This material has been designed to cover a period of 15 months. There are a number of verses that you can choose as memory verses for the children. The ones printed here are taken from the New International Version, unless otherwise stated.

Purpose: To help the child recognise that their body is the temple of the Holy Spirit and they need to treat it with respect and dignity and remember that God wants to live in them.

MONTH 1 – Introduction: My Life is a Temple – designed to worship God!

The purpose of this section is to impress the children with the fact that God has a special purpose for each of them – they are a dwelling place for God and that their lives can display their worship of God.

Collect pictures of various temples, palaces etc. Talk about how they look, how people act in them, what sort of things are seen as spoiling or desecrating them. Compare these with the lives of each child. Talk about how God has designed them with a special purpose, how they can reflect that purpose and what sort of things will spoil that purpose and plan that God has for them.

Discuss what they would do if they knew the king, queen, emperor, president would come to stay at their home. What preparations would take place? How would they act? Compare their responses with the thought that Jesus wants to dwell (live) in our lives. How will that change the way we live or act? What sort of things would destroy my body temple?

Memory Verses:

1 Cor. 6:19-20 Do you not know that **your body is a temple of the Holy Spirit**, who is in you, whom you have received from God? You are not your own; you were bought at a price. Therefore honour God with your body.

1 Cor. 3:16-17 Don't you know that **you yourselves are God's temple** and that God's Spirit lives in you? If anyone destroys God's temple, God will destroy him; for God's temple is sacred, and you are that temple.

2 Cor. 6:16 What agreement is there between the temple of God and idols? For **we are the temple of the living God**. As God has said: "I will live with them and walk among them, and I will be their God, and they will be my people."

<u>Activity Sheet 1:</u> Colour all the shapes that do not have a dot in them to discover the hidden message –

Your body is a temple of the Holy Spirit – 1 Cor 6:19

MONTH 2 - Quarter theme - With All My Being

Part 1 - My Heart & Soul

The month is focusing on our heart and soul. The emotional base of our being needs to respond to what God has done for us. Just as the heart is what keeps our physical body alive, so allowing God to be at the very centre of our lives, creates a love for God that keeps us spiritually alive. Explore the human heart and how it is made and what things can affect its functioning. Help the children to realise how important it is not to use any substances that will cause problems for the heart. Highlight the drugs that cause damage to the heart – amphetamines, cocaine, nicotine, heroin (opiates), steroids and caffeine.

Memory Verses:

Proverbs 4:23 Above all else, **guard your heart**, for it is the wellspring of life.

Mark 12:30 Love the Lord your God with all your heart and with all your soul and with all your mind and with all your strength.

1 Samuel 12:24 But be sure to fear the Lord and **serve him faithfully with all your heart**; consider what great things he has done for you.

1 Kings 8:61 But **your hearts must be fully committed to the Lord our God**, to live by his decrees and obey his commands, as at this time."

1 Chron. 22:19A Now devote your heart and soul to seeking the Lord your God.

ACTIVITY SHEETS:

Activity Sheet 2A & 2B: Heart activity page — colour and stick picture of Jesus behind the heart and open up to see picture of Jesus. (Ages 6-8)

Activity Sheet 3: Picture of human heart – drugs that will affect it. Unscramble drugs and list numbers of damage caused. (Ages 9-12)

Amphetamines (speed) – raises blood pressure, ruptured blood vessels, greater risk of heart attack or stroke

Caffeine – raises blood pressure, increased heart/pulse rate

Cocaine – raises blood pressure, increased heart/pulse rate, ruptured blood vessels, greater risk of heart attack or stroke

Nicotine – increased heart/pulse rate, greater risk of heart attack or stroke, coronary artery disease

Heroin – arterial ulcerations & inflammation of valves/lining

Steroids – raise blood pressure, enlarge the heart, greater risk of heart attack or stroke

MONTH 3 - Part 2 - My Mind

The mind is the control centre of the body. Satan knows that if he can wipe out the control centre, he can gain access to our body temple and take over.

Throughout human history, the devil has worked to block the way in which God can communicate with us through our conscience and mind.

We need to be particularly careful that we do not allow anything to ruin the mind. Addictive behaviours like gambling, too much television and drugs all shut down the mind's ability to function and for the conscience to be sharp. Every drug impacts on the mind in some way. See below on Activity 4.

When we focus on the things of God, we allow Him to live in our lives and bring peace and blessings. We can also ask God to renew our minds.

