals. However, the Bible speaks of the passing of 'evening and morning', (Genesis 1), before each new day of creation. These passages point to 24-hour days.

God said that His creation was good. To believe that birds and fish developed into higher land animals, through evolution, one must believe that there was death and suffering. That is to say, one species died out and gave way to a new species. It is therefore impossible to believe that God created animals over millions of years, involving death and suffering, (fossils), and at the same time, believe that God's creation was 'good'. A perfect creation does not involve death and suffering. Death and suffering came into existence after the creation of man, at the point of His fall from God's perfection.

Key questions

What does it mean to be created 'according to its own kind'? What does God mean when He said His creation was 'good'? How can we help to take care of God's creatures? How does God use the ocean to provide for us? What is an ecosystem? Why would we call the ocean an ecosystem?

Our response to 'God is Provider'

Because God is a provider, I will...

- 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.
- Recognize that God is Lord and King of the universe and has everything in control.
- Thank God for the things He provides

Biblical stories and passages

The Creation (Genesis 1)

Genesis 1: 20-21 God said, "Let the water teem with living creatures, and let birds fly above the earth across the expanse of the sky. So, God created the great creatures of the sea and every living and moving thing with which the water teems, according to their kinds, and every winged bird, according to its own kind. And God saw that it was good." Psalm 148 The Creation praises God.

Luke 5:1-11 - The great catch. (Shows Jesus' power over creation)

Outcomes

Students will

Knowledge

- Study the diversity of marine life.
- Understand the relationship between plants and animals in a marine ecosystem.
- Appreciate our dependence upon sea life.
- Identify habits and habitat of marine life.
- Explain the current dangers to marine life and the steps being taken in the area of environmental conservation

Skills

- Classify organisms using key words
- Draw food webs
- Observe organisms using a microscope
- Plan and conduct investigations
- Research
- Suggest ways of saving endangered species

Values

- Show environmental responsibility
- Care for creation

Activities

- Classify different type of sea creatures e.g. mammals, crustaceans, fish, whales, coral, mollusks.
- Study animal food chains and represent them in the form of a flow chart.
- Visit a sea shore of possible and observe shore life.
- Compare life on rocky shores, sandy shores, coral reefs.
- Compare differences in sea life between tropical waters and Arctic/Antarctic waters.
- Study and chart whale migration.
- List types of sea creatures used for our food.
- Discuss problems of over fishing and impact of pollution on sea life.
- Discuss impact of rising sea temperatures on marine life including coral reefs
- Discuss near extinction of rare species. What can be done?
- Make a poster to encourage care and protection of marine life.

Assessment

- 1. Present research on one endangered species of marine life.
- 2. Draw a food chain beginning with marine plants.
- 3. What have I learned from the study of marine life...
 - about God?
 - about doing what God wants me to do?
 - about the Bible?

Learning Connections

English: Write on how to save and protect marine species

Values education Year 3 God is Provider

Faith

We can have faith that God will provide all our needs.

Faith is...

- putting our trust in someone
- believing that a person will do as they say
- believing that someone or something will act as they are meant to act
- being confident that someone in trustworthy

Who can we trust?

We can only trust those who have proven themselves trustworthy. God, our Heavenly Father can be trusted more than anyone.

Activities

- 1. We can say that we trust a chair because it always supports us. We know that it won't collapse under us. Name three other things that you trust and say why you trust them.
- 2. Name three people who you can trust.
- 3. Name someone you would not trust.
- 4. Why can we trust God?
- 5. Name three Bible characters that had great faith. What did they trust God for?
- 6. What miracles can God do for His people today when we trust in Him?

What does the Bible say about faith?

Philippians 4:19 God will supply all your needs according to His riches in Christ Jesus. Hebrews 11:6 Without faith it is impossible to please God.

Matthew 17:20 Faith as a grain of mustard seed.

Matthew 21:21-22 If you have faith, you can say to this mountain, 'move' and it will move.

Practical Science: Finding out about salt water

Make an Egg Float in Salt Water

http://www.sciencekids.co.nz/experiments/floatingeggs.html

An egg sinks to the bottom if you drop it into a glass of ordinary drinking water but what happens if you add salt? The results are very interesting and can teach you some fun facts about density.

What you'll need:

- One egg
- Water
- Salt
- A tall drinking glass

Instructions:

- 1. Pour water into the glass until it is about half full.
- 2. Stir in lots of salt (about 6 tablespoons).
- 3. Carefully pour in plain water until the glass is nearly full (be careful to not disturb or mix the salty water with the plain water).
- 4. Gently lower the egg into the water and watch what happens.

What's happening?

Salt water is denser than ordinary tap water, the denser the liquid the easier it is for an object to float in it. When you lower the egg into the liquid it drops through the normal tap water until it reaches the salty water, at this point the water is dense enough for the egg to float. If you were careful when you added the tap water to the salt water, they will not have mixed, enabling the egg to amazingly float in the middle of the glass.

Practical Science: Fresh or salty?

Discussion:

Have you ever tasted sea water? What is it like? What makes it taste the way it does? What do we know about salt? After this experiment write down what you have found out.

What you need:

- Two 1-litre bowls of water.
- Salk
- A spoon
- Two squares of cotton cloth
- Soap
- A water-proof pen



Art Year 3 God is Provider Topic: The Sea

Biblical connection: God has provided for us through the sea.

Bible art as a wall display: The great catch: Luke 5:1-11: Make a collage of the boat, nets, disciples and fish. Use netting from sacks to represent nets, or if you can't find any, glue string to the page in a crisscross design to look like a net. Draw a boat and cut it out. Children can add paper fish. **Phil 4:19** My God shall supply all your needs.

1. Drawing, painting and collage

Ask students to:

- Create a sea with thin paint, Draw colourful fish and sea creatures. Cut them out and stick them on the painted sea background.
- Make a line drawing showing a stormy sea

2. Construction

- Make mobiles of sea creatures, e.g. a matching pair of fish shapes can be placed back-to-back, glued or stapled half way around, stuffed with shredded paper, then gluing/stapling is completed to make a 3D fish which can be hung from the ceiling.
- Make a seashore scene in a sand tray or in a cardboard box. Crabs can have concertina folded legs. Add sea shells and smooth stones. Make sea weed from paper.



Make an underwater coral reef scene from egg cartons.



The sea 1 List 5 things that could never be placed in water.	The sea 2 What if: All fish disappeared
The sea 3 List the disadvantages of, and make improvements to: A fishing rod and reel	The sea 4 Draw a row boat. Now make it: Bigger Add something to it Replace something
The sea 5 How many ways can you: catch a fish?	The sea 6 Find 10 different uses for: A fishing net

The sea 7	The sea 8
"People should not be allowed to go swimming at the beach." Why might someone say this?	Think of things that are the same: A wave A plastic drink bottle
The sea 9 "coral" is the answer. Make up 5 questions.	The sea 10 Brainstorm solutions for: How to encourage people not to litter on beaches.
The sea 11 Design a machine for: Digging worms out of the sand	The sea 12 Design a crab catcher using: String A plastic container Seaweed A rock

God is our Saviour Teacher's Topic Guide Year 3

Topic: Australia & New Zealand

Duration: 3 weeks

- God's love embraces all cultures. As Christians, we are commanded to love our neighbour. This extends beyond the person living next door. As in the story of the Good Samaritan, kindness to our neighbour may mean showing kindness to someone from another country.
- The true meaning of 'loving our neighbour' is to show personal interest and appreciation, and to extend God's love to them.

Activities

- Identify the 7 continents of the world: North and South America, Africa, Australia, Europe, Asia, Antarctica
- Draw maps of Australia and New Zealand.
- Mark major cities, geographical features including seas and oceans, and tourist attractions on a map
- Learn about the first Australians and the first New Zealanders.
- Create some Australian Aboriginal / Maori art
- Draw and display pictures of animals from Australia and New Zealand

Notes: (www.operationworld.org) Australia

Geography

This island continent is the world's driest, but has higher rainfall in the east, southeast and southwest coastal regions, where most live in highly concentrated urban areas.

Capital: Canberra

People living in cities: 89.1%

Challenges for Prayer

While over two-thirds of Australians identify themselves in some way as Christian, only 10% regularly attend church, and increasing numbers have negative attitudes toward the Church, believing that Biblical values are intolerant. (People would rather do as they please than take notice of the Bible.) Most people believe that you can pick-and-choose your religion and all are the same. Church attendance is rapidly declining.

New Zealand

Geography

Two mountainous main islands 1,600 km southeast of Australia.

Capital: Wellington

People living in cities: 86.8%

New Zealanders are also called 'Kiwis'.

Official language: English. Māori is also spoken.

Challenges for Prayer

As in Australia, the number of people calling themselves "non-religious" is rapidly increasing. Church attendance declining. About 14% attend church weekly; 40% of Kiwis attended church in the past but no longer do so.

Values education Year 3

God is our Saviour

God's love for people of every nation

God created people differently. He loves all people, regardless of race, religion or ethnicity.

Our response to God is our Saviour

John 3:16: For God loved the <u>whole world</u> so much that He gave his only Son, so that whoever believes in Him should not die but have everlasting life.