Memory Verses:

1 Peter 1:13 **So think clearly and exercise self-control.** Look forward to the special blessings that will come to you at the return of Jesus Christ. (New Living Translation)

Isaiah 26:3 You will keep in perfect peace all who trust in you, whose thoughts are fixed on you! (New Living Translation)

Matthew 22:37 Jesus replied, "You must love the Lord your God with all your heart, all your soul, and all your mind." (New Living Translation)

Romans 12:2 Do not be conformed to this world, but **be transformed by the renewing of your minds**, so that you may discern what is the will of God--what is good and acceptable and perfect. (New Revision Standard Version)

Ephesians 4:22-24 You were taught, with regard to your former way of life, to put off your old self, which is being corrupted by its deceitful desires; **to be made new in the attitude of your minds**; and to put on the new self, created to be like God in true righteousness and holiness.

ACTIVITY SHEETS:

Activity Sheet 4: Brain Knock Out - Use the code to find the things that knock out the functioning of the brain. (Ages 9-12) Talk about what these things do in the brain.

Inhalants – affect the cortex of the brain and the breathing centre in the brain stem. Can cause permanent damage to the central nervous system. Causes impaired judgement and altered personality. Depletes the neurotransmitter - GABA

Opiates – includes opium, heroin, morphine. Affects the cortex and the brain stem and spinal cord; depletes endorphins in the brain.

Nicotine – Depletes the neurotransmitters in the brain – (acetylcholine, serotonin, GABA).

Steroids – Affects the cortex and midbrain where hormone production is governed. Depletes testosterone.

Gambling – Becomes an addictive behaviour affecting the brains reward circuitry which governs impulse control and judgment, resulting in the nonsensical pursuit of "rewards," without a focus on reality.

Marijuana – Affects the frontal cortex, hippocampus and cerebellum, depletes the neurotransmitters - (acetylcholine, serotonin, endorphins and GABA); impairs memory and

psychomotor skills. Can cause psychotic symptoms such as schizophrenia and reduces the production of hormones

Alcohol – Has widespread effects on many parts of the brain – reduces neurotransmitter – GABA. It affects the cerebral cortex, cerebellum, brain stem (particularly the breathing centre) and damages brain cells. It causes memory impairment, reasoning impairment and loss of motor skills. The teenage brain and developing foetus is particularly vulnerable.

Amphetamines – Depletes the neurotransmitters - (adrenalin, noradrenalin, dopamine). Is a stimulant but is followed by depression which contributes to addiction.

Barbiturates – Affects the GABA receptors in the cortex and brain stem – depletes the neurotransmitter - GABA. Is a depressant and causes crippling emotional and physical dependence.

Cocaine – Depletes the neurotransmitters - (adrenalin, noradrenalin, dopamine). Long term deterioration in brain metabolism.

Too much television – The brain goes into an alpha brainwave state - comparable to hypnosis. Studies have shown that the left side of the brain, responsible for logical analysis and thought "sort of went to sleep" once TV was switched on. but the right brain was busy "storing information in its memory bank". It means that information is stored in the brain without tagging it as to whether it is to be acted on, or whether it is of value. This programs a non-response to reality. (See Month 6 for more information).

Hallucinogens – Depletes the neurotransmitters – (serotonin, acetylcholine, noradrenalin); interferes with the brain's ability to selectively store immediate experiences creating hallucinations.

Caffeine – Depletes neurotransmitters - (adrenalin, noradrenalin, dopamine); constricts the blood vessels in the brain.

Activity Sheet 5: Protect the growing brain! – Dot to dot of baby and control centre. (Ages 6-8)

MONTH 4 - Part 3 - My Strength - Skeleton, Muscles & Exercise

The body's strength is dependent on a healthy skeleton and well-developed muscles. Study both the skeleton of the body and the muscles and how they give the body strength and stability but are also designed for movement and flexibility.

(See http://www.childrenscolorado.org/misc/movie/bodybasics/bone.html)

The skeleton gives the body shape with 206 different bones. It helps protect the organs such as the brain, heart and lungs. It works with the muscles and so sometimes this is called the musculoskeletal system. Muscles are connected to the bones by tendons and bones are connected to each other by ligaments. The places where the different bones are connected are called joints. Muscles that make bones move are connected to two different bones; for example bending the arm at the elbow or the leg at the knee. Some of the bones make blood cells in the marrow. Your bones store minerals such as calcium and phosphorus.