- kindness, patience and gentleness towards others
- compassion towards those who are hurting or in need
- friendliness, forgiveness and faithfulness
- love and acceptance of people from all nationalities and cultural backgrounds
 - understand that Jesus died for the whole world, every person of every nation.
 - recognize that God loves all people equally.
 - show kindness and consideration to all.
 - accept and love others, but this does not mean accepting beliefs that are against the truth of the Bible.

Outcomes:

- Identify and locate the seven continents of the world on a world map.
- Learn the compass points: north, south, east west, and be able to refer to locations using these terms.
- Locate Australia and New Zealand on the world map
- Locate the geographical position of your country in relation to Australia and New Zealand
- Research climatic conditions of Australia and New Zealand, noting the seasonal changes in weather
- Research major tourist attractions of Australia and New Zealand, e.g. Great Barrier Reef; Uluru, Sydney, Canberra (Australia); volcanoes, hot springs, ski fields (New Zealand)
- Research the first inhabitants of Australia and New Zealand (Australian Aboriginals and New Zealand Maoris)
- Compare cultural backgrounds of original inhabitants to Pacific Islanders.
- Research the early settlement of white people in Australia and New Zealand. Which countries did they come from? Why did they come?
- Identify animals and plants of Australia and New Zealand
- Name some of the foods grown in Australia and New Zealand.
- Realize that God loves everyone equally and wants everyone to come to know Him through His Son

Bible stories and passages

- Mark 10:13-16 Jesus loves all the children of the world
- Luke 10:27; Matthew 22:39 Love the Lord with all your heart...and your neighbour as yourself.
- Romans 3:19-26 People could not be made right with God by following the law, so God made another way, so that all nations would have opportunity to come to Him.
- Acts 10:34-36 The gospel for all nations
- Acts 16:6-10 Taking the gospel to the nations

Activities and discussion

- 1. Compare way of life in your country with that of Australia and New Zealand. Look for similarities and differences.
- 2. What can we learn from Australia and New Zealand? Why have many people in Australia and New Zealand stopped going to church? How does this compare to our country?

What does the Bible say about accepting people of different cultures?

- Luke 10:25-38 The Good Samaritan
- John 3:16 God so loved the WHOLE world that He gave His son
- Revelation 7:9 After this I looked, and there before me was a great multitude that no one could count, from **every nation**, tribe, people and language, standing before the throne and before the Lamb. They were wearing white robes and were holding palm branches in their hands.
- Matthew 22:37-39 Love the Lord your God. Love your neighbour as yourself. (Neighbour refers to people of other nationalities)
- John 4:1-26 Jesus and the Samaritan woman.

Art Year 3 God is our Saviour Topic: Australia and New Zealand

Biblical connection: God loves the people of every nation of the world. He sent Jesus to give every person an opportunity to accept and follow Him. We thank God for sending missionaries to our country to tell us about Jesus.

Bible art as a wall display: Jesus said, "Go to every part of the world and tell people about Me." Mark 16:15

Make a display of a map of the world and highlight Australia, New Zealand and Fiji.

1. Australian Aboriginal dot paintings /drawings

Students can try some tradition Australian Aboriginal art. The traditional style shows dots and patterns. Typically, the outline of an animal is drawn and the inside divided up into shapes, then the shapes filed with pattern. Often the internal organs are shown. Patterns are added around the animal shape to complete the picture. Colours were those found around them: the colours of clay, plants and animal blood.



2. New Zealand Maori art

Students can try doing some traditional Maori art. Maori art is similar to Fijian art because the Maori people are originally from the Pacific Islands. The patterns are rounded and swirling, and not dotty like Australian Aboriginal art. Because there were no land animals apart from birds in New Zealand, we only see traditional paintings showing plants and birds. A favourite plant is the silver fern.



Combined art / writing activity:

Ask the students to write a story about the importance of the fish hook symbol to the Māori people. Traditional Māori people were good at fishing and food from the sea was very important to them.



1. Landmarks of New Zealand

Make a poster showing some of the major landmarks or tourist attractions, e.g.



	Thinking Skills		
City or count Lots of cars and buses People everywhere! Everything's so busy There's no time to stop But when we're in the o We seem to slow right o The air is smelling clear More trees than in the t List 3 words that remind city and 3 for the count	ry1 and stare. country down. n and fresh town. d you of the ry.	City or country 2 Make a list of the things peop may not like about the city.	
City or count Make a list of the thing may not like about the	ry 3 gs people e country.	Ci Make may l	ity or country 4 a list of things people ike about the city.
City or count Make a list of things p like about the country	ry 5 beople may	You ha money country place l helicop	City or country 6 we been given enough to buy a place in the y. Draw a plan of your ooking down from a oter.

God is Pure and Holy Teacher's Topic Guide Year 3

Topic: Rules, customs and laws

Duration: 4 weeks

Spiritual Awareness

Wisdom in following rules

There is wisdom in following rules within society. When people work together by obeying rules, communities become safer and more ordered. God has given us rules for Christian living. As we obey these rules, we will be happier people and be able to share His love with others.

Protection through obedience

The Bible is our guidebook for life. It contains the rules and laws to be followed for life of safety and security under God's protection. There is a direct relationship between safety and obedience. When we obey God and follow His will for our life, then He promises to shelter us. However, when we remove ourselves from His care, and disobey, then we remove ourselves from His protection. This topic is linked with wisdom. There is wisdom and protection in obeying God's laws.

Our response to 'God is Pure and Holy'

Because God is Pure and Holy I will...

- Ask God what is the right thing to do and do it.
- Listen to people who are wiser than me.
- Listen to my parents and teachers.
- Obey God's word.
- Do what Jesus would do.
- Follow class rules.
- Follow directions.
- Follow community rules.
- Be a responsible citizen

Biblical references

Bible stories and passages

Exodus 20:1-17 The Ten Commandments are God's rules for our protection.

The book of Jonah - The consequences of disobedience. Jonah went in the opposite direction to get away from the Lord.

Matthew 7:24-27 The wise man built his house on the rock.

Exodus 17:8-13 Joshua's army overcame the Amalakites as long as Moses held up his hands. Aaron and Hur held up the hands of Moses until sunset. This is a symbol for us. Pointing upward to God wins the battle.

Bible verses

Colossians 3:20 Children obey your parents. 1 Peter 1:14 Be obedient to God. Proverbs 3:5-7 Trust in the Lord with all your heart...obey the Lord and refuse to do wrong (GNB)

Deut 11:22 Obey faithfully all the laws I have given you.

Psalm 119:9 How can a young person keep their life pure? By obeying Your commands.

Psalm 119:11 I keep Your law in my heart so that I will not sin against you.

Psalm 119:105 Your word is a lamp to my feet and a light to my path.

Outcomes

Students will

Knowledge

- understand that laws are necessary for people to work and live together and that laws operate for our safety
- appreciate that laws and customs exist for our enjoyment of life
- experience games and appreciate that we have fun because of the existence of rules
- study the importance of rules in different social situations: family, schools, community

Skills

- Creative thinking: What would life be like without rules?
- List reasons for the necessity of certain rules.
- Construct a list of class rules.

Values

- understand the importance of God's rules
- understand the relationship between obedience and safety
- show sensitivity and respect towards others

Key Questions

What are our school rules? What are some rules in the home? What are some other rules? Why do we have traffic rules? How would it be if some obeyed rules and some didn't? Which rules are absolute, meaning that everyone has to obey them? Which rules are for children only? Which rules did Jesus break? Why? How do my parents keep me safe? What are some of the rules in my family? What would happen if I didn't obey these rules? How do these rules keep me safe? Where do we find God's rules for us? What happens when we obey God's rules?

Activities

- Discuss games and compare games played with and without rules.
- Make up a game with rules; play games with rules
- List rules that operate within the family, school or neighbourhood.

- Dramatise family situations that involve rules, e.g. times for watching TV. and going to bed.
- Discuss consequences of having no rules.
- Make road safety posters; Make a chart showing road signs.
- Discuss laws applicable to: water restrictions, fire bans, fishing, camping, trespassing, littering.
- List the Ten Commandments and explain how they keep us safe.
- Discuss safety in the home. Draw up a list of rules for safety in the home.
- Discuss ways in which parents keep their children safe, and the importance of obeying parents.
- Discuss rules for games in sports.

Assessment

- 1. Make a list or make drawings to show the rules in your home.
- 2. Make a list or make drawings to show the rules in your school.
- 3. Explain these rules to the class.

4. While learning about rules, what did I also learn...

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

Learning Connections

English: Write a set of rules and directions for playing a game, (a procedure) **Mathematics:** Board games that use mathematical skills.

Values education Year 3 God is Pure and Holy

Courtesy and good manners

Courtesy is...

Having good manners Acting in a way that makes others feel valued and respected Being polite

Here is an acrostic for POLITE. Make a poster for it.

P = Please say "Please"
O = Obey parents and teachers cheerfully
L = Learn to wait and don't push in.
I = Interrupting is out!
T = Thank you
E = Excuse me

Good manners in the home:

Saying please and thankyou Table manners – eating with mouth closed. Respecting others when they need some quiet Doing what parents ask Taking turns

Good manners outside the home;

Greeting people, using their name Please and thank you Clean up after yourself Answering messages Being on time

Good or bad manners? Write G for good or B for bad:

- 1. Speaking rudely to someone
- 2. Giving an elderly person a seat
- 3. Saying nothing when someone says "hello" to you
- 4. Forgetting to say "Excuse me"
- 5. Saying "Thank you"
- 6. Coughing without covering your mouth
- 7. Saying "please"
- 8. Interrupting a speaker before they can finish their sentence.
- 9. Keeping your mouth closed when you chew your food.
- 10. Pushing in.

Art Year 3

God is Pure and Holy Topic: Rules, laws and customs

Biblical connection: God wants us to obey His rules.

Bible art: Moses on Mt. Sanai receiving the Ten Commandments

Students can think about what the mountain would look like…rocky, surrounded by desert, no trees. They can draw Moses in traditional Biblical clothing with the tablets. Include smoke and lightning.

Bible verse: 1 Peter 1:14 Be obedient to God.

1. Drawing

Students can make safety posters

2. Construction

Students create a road system for toy cars on a large piece of cardboard and include road signs, pedestrian crossings and traffic lights. Problems solve how to join standing items to the flat cardboard sheet.

3. Painting

In the wall display above students can experiment with paint as they create the rocky texture of the mountain.

Thinking Skills Pure	e & Holy Yr 3
Rules 1 Draw a bicycle. Now change it by doing this: B – make one part bigger A – add something extra R – replace one part with something extra	Rules 2 Use your imagination. Work out different things that this picture could be, to do with road safety.
Rules 3 Name 10 road rules that should NEVER be broken.	Rules 4 Brainstorm new ways of making roads much safer for bicycles.
Rules 5 Children younger than 10 should not be allowed to ride a bike on a public road. Give 3 good points and 3 bad points for this idea.	Rules 6 The answer is "accidents". Give 5 interesting examples.

God is Creator Teacher's Topic Guide Year 3

Topic: Senses of Touch and Hearing Duration: 5 weeks

Finding out through the sense of touch

We use our senses to find out about the world around us. We know how something feels by using our sense of touch: rough, smooth, wet, dry. Our sense of touch helps us find out the truth about the world that God created.

How can we find out whether an idea is true? God helps us to do that when we ask Him to show us. God has given us the Holy Spirit to show us what is true and what is false. As we listen to God's voice and get to know God's word, we will know what is true. Jesus said, "I am the Way, the Truth and the Life."

Outcomes:

- explain how our sense of touch helps us to find out about things around us
- explain how we find out whether ideas in the world around us are true or false
- be able to identify what parts of the body are used for our sense of touch
- be able to predict some of the things they would be able to feel if they were put in a situation
- discover objects based only on the sense of touch

Biblical stories and passages

Psalm 115:4-7 Those who worship idols: "Their gods are made of silver and gold formed by human hands. They have mouths but cannot speak, and eyes but cannot see. They have ears but cannot hear, and noses but cannot smell. They have hands but cannot feel, and feet but cannot walk." Luke 8: 40-56 The woman who touched the hem of Jesus garment.

Key question:

How do we find out about things?

Activities for touch

- Explain that the things that we touch have many different textures: rough, smooth, soft, hard. Explain that we not only use our hands for our sense of touch, but if we have our shoes off, we can also use our feet.
- Show the students a picture of a beach scene, or ask them to imagine it. Ask the students to make a list of the things that they think they would be able to touch and feel if they were in this picture. Encourage the students to share their ideas.
- The 'feely game'. Put some familiar items inside socks or brown bags, and have the children feel them and guess what they might be. Explain that in this activity they will use their sense of touch to try to find out what is in the socks/bags. Remind students that they are NOT to look in the bags.
- Discuss what items the students thought were in the bags and show them what it really was.
- Explain: "We can feel different sensations on our skin. We can sense touch, pressure and temperature. We have skin all over our body. Our hands are very sensitive to touch." Make a list of the way things feel using our hands, e.g. hot, cold, rough, smooth.

- Ask: If you were not able to see with your eyes, would your sense of touch be helpful, and why?
- Do you think it's possible to drop a marble (or a coin) into a paper cup without looking? Try it. Put an item in a paper cup without looking. How were you able to do this?
- Compare your sense of touch with your other senses. Which do you think is the most important and helpful to you? Why? Equally helpful?
- Do you think we could do as well without one or more of our senses? Talk about it and try different tests. Some people are not able to see, or hear, or smell, and scientists have found that those people are able to develop another sense very strongly, to help them understand our world.
- Make a Braille alphabet with dots of dried glue. Explain what it is used for, and have the children feel the letters with eyes open and eyes closed.
- Have an outdoor treasure hunt. Ask the children to find something rough, something smooth, something prickly and something wet. Make up your own criteria according to your environment.
- Have the children make their own tactile board. Make available a piece of heavy paper or card, and a variety of items with strong sensory qualities. E.g. sponge, foil, sandpaper, bark chips, coin etc. Have the children glue some items to the board, and then when dry, close eyes and guess what the texture is by feeling it with hands
- Compare sensations by placing an item on an arm, or cheek, or foot. Do you think the sensation is stronger by touching with your hand, or with your cheek etc.?
- Do the same thing but have the child close eyes and answer.
- Child closes eyes. You touch a child on arm with finger. Have the child try to touch the exact spot where you touched.

Key question about touch

What would it be like if we did not have the sense of touch?

Activities for Sound

- Identify sounds in the immediate environment.
- Identify sounds in the home.
- Go for a walk and identify sounds.
- Classify sounds loud, soft, harsh, musical, banging, tapping, whirring, clattering, buzzing, vibrating
- Make sounds using body parts.
- Make musical instruments from rubber bands (plucked), balloons (escaping air), rulers & containers (drum), jars filled with different levels of water (strike with pen), combs and tissue paper (blow), cardboard cylinders (blow).
- Classify instruments of the orchestra according to the way they make sounds, i.e. pluck, blow, bow etc.
- Listen to sounds of varying frequencies, (high/low), and measure the distance from which they may be heard.
- Experiment to see whether sound can travel through certain materials.
- Make 'telephones' from tin cans and string.
- explain the nature and properties of sound waves

- explain how sound waves are made
- Draw a diagram of the ear and the passage of sound waves.
- Read the biography of Helen Keller (Supplied in this folder)
- Find out how the hearing impaired can be assisted by scientific innovations, e.g. hearing aids

Key Questions about sound

What is a good listener? How do we hear? What kinds of sounds do we hear? How does hearing help to keep us safe? What special help is available for people who cannot hear?

Braille Alphabet



Year 3 Values education God is Creator

Thankfulness for who I am

For my life, my family and that I have life. Thankfulness to God for creating me as I am. God loves me just the way I am. He created me in a very special way. I am special to Him.

Thankfulness for who I am...

- knowing that I am special to God
- feeling sure that I am a very valuable person
- feeling good about my strengths, but not boasting about them
- knowing that I am not good at some things, and accepting it
- feeling happy about the way I am
- knowing that God loves me just the way I am
- being thankful to God for the way He created me

Activities

- 1. Design your own personal shield that shows the things you are good at. Draw symbols for things like music, cooking, drawing, or whatever you are good at.
- 2. Did you know that no one has the same fingerprint as you? You are special. Here's an art activity. Make some stamped fingerprint designs. Make the finger prints (or thumb prints or hand prints into animals. Use a pen to add legs, beak, tail or whatever you need to make your animal.

Practical Science 1: Sense of Touch Describe how things feel

Make a collection of things that feel different when we touch them: Examples:

Sticks Stones Cloth Ice Cotton wool Plastic Metal Sandpaper

Find words to describe each of these. Make a classification table. Make this into a bar graph.

Soft	rough	smooth	warm	cold	slippery	slimy
cotton	stick	stone	face	lce	plastic	Jelly
						paint
face	sandpaper	mango		metal	silk	finger
hair	pineapple					

Mystery surfaces

Make your own touch surfaces by coating pieces of cardboard with glue.

Then spread on things to give a texture, such as popcorn, sugar, flour, seeds, sand. Put each card in a paper bag.

Take turns to pull a card out of a bag, eyes closed.

Mystery fabrics

Make cards as for "Mystery surfaces".

Glue on to the cards different types of fabrics such as silk, tee-shirt material, scratch bag material, wool, fur

Practical Science 2: Sense of Touch

Warm or cold?

You will need:

Three jars of water: one icy cold; one at room temperature and one warm

What to do:

Dip one finger into the cold jar and one finger on the other hand into the warm jar for a minute.

Slowly, your brain will grow used to the two different temperatures.

Now move both fingers into the jar at room temperature and notice how it feels. Although you know both fingers are in cool water, your brain doesn't agree.

Why is this so?

There are millions of nerve endings in your skin which are sensitive to heat, cold, pain, light and heavy pressure. Certain parts of your body, like your hands, are crowded with nerve endings and much more sensitive than other parts. The nerve endings send messages to your brain. If one message is received by the brain for long enough, your brain gets used to it and doesn't immediately recognize any changes.

Practical Science 3: Sound

Make a drum

What you will need: A balloon Scissors A strong elastic band A can with both ends removed



What to do:

Blow up the balloon and leave it for at least 2 hours so that it can stretch. Carefully cut the end off the balloon. Try not to burst it. Let the air out slowly. Cut a large circle out of the balloon with scissors, Stretch the circle over the tin can and secure it with an elastic band.

The balloon is like a skin on a drum. It vibrates as you hit it with your fingers. This makes the sound.

- 1. What other materials are used to make different types of drums?
- 2. Why does the skin need to be stretched?
- 3. The vibrations are travelling through the ______ to our ears.