The human skeleton is separated in two parts. One part is the axial skeleton. The axial skeleton includes the skull, sternum, ribs, and vertebral column. The other part is called the appendicle skeleton and includes your arms and legs, shoulders and pelvic bones.

There are four types of bones in your body. They are long bones, short bones, flat bones, and irregular bones. These bones are made of two kinds of tissue. They are compact or dense bone, and spongy bone.

The bones need muscles to make them move. The muscles make everything in the body move. There are more than 600 muscles in the body and they are made out of stretchy cells and fibres

Talk about how muscles work (For more information and also in Spanish, see http://kidshealth.org/kid/htbw/muscles.html#)

Discover what happens when we fail to use our muscles - atrophy. Liken it to the spiritual life – when we fail to exercise faith, bible study and prayer our spiritual life is weak.

Talk about how to maintain strength and fitness. Introduce an exercise class with an instructor to help the children have fun in exercising or start a walking club for children after school. Encourage children to be active. Plan activities along the walk to make it fun – e.g. scavenger hunt, finding answers to questions on landmarks along route, etc.. A group of 4 - 5 children is great.

Discuss how drugs, alcohol and tobacco sap the strength, can weaken muscles and deplete the skeleton of calcium.

Some facts and statistics from studies on calcium in the bones:

- Certain drugs or foods cause a loss of calcium from the bones
 - Caffeine (in Coffee or Coke)
 - The consumption of 3 or more cups of coffee a day increased the risk of hip fracture by 53% in the subsequent 2 years.
 - Risk of hip fracture in high caffeine users was 3 times that of the noncaffeine users.
 - Alcohol The use of only 1 oz. (30 ml) of alcohol per day more than doubled the risk of hip fracture compared to non-drinkers.

- Sodium (salt) For every gram of sodium ingested there is an additional 25 mg of calcium lost in the urine.
- High protein diets For every 10 grams of protein consumed, urinary calcium increases about 10 mg.
- High fat diets
- A 30 gram increase in urinary calcium loss per day will result in a 220 gram loss over 20 years. This corresponds to about 22% of a typical male and 30% of the typical female skeleton stores.
- It takes about 90 days for old bone to be replaced by new bone.
- While steroid use strengthens muscles it has very bad side effects on the rest of the body. It stunts vertical growth, causes damage to the reproductive organs in both men and women, raises blood pressure, enlarges the heart, damages the liver, suppresses the immune system, heightens the risk of strokes, causes fluid to be retained in the body, can cause extensive acne and alters the personality by increasing aggression, irritability and depression. Muscles are best strengthened by exercise not by steroid use as exercise helps the body in many ways.

Wrong attitudes can also weaken our skeleton, but right ones can strengthen it. (See memory verses from Proverbs.)

Talk about the benefits of exercise:

- Increases muscle strength
- Improves the circulation
- Helps the blood to expel impurities from the body
- Invigorates the whole body
- Strengthens the digestive organs, the liver, kidney, lungs and heart
- Relieves brain weariness, helping us to think more clearly
- Releases a chemical, called serotonin, in the brain which makes you feel good, relaxes muscles and gets rid of stress
- Helps the immune system to fight disease.

Memory Verses:

Mark 12:30 Love the Lord your God with all your heart and with all your soul and with all your mind and with all your strength. (This text can be used here if it was not used previously)

Psalm 84:5 Blessed are those whose strength is in you.

Psalm 118:14 **The Lord is my strength** and my song; he has become my salvation.

Proverbs 24:5 A wise man has great power, and a man of knowledge increases strength.

Isaiah 40:31 But **those who hope in the Lord will renew their strength**. They will soar on wings like eagles; they will run and not grow weary, they will walk and not be faint.

Proverbs 3:7-8 Do not be wise in your own eyes; fear the Lord and shun evil. This will bring health to your body and **nourishment to your bones**.

Proverbs 14:30 A heart at peace gives life to the body, but **envy rots the bones**.

Proverbs 16:24 Pleasant words are a honeycomb, sweet to the soul and **healing to the bones**.

Proverbs 17:22 A cheerful heart is good medicine, but a crushed spirit dries up the bones.

Isaiah 58:11 The Lord will guide you always; he will satisfy your needs in a sun-scorched land and will **strengthen your frame**. You will be like a well-watered garden, like a spring whose waters never fail.

POEM: Just Take a Walk

Just take a walk in the morning,
Don't say you haven't the time.
Climb out of bed twenty minutes ahead
Of the hour you're expected to climb.
Quite riding down to the office,
Walk at least part of the way –
Walk for a mile for a change for awhile,
And see what it does to the day!

Use the song – *Dem Dry Bones* (There are a number of different versions, but here is one version below. It can also be sung all the way from toe to head without the break of "Oh, hear the word of the Lord" in between, gradually ascending the scale.)

Ezekiel connected, "Dem dry bones!"
Ezekiel connected, "Dem dry bones!"
Ezekiel connected, "Dem dry bones!"
"Oh, hear the word of the Lord."

The toe bone connected to the foot bone,
The foot bone connected to the ankle bone,
The ankle bone connected to the leg bone,
O hear the word of the Lord.

The leg bone connected to the knee bone,
The knee bone connected to the thigh bone,
The thigh bone connected to the hip bone,
O hear the word of the Lord.

The back bone connected to the shoulder bone, The shoulder bone connected to the neck bone, The neck bone connected to the head bone, Oh, hear the word of the Lord!

Dem bones, dem bones gonna walk aroun' Dem bones, dem bones, gonna walk aroun' Dem bones, dem bones, gonna walk aroun' Oh, hear the word of the Lord. Disconnect dem bones, "Dem dry bones!"
Disconnect dem bones, "Dem dry bones!"
Disconnect dem bones, "Dem dry bones!"
"Oh, hear the word of the Lord."

The head bone connected from the neck bone,
The neck bone connected from the shoulder bone,
The shoulder bone connected from the back bone,
"Oh, hear the word of the Lord."

The hip bone connected from the thigh bone, The thigh bone connected from the knee bone, The knee bone connected from the leg bone, "Oh, hear the word of the Lord."

The leg bone connected from the ankle bone, The ankle bone connected from the foot bone, The foot bone connected from the toe bone, Oh, hear the word of the Lord!

Dem bones, dem bones gonna live again Dem bones, dem bones, gonna walk aroun' Dem bones, dem bones, gonna praise the Lord Now, hear the word of the Lord! Oh, hear the word of the Lord!

Some versions can also be viewed on YouTube at:

Wiggles - www.youtube.com/watch?v=pBOX YbwT9c

Kings Heralds - http://www.youtube.com/watch?v=SOSWaJPC2yY

ACTIVITY SHEETS:

Activity Sheets 6A & 6B: Cut out the bones of the skeleton on the two activity pages. (It is not necessary for the children to cut in between toes etc. Join the bones together at the letters by making a small hole where the letter is and fastening with paper split fasteners. You will need 12 fasteners for each skeleton. The one for H is for added stability. This activity can be done in conjunction with the song above.

Activity Sheet 7: Weightlifter Puzzle - based on Memory verse - Mark 12:30 Starting with the circled letter (L) write every third letter on the line to discover the memory verse. Work out the letters from the riddle for the reference. Can be used when covering the material on muscles.

MONTH 5 - Half Year Theme - Guarding the Gateways

Part 1 - Our Senses - Nervous System - Our Spiritual Senses

Explore in a little more depth the way in which the nervous system works and the way it interacts with our senses.

Some good websites for material are:

- http://kidshealth.org/kid/htbw/brain.html This site has some good images of the different parts of the brain.
- http://kidshealth.org/parent/general/body basics/brain nervous system.html
- http://yucky.discovery.com/flash/body/pg000136.html
- http://www.tlsbooks.com Choose either Kindergarten or Grade Four. Then scroll down to Science Worksheets. Choose Your Five Senses worksheets.
- http://www.preschoolrainbow.org/5senses.htm This website has quite a few suggested activities to go with the various senses, set at the level of preschool age children but could be adapted to older children.

More in-depth resource material:

http://faculty.washington.edu/chudler/introb.html

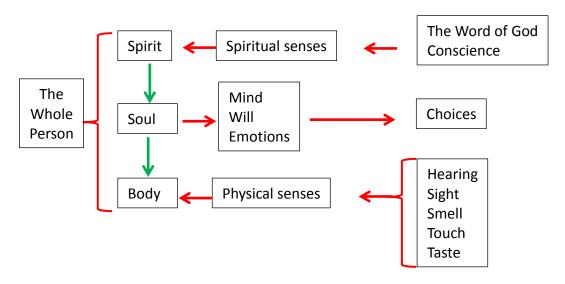
Puzzles and Quizzes on the nervous system:

http://www.neok12.com/Nervous-System.htm

Stress the importance of protecting the brain, making sure that we are keeping a watch on the senses – what messages we allow into our brain. Talk about the way in which we can make decisions needs to be based on God's Word and not just on what our senses send to the brain.