Make a shaker

What you need: Paper cups Plastic bottles with lids Rice, lentils, dried beans or peas, sand or pebbles

What to do:

To make a paper-cup shaker, put a handful of rice or lentils into one cup. Turn another cup upside down and tape the two cups together rim to rim.

To make plastic bottle shakers, pour a handful of dried peas or beans into the bottle and put the lid on tight.

Try making shakers with different sized bottles. You will find that the larger bottles which hold more make deeper sounds.

Experiment with the different fillings. You will find that paper cup shakers with lentils or rice make a softer sound than the plastic bottles with dried beans or peas.

- 1. Which shaker made the louder sound?
- 2. Which shaker made the lower sound?

Practical Science 4: Sound

Make a bottle flute

http://www.kidspot.com.au/kids-activities-and-games/Science-experiments+10/Bottle-Flute+11060.htm?

Making music does not have to be a terribly noisy experience. Making music with these glass bottles can actually be quite pleasant. Give it a go and see if you can make a tune to impress.

What you need:

- 2 (or more) glass bottles
- water

What to do:

Fill the glass bottles with different amounts of water, without filling any to the top.

Blow gently across the top of the bottle so that you can hear a note.

Now blow gently across all of the bottles. They should all make different notes. Why? Because blowing air inside the bottle makes the water vibrate, creating the note.

Use a Balloon to Amplify Sound

http://www.sciencekids.co.nz/experiments/balloonspeakers.html

Small sounds can still make a big noise when you use a good sound conductor. Experiment with a balloon, compressed air and your own ears to find out how it works and the science behind it.

What you'll need:

A balloon

Instructions:

- 1. Blow up the balloon.
- 2. Hold the balloon close to your ear while you tap lightly on the other side.

What's happening?

Despite you only tapping lightly on the balloon your ears can hear the noise loudly. When you blew up the balloon you forced the air molecules inside the balloon closer to each other. Because the air molecules inside the balloon are closer together, they become a better conductor of sound waves than the ordinary air around you.

Practical Science 5: Sound

Make Music with Water: Water chimes

http://www.sciencekids.co.nz/experiments/makemusic.html

Have you ever tried making music with glasses or bottles filled with water? Experiment with your own special sounds by turning glasses of water into instruments, make some cool music and find out how it works.

What you'll need:

- 5 or more drinking glasses or glass bottles
- Water
- Wooden stick such as a pencil

Instructions:

- 1. Line the glasses up next to each other and fill them with different amounts of water. The first should have just a little water while the last should almost full, the ones in between should have slightly more than the last.
- 2. Hit the glass with the least amount of water and observe the sound, then hit the glass with the most water, which makes the higher sound?
- 3. Hit the other glasses and see what noise they make, see if you can get a tune going by hitting the glasses in a certain order.

What's happening?

Each of the glasses will have a different tone when hit with the pencil, the glass with the most water will have the lowest tone while the glass with the least water will have the highest. Small vibrations are made when you hit the glass, this creates sound waves which travel through the water. More water means slower vibrations and a deeper tone.


Practical Science 6: Sound

Make a guitar and a xylophone

Guitar:

What you need: A small carboard box Rubber bands

What to do:

- Cut the front out of the box.
- Stretch the rubber bands across the open part of the box.
- Watch the rubber bands vibrating to make the sound.

The rubber bands vibrate the air and travel to our ears.

Xylophone:

What you will need:

5 glasses A jug of water

What to do:

- Fill 5 glasses with different amount of water.
- The first has only a little, the next has a bit more, the next one has a bit more and the last one is full.
- Use a metal spoon to hit the glasses.
- 1. Which glass makes the highest sounds?
- 2. Which makes the lowest?
- 3. What is vibrating this time?

Make some pan pipes

What you need:

8 straws Tape

What to do:

Cut the straws into different lengths. Place them in order of shortest to longest and tape the together at one end.

To play your pan pipes, blow gently across the top of each pipe. You will find that the longer pipes make a lower sound than the shorter pipes.

- 1. Which musical instruments are played by blowing?
- 2. What is vibrating?



Practical Science 7: Sound

Make some telephones

What you need:

2 clean, empty cans A nail A hammer A piece of string about 6 metres long

What to do:

- Ask an adult to help you make a hole in the bottom of each can using a hammer and nail.
- Push one end of the string through the hole through the open end of the can to the outside.
- Tie a very big knot (or several knots) to stop the string slipping through.
- Take the other end of the string and thread if through the other can. Tie a knot in the end.
- Give one can to a friend. Walk apart from each other until the string is pulled tight. The string must be very straight and must not touch anything.
- Take turns in talking to each other. One person listens by holding the can to the ear and the other person speaks softly into his/her can.
- 1. What is vibrating?
- 2. The sound is of your voice is traveling along the _____

Art Year 3

God is Creator Topic: The senses: touch and hearing

Biblical connection: God created us with senses to enjoy His beautiful creation, and to communicate with others.

Bible art as a wall display 1: The woman who touched the hem of Jesus' clothing

Bible verse: Luke 8:45: "Who touched me?" Jesus asked.

Bible art wall display 2: Jesus speaking to a crowd of people saying, "He who has ears, let him hear." (Mark 4:9) Show Jesus speaking this verse in a speech bubble.

1. Painting and collage (Touch)

Teach the meaning of the word texture and look for textures in the environment. a) Students create art work with different 'feeling' textures: smooth, rough, bumpy b) Student create art work that LOOKS as if it has texture, but is actually smooth to touch, e.g. the surface of the moon; a rocky beach

2. Modelling (touch)

• Making a textured surface using sticks, forks and toothbrushes on the clay.

3. Drawing animals and the sounds they make (Hearing)

Students can draw different birds and animals and use speech bubbles to describe the sounds they make, e.g. birds tweet, frogs croak; bees buzz

4. Drawing of painting to music

5. Threads and textiles

Explore the textures of threads and textiles. Create a woven mat using threads or fibres of different textures. Grasses can be included.

	Thinking Skills Creator Yr 3		
Five senses 1 The answer is: our senses. Give 5 questions.		Five senses 2 Name 5 things that you could NEVER see.	
Five senses Make something tha blind people.	3 t will help	Five set Draw 5 things a would see if the around the mod	nses4 stronauts y travelled on.
Five senses Find 10 different u a chair	5 ses for	Five se Draw a set of he Now redesign it B – make one p A – add someth R – replace one something else	enses6 ead phones. using part bigger hing extra e part with

God is Wise Teacher's Topic Guide Year 3

Topic: Hygiene and safety Duration: 4 weeks

Spiritual Awareness

Our bodies are temples of the Holy Spirit. Each individual is extremely valuable. It is therefore our responsibility to look after ourselves, to think ahead and act wisely for our own protection. Wisdom involves listening to others and obeying rules.

Values: Our response to 'God is Wise'

- Integrity: Ask God and find out from the Bible: What is the right thing to do? Put this into practice
- Wisdom: Learn from people who are wise
- Trust in God to be a guide for the journey of life
- Responsibility

Outcomes: Students will

- explain the basics of hygiene
- explain the importance of obeying safety rules
- explain the safety rules for preparing with hot food
- compare the health benefits of natural foods with junk foods / processed foods
- assess their own lifestyle for health and fitness; identify strengths and weaknesses

Bible stories and passages

Matthew 10:29-30; Luke 12:6-7 We are of more value than many sparrows.

Exodus 15:26; Deut 7:15 In obeying health laws, God promised to protect the Israelites from the diseases of the Egyptians.

Exodus ch 20 the Ten Commandments: God's people had to obey rules.

Exodus ch 16 God provided manna in the wilderness. Verse 17 tells us what happened when the people didn't obey the rules about collecting the manna.

Bible verses:

1 Corinthians 6:19-20 Don't you know that your body is a temple of the Holy Spirit? Proverbs 4:20 & 22 Listen to my words. Remember them and keep them in your heart. They will give life and health to anyone who understands them.

Proverbs 16:16 It is better to have wisdom than gold or silver.

Proverbs 3:7-8 Never let yourself think you are wiser than what you are; simply obey the Lord and refuse to do wrong. If you do, it will be like good medicine, healing your wounds and easing your pains (GNB).

Luke 2:52 Jesus grew both in body and in wisdom (GNB).

Proverbs 19:20 Listen to advice and accept instruction, that you may gain wisdom in the future.

Key Questions

What is wisdom? Why should we take care of our bodies? Why does God want us to follow rules?

What rules can we make for keeping safe?

What rules can we make for keeping germs away from our bodies, (including teeth) What rules can we make for keeping our bodies strong and healthy?

Activities

a) Safety

- Discuss times of feeling safe or unsafe.
- Suggest wise behaviour regarding relating to strangers.
- Devise a set of rules for safety for different situations in the home, in the playground, on an outdoor adventure, at the beach, crossing roads, riding bikes.
- Make safety posters.

Safety in the kitchen

Conduct some cooking activities.

Preliminary discussion and activities:

What are some of the things we must remember when preparing hot food? What other dangers might there be in the kitchen?

Why do we need to wash our hands before we start preparing food? Why do we need to put some foods in the refrigerator? Which foods? What happens to foods when they are left out of the refrigerator?

Safety in the kitchen demonstration and game

Discuss potential dangers in working in the kitchen. Make a list and ask students to contribute, e.g.