Use the following diagram to assist the children to understand the role the senses play and the importance of having a keen spiritual sense which is developed by reading, memorising and putting into practice the word of God and prayer.

In making decisions, we should be governed by our spiritual senses (the Word of God and our conscience) and our physical senses (hearing, sight, smell, touch and taste) should then be under the control of our mind and will. If we make choices based only on our physical senses we will fall into temptation and our spiritual sense will be weakened. This is what happened to Adam and Eve. They allowed their physical senses to take over and disregarded the words of God. If we allow both the physical and the spiritual senses to have equal domination then we end up being "double-minded", with our emotions, will and mind being unstable and unpredictable.



Use the story of the first temptation (Genesis 3) as an illustration of how allowing our physical senses to dictate, and doubt of the spiritual senses leads to ruin and death. Have the children identify the senses that lead Eve and Adam to sin.

Teach the children how to read and apply scripture and encourage the memorisation of scripture. Discuss how thoughts can be taken captive and made obedient to Jesus. Use 2 Corinthians 10:4 to show that it is done with God's weapons and not in our own strength. (The older children could learn both verses.)

Memory Verses:

1 Thessalonians 5:23 May your whole spirit, soul and body be kept blameless at the coming of our Lord Jesus Christ.

2 Corinthians 10:5B We take captive every thought to make it obedient to Christ.

Psalm 119:9-11 How can a young man keep his way pure? By living according to your word. I seek you with all my heart; do not let me stray from your commands. I have hidden your word in my heart that I might not sin against you.

Romans 13:14 Rather, clothe yourselves with the Lord Jesus Christ, and do not think about how to gratify the desires of the sinful nature.

ACTIVITY SHEETS:

Activity Sheet 8: Coded message hidden in the brain – Psalm 119:11

Activity Sheet 9: Facts about the nervous system and Word Find - 2 pages (Ages 9 - 12)

Activity Sheet 10: Label the parts of the brain and nerve cell.

MONTH 6 - Part 2 - Sight

Discuss the principles for viewing television and using the internet with the children.

What these studies show is that the right side of the brain may be dutifully absorbing all the images from your television screen, but the left side, which does critical analysis, is lulled into a stupor by the television's flicker. This makes analysis of the images difficult.

Television can be especially damaging to developing minds. A disturbing 2004 study found that watching TV at ages one and three caused attention-related problems at age 7. The attention problems included whether the child had difficulty concentrating, was easily confused, was impulsive, had trouble with obsessions, or was restless. These are symptoms of ADHD (attention deficit hyperactivity disorder).

The researchers speculate that the developing brain may be more vulnerable to the over-stimulation of TV. Both the researchers and the sponsors of the study, The American Academy of Paediatrics, recommend that parents exercise caution in letting their children under the age of 2 years watch any television.

(http://www.insteadoftv.com/tv-zombie.html; http://www.eruptingmind.com/effects-of-tv-on-brain/)

Talk about setting guidelines for what you view with your eyes – emphasize the importance of guarding this gateway to the temple as many temptations come to us through our sight (pornography, lust, coveting etc.). You could talk about the three wise monkeys – hear no evil; see no evil; and speak no evil.

Study how the eye works and the wonderful way God made us.

http://kidshealth.org/kid/htbw/eyes.html

Talk about how we can view situations and people with compassion and be a power for good.

Show how the vision can be affected by drugs and alcohol. If you have booze goggles, you can use these to illustrate how hard it is to see straight when drunk. Play a number of games where the person is blindfolded to emphasize the importance of having light in the eyes instead of darkness (e.g. blind man's bluff; piñatas; pin the tail on the donkey etc.) Play "I Spy".

Use the puppet plays on "Walking in the Light" from convention http://www.wwctu.org/pages/2010 convention.html

Go to Presentation Material and choose either the audio or scripts for the plays you would like to use.

Memory Verses:

Luke 11:34 Your eye is the lamp of your body. When your eyes are good, your whole body also is full of light. But when they are bad, your body also is full of darkness.

Psalm 19:8 (GW) The instructions of the Lord are correct. They make the heart rejoice. The command of the Lord is radiant. It makes the eyes shine.