DON'T

- don't leave saucepan handles hanging over the edge of the stove.
- don't pick up hot food with your hand.
- don't leave toys on the kitchen floor.
- don't run and play around Mum when she's preparing hot food.
- don't leave perishable food out of the fridge

DO

- use an oven mitt for handling hot things.
- take care not to bump anyone who is holding hot food or drinks.
- take care when using knives.

The teacher can act out an unsafe action while working in the kitchen, e.g. taking something out of the oven without oven mitts; preparing food without washing hands. Students explain why it is unsafe. Then students can explain the safe way of performing the job.

Props needed for the demonstration:

- a table or desk to act as the kitchen bench
- oven mitts/ oven cloth
- heat proof mats
- saucepan, baking dish, bowl, knife

• soap and bowl for washing hands

Learning Connections:

Literacy – speaking and listening; reading and writing of recipes Art – drawing kitchen utensils and cutting them out to make a collage Maths – identify shapes of kitchen utensils; weighing and measuring ingredients

b) Hygiene

- Discuss hygiene at school and home.
- Make a list of rules for good hygiene.
- Discuss the consequences of not washing hands, not cleaning teeth etc.
- Discuss germs and how they affect our bodies
- Discuss the importance of cleaning teeth

Germs

Germs are everywhere. Germs are so small that you can't see them. Germs can make you sick. You can get rid of germs by washing your hands and your body.

How to wash your hands

Use warm running water. (If you don't have warm water, use cold running water.) Use liquid soap where possible. Rub hands together for at least 15 seconds. Scrub underneath the fingernails. Rinse and then dry.

How to dry your hands

If you don't have paper towel or a clean towel, shake your hands dry before touching anything.

When to wash your hands

Before eating or touching food After using the toilet After playing with animals

Teaching idea

Use a spray bottle filled with clean water.

Spray water on children's hands.

Explain that the water on their hands is like the germs that come out of their mouths every time they cough or sneeze.

Now ask the children to touch an object such as a table or chair. Ask them what happened to the object they touched. (It became damp.)

Explain that this is what happens when we sneeze or cough into our hands and then touch an object.

What will happen if one of their friends touches the damp object?

What can we do to prevent our friends from catching our germs?

Use a tissue to cover your mouth when coughing or use a tissue to blow your nose.

If you don't have a tissue and you use your hand to cover your mouth while coughing, wash your hands after.

Assessment

Divide a page into four. In each section draw examples of things to remember about keeping germs away from our bodies.

c) Wisdom in choosing healthy food

Natural food: Also called 'unprocessed food'. These are foods directly from nature, such as fruit, vegetables, nuts, meat, fish and eggs. Some dried or tinned foods can be classified as natural foods if they do not have food additives, e.g. dried beans, lentils, rice, butter, milk, tinned tomatoes. Natural foods are the best foods.

Fast food: Convenience food from outlets. Ready-to-eat foods such as hamburgers, hot dogs, fried chicken and chips. These have some nutritional value but contain ingredients that are not good for our health. These should be eaten rarely.

Food additives: Chemicals added to give artificial colour or flavour, or to preserve the food. The long-term effects are unknown but it is better to avoid them.

Processed food: These are foods that are changed from their natural state and sold in packets, cartons and cans. Some have nutritional value. Some have nutritional value. These foods are not as healthy as foods from nature.

Junk food: food with no nutritional value and food that may be bad for our health. These include sweets, sugary foods, savoury snacks such as potato crisps, and soft drinks or imitation fruit drinks. Should be consumed rarely.

Eight rules for keeping healthy NEW START stands for:

- Nutrients are the parts of food that makes us grow, and stay healthy. Only healthy foods do this.
- Exercise at least half an hour every day
- Water 6 glasses a day, (not fruit juice or fizzy drink)
- **S**unlight for vitamin D for strong bones.
- Toxin-free avoid artificial food additives and avoid toxic chemicals in the environment
- Air get fresh air every day
- **R**est don't stay up late
- Think happy thoughts and trust in God



God is Wise Values education Year 3

Wisdom

God is wiser than anyone in the whole universe. We can ask God for His wisdom.

Wisdom is...

- knowing the right thing to do, and doing it
- listening to people who are more experienced than we are
- listening to parents and teachers, and doing what they say
- doing what Jesus would do
- making right choices and decisions
- making right choices about the use of time and money

Activities

- 1. Imagine you are at a new school. What type of people would you look for when choosing new friends?
- 2. Pretend you are going to the supermarket. Imagine that you are going to buy the following things. Choose wisely! Remember to consider cost, nutrition and size. Next to each item write the type or brand and the size you would choose for your family. Explain why you consider these to be your wisest choice.

e.g. washing powder, milk, toilet paper, toothpaste

Set it out like this:

WASHING POWDER type/brand..... size..... price..... I chose this because.....

What does the Bible say about wisdom?

Proverbs 13:10 Wisdom is found in those who take advice.
James 1:5 Ask God for wisdom.
Proverbs 2:6-10 The Lord gives us wisdom.
1 Corinthians 3:18-19 The wisdom of this world is foolishness to God.
Matthew 7:24-27 The wise and foolish builders.

Practical Science: Kitchen chemistry Dissolving Sugar at Different Heats

http://www.sciencekids.co.nz/experiments/dissolvingsugar.html

Learn about solutions as you add more and more sugar cubes to different temperature water. This easy experiment shows that you can only dissolve a certain amount and that this changes as the water gets hotter.

What you'll need:

- •Sugar cubes
- •Cold water in a clear glass
- •Hot water in a clear glass (be careful with the hot water)
- •Spoon for stirring

Instructions:

- 1. Make sure the glasses have an equal amount of water.
- 2. Put a sugar cube into the cold water and stir with the spoon until the sugar disappears. Repeat this process (remembering to count the amount of sugar cubes you put into the water) until the sugar stops dissolving, you are at this point when sugar starts to gather on the bottom of the glass rather than dissolving.
- 3. Write down how many sugar cubes you could dissolve in the cold water.
- 4. Repeat the same process for the hot water, compare the number of sugar cubes dissolved in each liquid, which dissolved more?

What's happening?

The cold water isn't able to dissolve as much sugar as the hot water, but why? Another name for the liquids inside the cups is a 'solution', when this solution can no longer dissolve sugar, it becomes a 'saturated solution'. This means that sugar starts forming on the bottom of the cup.

The reason the hot water dissolves more is because it has faster moving molecules which are spread further apart than the molecules in the cold water. With bigger gaps between the molecules in the hot water, more sugar molecules can fit in between.

Practical Science: Kitchen chemistry The Floating Egg

Find out which liquids an egg will float in.

MATERIALS

- 4 glasses of water
- Salt
- Sugar
- Flour
- Fresh egg

STEPS

- 1. Fill each glass three-quarters full with water.
- 2. Stir a few tablespoons of salt into one glass of water, until it dissolves.
- 3. Stir the same amount of sugar into the second glass of water.
- 4. Stir the same amount of flour into the third glass of water. Leave the fourth glass of water plain.
- 5. Guess which glass of liquid the egg will float in. Now try them all!

DID YOU KNOW?

Density is how tightly the matter of a mixture is packed together. For example, an egg is denser than plain water, so the egg sinks. Salt water, however, is denser than an egg, and so the egg floats! Are you more or less dense than sea water? Note: If the egg is stale it will float in water because gas forms inside the egg when the egg is going bad. You can use this trick to check the freshness of an egg.

Practical Science: Kitchen chemistry Acid or alkaline?

Introduction: There are different types of liquids. Based on its PH (amount of hydrogen) we can classify them into 3 types. Liquids that have a pH of 7 are called Neutral liquids. (Example water and milk) Liquids that have a pH greater than 7 are called alkaline liquids. (examples: soap, bleach, dishwashing liquid) Liquids that have a pH less than 7 are called acidic liquids. (vinegar and lemon juice)

Aim: to test the reaction between and acid and an alkaline liquid.

Materials: Fresh Lemons, a knife, a small measuring cup & measuring spoon, baking soda, liquid dishwashing soap and a clear cup for the reaction

Procedure:

- 1. Roll the lemons on a table top like rolling dough. This releases the juice inside the lemon.
- 2. Cut the lemon in half (adults only, please) and carefully squeeze out the juice into a small measuring cup. Note how much juice was created from each lemon and put the juice aside.
- 3. Into the <u>empty</u> glass place 1 tablespoon of baking soda.
- 4. Add 1 teaspoon of liquid dish soap to the baking soda. Stir these up a bit.
- 5. Pour the lemon juice into the cup and stir. Now watch the lemon suds erupt!

Observation: record your observations:

How does it work? This is a classic example of an acid-alkaline reaction. This is often done with vinegar and baking soda. The baking soda (alkaline) and the lemon juice (an acid) combine to release Carbon Dioxide gas. The liquid soap turns the bubbles into foam that often erupts right out of the glass.

Practical Science: Kitchen chemistry

Volcano in the kitchen

Materials 6 cups flour 2 cups salt 4 tablespoons cooking oil warm water plastic soda bottle dishwashing detergent food coloring vinegar

baking dish or another pan

2 tablespoons baking soda

Make the Chemical Volcano

First, make the 'cone' of the baking soda volcano.

Mix 6 cups flour, 2 cups salt, 4 tablespoons cooking oil, and 2 cups of water. The resulting mixture should be smooth and firm (more water may be added if needed).

Stand the soda bottle in the baking pan and mold the dough around it into a volcano shape. Don't cover the hole or drop dough into it.

Fill the bottle most of the way full with warm water and a bit of red food color (can be done before sculpting if you don't take so long that the water gets cold).

Add 6 drops of detergent to the bottle contents. The detergent helps trap the bubbles produced by the reaction so you get better lava.

Add 2 tablespoons baking soda to the liquid.

Slowly pour vinegar into the bottle. Watch out - eruption time!

Experiment with the Volcano

Make a prediction about what happens if you change the amount of baking soda or vinegar. Record and analyze the effect, if any.

Can you think of ways to change the volcano to make the eruption go higher or last longer? This might involve changing the chemicals or the shape of the volcano. It helps to record numerical data, such as the volume of liquid, the height of the "lava", or duration of the eruption.

Does it affect your volcano if you use a different kind of chemical to color the volcano? You could use tempera paint powder. Try using tonic water instead of regular water to get a volcano that glows under black light.

What happens if you substitute other acids instead of vinegar or other bases instead of baking soda? Examples of acids include lemon juice or ketchup. Examples of bases include laundry detergent and household ammonia. Use caution if you substitute chemicals because some mixtures can produce hazardous gasses. Don't experiment with bleach or bathroom cleaners.

Useful Tips

The cool red lava is the result of a chemical reaction between the baking soda and vinegar.

In this reaction, carbon dioxide gas is produced, which is also present in real volcanoes.

As the carbon dioxide gas is produced, pressure builds up inside the plastic bottle, until the gas bubbles (thanks to the detergent) out of the 'volcano'.

Adding a bit of food coloring will result in red-orange lava! Orange seems to work the best. Add some red, yellow, and even purple, for a bright display.

Art Year 3

God is Wise Yr 3 Topic: Hygiene and safety

Biblical connection: Wise people follow wise advice. We should obey the rules for health and hygiene.

Bible art as a wall display: Mary and Martha with caption, "Mary listened."

Proverbs 4:20 & 22 Listen to my words. Remember them and keep them in your heart. They will give life and health to anyone who understands them.

Drawing

• Make a poster showing ways to stop spreading germs that cause sickness: wash hands after the toilet and before eating or food preparation; use tissues when you sneeze and cover your mouth when you cough.

For safety in the kitchen:

- Draw kitchen utensils and cut them out to make a collage.
- Make another poster: Be careful with sharp things and hot things in the kitchen.

Printing

• Build up a picture using kitchen equipment such as plastic forks and spoons, plastic cups and old unwanted kitchen utensils such as an egg lifter or potato masher – anything that could make interesting print patterns. Make a stamp pad from a kitchen sponge in a shallow container. Pour a little paint on the sponge and you are ready to print.

Thinking Skills	Wise Yr 3
Hygiene 1 Draw tap. Now redesign it by doing this: B – make one part bigger A – add something extra R – replace one part with something else	Hygiene 2 Name 5 things that NEVER need to be washed.
Hygiene 3 Think of 3 different things this picture could represent. It must have something to do with keeping clean.	Hygiene 4 Give 10 ways of making things clean in and around your home.
Hygiene 5 Give 3 possible reasons why: someone would not be allowed to use soap for bathing or showering.	Hygiene 6 Find 5 different uses for some "bubble bath".

God is A Servant Teacher's Topic Guide Year 3

Topic: The Medical Profession Duration: 4 weeks

Spiritual Awareness: Jesus, the healing servant

God has provided healing for the whole person. We can trust in His great power to heal. God can still heal miraculously today, but sometimes He chooses to use his servants, doctors and nurses, to help cure our ailments.

God has also placed tools for healing within the creation. The human body alone has an ability to heal itself. We see this in the healing of cuts, bruises and broken bones. God has also given us healing plants to aid recovery. Sometimes we can be healed just by eating the right food. Many cultures have a wealth of knowledge on the medicinal properties of plants.

Our response to 'God is a Servant'

Because God is a servant I will...

- follow the example of Jesus, the greatest servant
- be willing to help others
- consider the needs of others
- put others before myself
- not think of myself as being more important than everyone else
- appreciate the work of those who make great sacrifices to help people in need

Biblical references

Bible stories and passages

The healing miracles of Jesus: John 9:1-34 The man born blind John 5:1-18 The man at the pool Luke 8:43-48 The woman who touched the hem of His garment Luke 5:18-25 A man came through the roof Luke 6:6-10 Jesus heals a paralyzed hand Mark 10:46-52 Blind Bartimaeus receives sight

Verses

Luke 4:18- He has chosen me to bring good news to the poor and recovery of sight to the blind.

Luke 6:17-18 They had come to hear Him and to be healed of their diseases.

Matthew 14:14 He was filled with pity for them and healed those who were ill.

Matthew 4:23 Jesus went everywhere in Galilee. He taught in the synagogue and preached the Good News about the kingdom of heaven. And He healed all the people's diseases and sicknesses.

Key Questions

How did Jesus heal people when He was on earth? Can He still heal people today? What must we do if we want God to heal us? How can doctors and nurses help us when we are sick? How can we help ourselves when we are sick?

Outcomes

Knowledge

- describe the roles of doctors and nurses
- understand the servant role of these workers and their role in healing the sick
- list methods of treatment and aids to healing
- study the role of medical missionaries

Skills

- classify equipment of doctors and nurses
- imagine the day in the life of a doctor or nurse

Values

- appreciate the work of the medical profession, including medical missionaries
- be willing to share experiences and listen to others
- have compassion and a desire to help those who are sick
- pray for those who are sick

Key Questions

How did Jesus heal people when He was on earth? Can He still heal people today? What must we do if we want God to heal us? How can doctors and nurses help us when we are sick? How can we help ourselves when we are sick?

Activities

- Describe the role of doctors and nurses in today's society
- Discuss pictures of medical workers at work.
- Compare early or traditional medical practices with those of today.
- Read the biographies of Medical Missionaries.
- Classify, identify and draw equipment used by doctors and nurses.
- Make a book describing the day in the life of a medical worker.
- Discuss medical procedures, for example, broken bones, surgery
- Examine a First-Aid kit and draw the contents.
- Discuss dangers of swallowing nonprescribed pills or medicines, and the need to keep these out of reach of young children.
- Discuss aids to healing such as rest, healthy food.

Biographies and Christian medical organizations: Albert Schweitzer, Florence Nightingale, Mother Teresa, Mercy Ships and Samaritan's Purse.

Assessment

1. Make a chart to show the different jobs performed by medical workers.

2. What have I learned from the study of medical workers... about God? about doing what God wants me to do? about the Bible?

Year 3 Values education God is a Servant Service

Service is ...

- looking for ways to help others
- being willing to do jobs cheerfully

Activities

- What services do your parents provide for you? Make a poster called "My Mum" or "My Dad". On the poster draw pictures and write sentences about what they do, e.g. "My Mum cooks meals for me."
- 2. Think about how you can provide a service for someone. Make a card for that person. On the card write:

Dear I would like to give you some of my time this week. I will help you by for hours, signed

What does the Bible say about serving others?

1 Peter 4:10 Use your gift to serve others.

Matthew 20:28 Jesus came not to be served, but to serve others.

Galatians 6:9 Let us not grow tired of doing good.

Art Year 3 God is a Servant Topic: Medical servants

Biblical connection: Doctors and nurses help us set an example of serving. Some doctors and nurses work as missionaries, helping people who have no doctors in their communities.

Bible art as a wall display: Make a scene using collage, showing the many people that Jesus healed. For the clothing, cut out small pieces of fabric (or draw patterns on rectangles of paper). Use these as a basis for making a crowd of people. (Jesus healed many people, Mark 1:34). Draw faces, and arms.



Drawing or painting

Draw or paint a medical worker in their uniform.

Any medium

Use art materials to make gifts for those who need our special help.

	Thinking Skills Se	rvant Yr 3	
Medical pr What if there we or nurses? Write down 10 consequences.	ofession 1 ere no doctors possible	Med What an you cou bed to n comfort	lical profession 2 e 5 improvements ld make to a hospital nake patients more able?
Medical p The an "a n Make up 5	rofession 3 swer is: urse"	Medi Design a disabled	cal profession 4 new device to help people walk.
Medical pr Give 10 comp uses stetho	ofession 5 letely different for a scope	Med Use your out 5 diff picture co somethin medical p	ical profession 6 imagination. Work erent things that this ould be. It must have og to do with the profession.

God is Protector Teacher's Topic Guide Year 3

Topic: Weather

Duration: 3 weeks

Spiritual Awareness

God has power over 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.

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. With the Fall of mankind, the weather conditions changed, and sin eventually brought about God's judgement displayed in 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.

Bible stories and passages: Protection from extreme weather

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

Genesis 6-8 God protected Noah and his family during the Flood.

Genesis 37-47 God protected Joseph and his family through drought.

Mark 4 Jesus protected the disciples during the storm.

Matthew 7:24-27 The wise man was protected from the storm because he built his house on the rock.

Acts 27 God protected Paul in the storm.

Verses about protection from harsh weather and storms of life:

Psalm 91:1-5 We live within the shadow of the Almighty, sheltered by the God who is above all gods. This I declare, that he alone is my refuge, my place of safety; he is my God, and I am trusting him.