Psalm 119:18 (NLT) Open my eyes to see the wonderful truths in your law.

Proverbs 23:26 (NLT) O my son, give me your heart. May your eyes delight in my ways of wisdom.

Isaiah 33:15-16 Those who walk righteously and speak uprightly, who despise the gain of oppression, who wave away a bribe instead of accepting it, who stop their ears from hearing of bloodshed and **shut their eyes from looking on evil**, they will live on the heights; their refuge will be the fortresses of rocks; their food will be supplied, their water assured.

1 Cor. 12:16-18 (NLT) And if the ear says, "I am not part of the body because I am only an ear and not an eye," would that make it any less a part of the body? [17] Suppose the whole body were an eye—then how would you hear? Or if your whole body were just one big ear, how could you smell anything? [18] But God made our bodies with many parts, and he has put each part just where he wants it.

Activity Sheet 11: Match the eyes by ruling lines to discover two memory verses. Proverbs 23:26B (NLT); Luke 11:34A

MONTH 7 - Part 3 - Smell - Inhalants

Your sense of smell is very important as it helps you to taste things better or to be aware of danger like fire or rotten food.

Play a smell identification game where the child is blindfolded and given various things to smell and tell what they are. Only use things that are safe to smell – e.g. mango, banana, rotten potato, wet burnt wood, strawberries, lavender, a rose, wattle, sweaty shirt. (See Science Experiment "It Smells Like.." on http://www.preschoolrainbow.org/5senses.htm)

Talk about what are nice aromas and what are unpleasant smells. Talk about what things God likes to smell from the following texts – sincere repentance for sin (*Numbers 15:2,3, 7*); consecration of our lives to God (*Leviticus 8:28*); our prayers (*Psalm 141:2*); good friendship and counsel (*Proverbs 27:9*); compassion and service to others (*Philippians 4:18; John 12:3*); a life of righteousness (Jesus Christ - *Psalm 45:7-8*). Compare with what is an unpleasant smell to God – wickedness, self-importance (*Isaiah 65:2, 3, 5*).

Memory Verses:

Psalm 141:2 **May my prayer be set before you like incense**; may the lifting up of my hands be like the evening sacrifice.

Proverbs 27:9 Perfume and incense bring joy to the heart, and the pleasantness of one's friend springs from his earnest counsel.

2 Cor. 2:14-16 But thanks be to God, who always leads us in triumphal procession in Christ and through us spreads everywhere the fragrance of the knowledge of him. For we are to God the aroma of Christ among those who are being saved and those who are perishing. To the one we are the smell of death; to the other, the fragrance of life.

Some drugs affect our sense of smell and damage the delicate membranes in the nose. This is particularly true of a drug like cocaine and of inhalants. Users of these substances usually inhale them through the nose by sniffing or snorting.

The use of cocaine by "snorting" means that the cocaine makes the blood vessels in the nose very narrow, which stops the oxygen in the blood from reaching the very fine nerve endings. This means that the inside of the nose (mucous membrane) stops feeling things and is numbed. When a person continues to use the drug in this way, the cells are damaged and the nasal septum starts to rot. Cocaine also has many other bad effects on the body.

Inhalants are chemicals that are used widely in transport and industry which a person wrongly uses to breathe into their systems e.g. glue, paint and petrol (gas). These solvents enter the bloodstream through the lungs without first passing through the liver, where they might have had a chance to be detoxified. Many of the solvents contain poisons and carcinogens. Many solvents are hydrocarbons which reduce the oxygen supply to the brain making the person feel happy and dreamy at first, then sedated, drowsy, sleepy, under anaesthetic, in a coma and eventually dead. Lighting cigarettes while also inhaling solvents, will often cause a fatal explosion. The signs of solvent abuse include constant sniffing, sneezing, nosebleeds, coughing, running eyes and nose, surface burn marks below the eyes, nausea, loss of appetite, excess salivation, foul breath, lack of physical coordination and impaired judgement. Repeating sniffing of the concentrated vapours permanently damages the central nervous system and alters the personality.

Resources: http://kidshealth.org/kid/htbw/nose.html

Tom Scott and Trevor Grice: The Great Brain Robbery; Allen and Unwin 1997

Activity Sheet 12: Word Find on Inhalants

MONTH 8 - Part 4 - Hearing - Speech - Positive talking

For information on the human ear visit this website: - http://kidshealth.org/kid/htbw/ears.html

Many of the things that we listen to are recorded in our brain. We need to take care what we choose to listen to so that we have positive things in our mind. Some music and sounds can bypass the judgement part of the brain and cause us to act in ways that we would not really choose to. Disrespectful words, swearing, curses and foul talk can become a habit if we do not choose to close our ears to these and determine to only speak what is pure and true. A child learns to speak from what they hear.

There is one person's words that we will always listen to. It is our own words. If we are always speaking negatively and disrespectfully – voicing what we do not like and complaining and accusing others, then we begin to believe the words that we speak and soon our whole life will reflect those words that we have spoken. Instead we can choose to speak words of encouragement, kindness, truth, respect and challenge. Then we will hear those things that we have spoken and our life will take on a positive approach to the things that we face. When we hear others talking negatively we can choose to turn the conversation to the positive and express those things that will build up instead of destroy. Many suffer from a form of depression due to focusing on the negative instead of on the positive.

We also have a God who is always listening to us. His ears are open to our cries and so we can share our burdens and our joys with Him.

Ears also play a part in helping us to keep our balance. Your ears take care of you, so take care of them. Protect your hearing by wearing earplugs at events where the noise is loud (music concerts, fireworks) and around noisy machinery (lawnmowers, aircrafts, woodwork or metal work machines). Keep the volume down on your stereo or IPod, especially if you're in the car or wearing headphones.

Play listening games like guessing what a recorded sound is; Chinese whispers; or the communication picture game. This is where one child is the speaker and the other the listener. They sit back to back or on opposites sides of the room with pencils and paper. The first child starts to draw a picture and tells the other child exactly what he/she is doing. The listener has to listen carefully and draw exactly the same thing on their paper. When the pictures are complete, they compare pictures to see how well they have communicated.

As a ministry project, have children who can read well, read stories, articles or bible passages and record as an MP3 file or recording to give to an elderly person who is blind and can no longer see but relies on their sense of hearing to enjoy these things.

Memory Verses:

Psalm 34:15 The eyes of the Lord are on the righteous and his ears are attentive to their cry.

Psalm 19:14 May the words of my mouth and the meditation of my heart be pleasing in your sight, O Lord, my Rock and my Redeemer.

Proverbs 20:12 Ears that hear and eyes that see - the Lord has made them both.

John 8:47A He who belongs to God hears what God says.

Isaiah 30:21 Whether you turn to the right or to the left, your ears will hear a voice behind you, saying, "This is the way; walk in it."

Romans 10:17 Consequently, faith comes from hearing the message, and the message is heard through the word of Christ.

Proverbs 18:21A The tongue has the power of life and death.

Psalm 35:28 My tongue will speak of your righteousness and of your praises all day long.

Psalm 126:2 Our mouths were filled with laughter, our tongues with songs of joy. Then it was said among the nations, "The Lord has done great things for them."

Proverbs 21:13 If a man shuts his ears to the cry of the poor, he too will cry out and not be answered.

Activity Sheet 13: Crossword – Look up references and fill in the missing words.

MONTH 9 - Part 5 - Touch

The sense of touch helps us to know what things feel like when they are against our skin. The sensory receptors of the skin are concerned with at least five different senses: pain, heat, cold, touch, and pressure. When we touch anything, nerves send messages to our brain. If the feeling is unpleasant, the brain sends a message to tell us to take our hand away. If the feeling is pleasant, the brain sends a message to say that we may leave our hand where it is. When something hurts us, we feel pain. This is to protect us. Sin has brought pain, but one day God will take away our pain.

When a person takes drugs or alcohol, their sense of touch can either be dulled or made more acute, depending on the drug. A drunk person may actually hurt themselves, but may not feel the pain at the time. This can cause serious injury to result without them having it attended to. (*Proverbs 23: 35* describes a person who is drunk. "They hit me," you will say, "but I'm not hurt! They beat me, but I don't feel it! When will I wake up so I can find another drink?")

Other kinds of drugs will make people more sensitive so that they will react aggressively to touch as if it had caused pain when it may have been more pressure than pain. Help the children to understand the need to keep their senses in good order and not dull them or over-stimulate them.

In this unit children could also be helped to understand the difference between appropriate touch and inappropriate touch. They should be taught that no one has the right to touch them in their private areas unless with their willing consent (e.g. medical examination). Children need to be taught to care for and clean their own private areas when they are toilet trained so that an adult does not need to invade their privacy. They should be taught to respect their bodies and the personal space of others and to treat all with kindness and gentleness instead of disrespect, aggression or violence.