Isaiah 4:6 There will be a booth for shade by day from the heat, and for a refuge and a shelter from the storm and rain.

Nahum 1:7 The Lord is good, a stronghold in the day of trouble; he knows those who take refuge in him.

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

Psalm 121:5-6 You are my shade; protection from heat

Verses about God's provision through weather:

Deuteronomy 11:13 I will send rain on your land if you love and serve me with all your heart. Psalm 104:13 From the sky you send rain on the hills, and the earth is filled with your blessing. (GNB)

Psalm 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? Were floods, droughts and hurricanes a part of God's original perfect creation? 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? How do we prepare for cyclones?

Outcomes

Knowledge

- Identify suitable clothing to wear in different weather conditions
- explain how weather affects man's lifestyle
- study the weather patterns of the local environment
- study the weather patterns of our country
- look at ways of protecting ourselves from the elements *Skills*
- classify clothes, toys, games etc. used in different seasons
- problem solving: how to protect ourselves in extreme weather

Values

- appreciate the different seasons and the provision of sun and rain
- show wisdom in preparing for seasonal weather conditions

Activities

- 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 animal 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

Assessment

Create a chart called "Extreme weather". Divide the page into four and show how to protect ourselves in these extreme weather conditions: Hot sun; strong wind; a thunder and lightning storm; ice and snow. Use words and pictures.

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

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

Additional Teaching Notes:

Weather and the water cycle

Lightning, thunder and rainstorms were a mystery to people in ancient times. In Rome, Egypt and India people thought that lightning bolts were missiles thrown by the gods. Then Chinese thought that lightning was a goddess. Her job was to flash light here and there to help the thunder god find the people he was angry with.

Since rain is so necessary to our life on earth, ancient people wondered what caused it. Some thought that sprinkling water on the ground would help cause rain. Others tried to stab holes in the clouds with spears. The American Indians performed rain dances in the hope of making it rain. Maybe the most unusual idea is found in one of the holy books of the Hindu religion, the 'Vedas'. It says to tie up a frog with its mouth propped open. If you tie him to the right tree and say the right words, rain will fall!

The Bible talks about rain, lightning, thunder and storms. But it does not include any of the superstitious ideas found in other books written long ago. These books taught that the forces of nature were living beings who often did crazy things. The Bible on the other hand teaches that the earth's weather follows rules and cycles. Not Genesis 8:22.

"As long as the earth continues, there will be planting and harvest, cold and heat, summer and winter, day and night."

Job 28:26 says, "God made rules for the rain. And He set a path for the thunderstorm to follow." God told Jeremiah, "Day and night will always come at the right time," (Jeremiah 33:20).

Later on in history scientists began to discover the "rules for the rain" that Job talked about. We now have weathermen who know about the path of a thunder storm. Of course, all along the Bible had mentioned these laws of nature that we are still discovering. All along, the Scripture reminded us that the laws of nature are really the laws of God.

Where does the rain come from?

Rainfall is a process called the water cycle. Here's how the water cycle works: The sun evaporates water from the ocean. The water vapour rises and becomes clouds. This water in the clouds falls back to earth as rain, collects in streams and rivers, and makes its way back to the ocean. That process repeats itself again and again.

There was a scientist called Galileo who discovered that water follows such a cycle in 1630. But amazingly, the Scriptures mentioned this fact centuries earlier. Amos 9:6 says that God "calls for the waters of the sea. He pours them out on land."

Long before Galileo discovered it, the Bible told us that the water from the sea ends up falling on the land. Maybe it was because believed in the God of the Bible, that God showed Him truths about the creation.

Another verse that talks about the water cycle is Isaiah 55:10. It shows us that rain and snow return to the sky after watering the earth. (This is evaporation.)

"Rain and snow fall from the sky. They don't return without watering the ground."

Values education Year 3 God is Protector

Security

God is a loving Father who can be trusted. We can trust Him to protect us. We can feel secure in His care.

Security is...

- having no fear
- feeling safe
- being sure that God is in charge of my life
- giving my worries to God

I feel safe and secure because:

- my family cares for me
- God cares for me

Activities

- 1. Why do you think a baby feels secure?
- 2. What makes you feel safe and secure?
- 3. Two children can demonstrate a "trust walk". In this activity one student puts all their trust in the other student. The leader will lead the other on a walk while their eyes are closed. The leader will make sure the partner does not walk into things or trip over things.
- 4. After the trust walk, ask whether the person felt safe and secure on the trust walk. Why? They did not need to be afraid because the leader could be trusted to keep them safe and secure.

Questions:

Who can we trust? How do these people show their love and care for us?

What does the Bible say about security?

Psalm 91 He who dwells in the shelter of the Most High will rest in the shadow of the Almighty.

Psalm 23 The Lord is my shepherd.

1 Peter 5:7 Casting all your cares on Him, for He cares for you.

Matthew 6:25-31 Do not worry. God cares for the birds and much more for you.

Practical Science: Weather and seasons What Absorbs More Heat?

http://www.sciencekids.co.nz/experiments/lightcolorheat.html

When you're out in the sun on a hot summer day it pays to wear some light colored clothes, but why is that? Experiment with light, color, heat and some water to find out.

What you'll need:

- 2 identical drinking glasses or jars
- Water
- Thermometer
- 2 elastic bands or some sticky tape
- White paper
- Black paper

Instructions:

- 1. Wrap the white paper around one of the glasses using an elastic band or sticky tape to hold it on.
- 2. Do the same with the black paper and the other glass.
- 3. Fill the glasses with the exact same amount of water.
- 4. Leave the glasses out in the sun for a couple of hours before returning to measure the temperature of the water in each.

What's happening?

Dark surfaces such as the black paper, absorb more light and heat than the lighter ones such as the white paper. After measuring the temperatures of the water, the glass with the black paper around it should be hotter than the other. Lighter surfaces reflect more light, that's why people where lighter colored clothes in the summer, it keeps them cooler.

Practical Science: Weather Tornado in a Bottle

http://www.madaboutscience.com.au/store/index.php?main_page=page&id=17

Tame the destructive force of a tornado by creating a mini one in a bottle.

What you will need:

•Empty plastic bottle with lid. Any size, 500ml works well

- •Two drops of liquid detergent (clear detergent works best)
- •Teaspoon of glitter (optional)
- •Food colouring (optional)

What to do:

- 1. Almost fill the plastic bottle with cold tap water.
- 2. Add the liquid detergent.
- 3. Add glitter to the bottle.
- 4. Screw on the cap tightly.
- 5. Hold the bottle by the neck and turn it upside down. Rotate the bottle in a circular motion hard and fast. When you stop rotating a mini-tornado should form inside the bottle. Some find it easier to hold the bottle horizontally and then with a hard flick of the wrist flip it upside down. It may take several goes before you get it right all part of the fun.

Note: add a small amount of food dye for a colourful effect, or some tiny animal toys and watch them swirl in the vortex. Coloured lamp oil makes just the vortex coloured.

How does it work?

Most people encounter their first vortex as bath water drains from the bathtub. A vortex is a type of motion that causes liquids and gases to swirl around a center line. In this experiment you have created a water vortex by rotating the bottle. The vortex looks like a tornado in the bottle and is very similar to the effect you see with a real tornado except the medium is water as opposed to air.

For a longer lasting tornado in a bottle check out our vortex valves!

Art Year 3 God is Protector Topic: Weather

Biblical connection: Humans build shelters for protection from storms, rain and sun. God is our protection from the storms of life.

Bible art as a wall display: Mark 4:39 Jesus said, "Peace, be still," to the storm and the storm stopped.

OR, the wise and foolish builders, Matthew 7:24-27, with caption, "To stay safe, build your life on the rock."

Drawing, painting and collage Create a series of weather pictures, for all different types of weather.

Construction

Make a model of a house that would stand strong in a storm.

	Thinking Skills Protector Yr 3		
Weather and Seasons 1 Draw a fishing rod. Now redesign it by using the following steps: B – make one part bigger A – add something extra R – replace one part with something else		Weather ar Create a new combining the A raincoat and	nd Seasons 2 product by ese two things: d a sun hat
Weather and	Seasons 3	Weatheran	d Seasons 4
Name 5 things NEVER use	s you would in winter.	What if summe	er did not exist. onsequences.
Weather and S People should no out in the summe they are wearing Give 3 good poin points for this ide	Seasons 5 t be allowed or sun unless a hat. ts and 3 bad a.	Weather an Work out 3 thin could represer Noah and his f	d Seasons 6 ligs this picture nt in the story of amily.

	Thinking Skills Protector Yr 3		
Weather and Seasons 7		Weather and Seas	ons 8
Make an acrostic po the name of one of t seasons.	em using he	Design something new keep the rain off you w riding a bike.	v to vhen
Weather and Se Give 10 different us melted ice-creams	asons9 sesfor	Weather and Seaso Name 5 things that swi pools and beds have in common. e.g. you can dive into k them.	ns 10 mming 1
Weather and Sea Make an unusual ha you shade in summe	isons 11 It will give er.	Weather and Seaso Draw 3 pictures of som things you could make beach.	ons 12 ne at the

God is Truth Teacher's Topic Guide Year 3

Topic: States of matter

Duration: 3 weeks

Spiritual Awareness

God is true to His word and never changes. He is a faithful God. He is faithful to His word. In the study of 'states of matter' we see that a substance retains its chemical compositions despite changing from solid to liquid to gas. There is consistency in the created world, reflecting God's immoveable consistency. God and His word never change.