Study the sensory system of the fingers and look at the way in which our fingerprints are all different. Studies have shown that people with smaller fingers have greater sensitivity as everyone has approximately the same number of sensors but on a smaller finger they are closer together and therefore more sensitive to changes in texture. Talk about things that can destroy our sensitivity – cuts, burns, callouses etc.

Play a game with various feely things in a box that is covered or in a bag. Have children guess what it is by feeling with their hands.

Play a pressure game. All stand in circle joining hands, with one person in the centre. A hand squeeze is passed around the circle. The person in the centre has to detect where the squeeze is taking place. If he guesses correctly they exchange places.

The story of Jacob deceiving his father through touch can also be used. Genesis 27:1-29

Louis Braille's story can be used as an example of someone who used the sense of touch to bless many people. Get some copies of books in braille to help the children to understand how to read by touch. Some of the older children may like to try and learn the braille alphabet.

You could also use the story of Helen Keller and her teacher Annie Sullivan and how they learned to communicate through touch.

http://www.youtube.com/watch?v=8ch H8pt9M8&NR=1 (Helen Keller speaking)

http://www.youtube.com/watch?v=Gv1uLfF35Uw (Anne Sullivan explaining how she taught Helen to speak)

http://www.youtube.com/watch?v=556xz3Mw7rw&feature=related (movie on Helen Keller – 1hr 46 mins)

Check out these websites for some great touch experiments to use:

http://faculty.washington.edu/chudler/chtouch.html

http://www.childrensuniversity.manchester.ac.uk/interactives/science/brainandsenses/discovermore/sensitivity.pdf

This one has other activities for younger children:

http://www.twigglemagazine.com/March-activities/sense-touch-preschool-lesson.html

Memory Verses:

Acts 17:27 God did this so that men would seek him and perhaps reach out for him and find him, though he is not far from each one of us.

2 Corinthians 6:17 "Therefore come out from them and be separate," says the Lord. "Touch no unclean thing, and I will receive you."

NLT Matthew 17:7 Jesus came over and touched them. "Get up," he said, "don't be afraid."

NLT Luke 6:19 Everyone was trying to touch him, because healing power went out from him, and they were all cured.

Luke 18:15 People were also bringing babies to Jesus to have him touch them.

NRS John 20:27 Then he said to Thomas, "Put your finger here and see my hands. Reach out your hand and put it in my side. Do not doubt but believe."

1 Thessalonians 2:7 But we were gentle among you, like a mother caring for her little children.

Rev. 21:4 He will wipe every tear from their eyes. There will be no more death or mourning or crying or pain, for the old order of things has passed away.

ACTIVITY SHEETS:

Activity Sheet 14: Find the differences in the picture and use the Braille Code to decipher the memory text and the receptor used. (6 - 12 years)

Activity Sheet 15: Make a tactile Braille Code and label the touch diagram in Braille. (9-12 years)

MONTH 10 - Part 6 - Taste - Nutrition - Stomach

The sense of taste is actually a combination of the work of the taste buds on the tongue and the olfactory senses of the nose. The ability to taste and smell can be affected if anything interferes or blunts the ability of the nerves to accurately register the things that come into contact with it.

Cigarette smoking or the use of chewing tobacco or betel nut, will put the taste buds in contact with chemical compounds that tend to blunt the ability of the buds to register the basic tastes that the system is designed to recognise. The chemicals do not completely destroy the ability of the taste buds to recognize 4 main tastes - salty, sweet, sour and bitter. However, sense of taste is greatly decreased. This is usually a gradual process, so the smoker does not realise that he/she is no longer obtaining the same level of enjoyment from food. Very often a person will add hot spices to the food in order to get a strong taste. The use of very hot spices or foods at a high temperature can also affect our sense of taste as damage can be done to the taste buds. This means that the sense of taste that God has given us is greatly reduced and we do not experience the best of what God has intended. Very cold foods will also dull the sense of taste. Try holding an ice block on the tongue and then eating something that you don't like – the taste will not be as bad.

Each taste bud (and there approximately 10,000 taste buds in humans) is made up of many (between 50-150) receptor cells. The receptor cells replace themselves in approximately every 21 days so your mouth is being renovated all the time. This is also good news for when we find flavours that we may not particularly like. We can train our receptor cells to actually like the flavour in 21 days!! Why not try it out with the vegetables that Mum wants you to learn to like and try a little