Values: Our response to 'God is Truth'

- Honesty: Speak the truth; Never cheat, steal, lie or exaggerate
- **Trustworthiness;** keeping promises
- Integrity: Be true to our word and keep promises.
- Life-long learning: always seeking the truth
- Faith in the word of God being the truth, and that Jesus is the way, the truth and the life
- Respect for truth
- **Trust** in the Holy Spirit to lead and guide us into all truth.

Bible stories and passages: God is faithful and true

Genesis 9:8-17 God gave the sign of the rainbow, a sign that He would keep His promise never to destroy the world again with a flood.

Genesis chapters 15, 17, 18 God kept His promise to Abraham

1 Samuel ch 1 Hannah made a promise to God that if she had a son, she would give Him back to God. Hannah kept her promise.

Acts 9:1-23 Saul was changed to become Paul, and he became a faithful follower.

Daniel ch 13 Shadrach, Meshach and Abednego did not change their mind about the true God.

Daniel ch 6 Daniel also stood up for the true God and would not change.

Bible verses

Malachi 3:6 "I am the Lord, and I do not change." (GNB)

Psalm 119:86a All Your commandments are faithful.

Proverbs 30:5 God keeps every promise He makes (GNB)

John 3:16 For God loved the world so much that He gave His only Son, that whoever believes in Him should not die, but have everlasting life.

Psalm 33:4 The words of the Lord are true and all His works are dependable. (GNB) Numbers 23:19 God is not like men who lie; He is not a human who changes His mind. (GNB)

Key Questions

- What is matter?
- What is a solid?
- What is a liquid?
- What is a gas?

- Can any of these be changed by heat? What happens?
- Can any of these be changed by cold? What happens?

Outcomes:

- Understand that in chemistry the three traditional states of matter are solids (fixed shape and volume) and liquids (fixed volume and shaped by the container) and gases (filling the container)
- Understand that the solid state of water is called ice
- Understand that all matter is made of tiny particles. In solids, the particles are very close together, in liquids the particles are further apart, and in gas the particles are even further apart.
- Understand that a change of state between solid, liquid and gas can be caused by adding or removing heat.
- Understand that change is a process in which objects and events become, or are made to become, different from their former status
- Understand that change can be fast or take considerable time

Activities

- Make ice cubes.
- Melt ice cubes using a heat source.
- Observe and describe the changes from water to ice cube and back to water.
- Boil water to create steam. Measure the temperature of water being heated to boiling point.
- Classify materials and substances into categories of solid, liquid, gas
- Experiment with saturation and drying of sponges and fabrics in different drying conditions. Explain why some materials dried faster than others
- Conduct kitchen chemistry activities, such as melting butter, coconut oil or chocolate to make no-bake cookies (refrigerated); making jelly (jello); making fruit ice-blocks.
- Describe what happened to the ingredients when making the food.
- Compare the amount of heat necessary to melt butter and sugar by placing both butter and sugar in a warm (but not hot) place. Draw conclusions about the melting temperatures of different materials.
- Inflate and over-inflate balloons to show that air takes up space and can be contained.
- Blow bubbles.
- Make a chart divided into 3 sections: solid, liquid, gas. Use rice bubbles or similar to show how the particles would look inside a solid object, a container or liquid, and a container of gas.
- Discuss the properties of solids, liquids and gases.
- Discuss solids and liquids in relation to volcanic lava and rocks.
- Measure room temperature using a thermometer. Time how long it takes water to boil and record the rising temperature on a thermometer every minute. Graph the rise in temperature from cold to boiling point.

Assessment

1. Make three charts using words and pictures to describe the properties of a solid, liquid, gas e.g.

Solid: doesn't change shape; doesn't move around; can be changed by heat **Liquid:** flows smoothly from one place to another; can be clear or not clear; has not shape of its own; can be changed by heat

Gas: can't see most gases; air is a gas; wind is moving air that you can feel; it will fill a bubble or balloon; you can breathe it.

2. What have I learned from this study about God; about doing what God wants me to do and about the Bible?

Values education God is Truth Respect for Truth

Respect for truth means that ...

- we live by what we know to be true
- we obey what is true
- we do the things our parents and teachers tell us to do.
- we do what the Bible tells us to do.
- we follow the laws that are right and true.

Activities

- 1. Dad is driving to an important meeting and he is late. The road sign says not to go faster than 60 kilometres per hour. What should Dad do?
- 2. Mum has asked you to clean your room. Your friend wants you to come and play. What should you do?
- 3. You find a coin in the school playground. What should you do?
- 4. You have promised your grandma that you will help her with the sopping but your friend has just dropped in to see you. What should you do?

What does the Bible say about respect for truth?

1 John 3:24 Those who obey His commands live in Him.

1 John 5:3 This is love for God: to obey His commandments.

Psalm 25:2 Guide me in your truth and teach me, for you are God my Saviour, and my hope is in you all day long.

Practical Science Year 3

Will the Ice Melt and Overflow?

http://www.sciencekids.co.nz/experiments/iceoverflow.html

At first thought you might think that an ice cube sitting at the very top of a glass would eventually melt and spill over the sides but is this what really happens? Experiment and find out!

What you'll need:

- A clear glass
- Warm water
- An ice cube

Instructions:

- 1. Fill the glass to the top with warm water.
- 2. Gently lower in the ice cube, making sure you don't bump the table or spill any water over the edge of the glass.
- 3. Watch the water level carefully as the ice cube melts, what happens?

What's happening?

Even though the ice cube melted the water doesn't overflow. When water freezes to make ice, it expands and takes up more space than it does as liquid water (that's why water pipes sometimes burst during cold winters). The water from the ice takes up less space than the ice itself. When the ice cube melts, the level of the water stays about the same.

Solid, Liquid, Gas guessing game

Ask the student to make up riddles about things that are solid, liquid or gas. They can write their riddles and then read them to someone who has to guess the answer. For example, "What is solid, wooden, tall and attached to our wall?" (a book case)

Liquids take the shape of their container

Explain to the student that liquids take the shape of their containers. Experiment pouring liquids into containers of different shapes and sizes. Then have the student pour the same amount of liquid into each container. How do the shapes change? Why do some containers appear to have more liquid than others?

Balloon animals

Ask the student to blow up balloons to make different shapes. Balloons can be small, large, tube-shaped etc. Encourage students to make balloon animals to show how gas can be moved and contained. Compare how liquids and gases fill their containers.

Art Year 3 God is Truth Topic: States of matter

Biblical connection: God created the universe with scientific laws that are true, dependable & unchanging

Bible art as a wall display: Shadrach, Meshach and Abednego in the fiery furnace.

God says "Yes" to all His promises. (2 Corinthians 1:20)

Painting

How can we change liquid paint? Experiment with making paint thick, (by adding flour or glue) or thin (by adding water). Experiments with different techniques using thick and thin paint,

Examples for thin paint:

Coloured wash over crayon drawings

Straw blowing of thin paint, and holding page at various angles and allowing paint to run down to make patterns.

Examples for thick paint:

Make textures by applying thick paint to paper, and making patterns with pieces of corrugated carboard, ice block sticks and other objects to give interesting patterns and textures in the paint.

Thinking Skills Truth Yr 3

Creative cooking 1	Creative cooking 2
Create an ice-cream making	Your bar of chocolate is melting
machine using milk, ice,	and turning to liquid.
and sugar.	Think of 3 ways to stop it
Draw your invention.	melting.
Creative cooking 3 You have 3 ingredients: A liquid (water) A solid (sugar) A gas (air) Name and describe what you will make.	Creative cooking 4 Invent a delicious type of tea made from hot water and some kind of plant.
Creative cooking 5	Creative cooking 6
Invent a recipe using 3	Invent a delicious drink using
edible solids.	3 liquids.

God is Lord and King Teacher's Topic Guide Year 3

Topic: Christmas

Duration: 3 weeks

Spiritual Awareness

At Christmas we celebrate Jesus who God sent into the world to save us. Through His birth and death, we have eternal life and peace with God. He is our redeemer.

Our response to 'God is Lord and King'

Because God is Lord and King 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

Bible references:

Bible stories and passages

Matthew 1:18-25; Luke 2:1-40 – The Birth of Jesus Matthew 2:1-12 – The Visit of the Magi Luke 2: 8-20 – The shepherds and the angels Matthew 1 – Descendants of David through Jesus Christ Numbers 24:17 – Star of Jacob, Star of David

Memory verses

Luke 2:11 – For unto you is born this day, in the city of David, the Saviour, who is Christ the Lord.

Matthew 1:21 – "Mary will give birth to a son, and you are to give Him the name Jesus, because He will save His people from their sins."

Isaiah 9:6 – A child is born to us! A Son is given to us! And He will be our ruler. He will be called "Wonderful", "Counselor", Mighty God", Eternal Father", Prince of Peace".

Isaiah 26:3 You, Lord, give perfect peace to those who keep their purpose firm and put their trust in you.
Art Year 3 God is Lord and King Topic: Christmas

Biblical connection: God sent His son, Jesus into the world to be Lord and King in the lives of people. **Bible art as a wall display:** The Christmas story

Make Christmas cards

Examples using collage:



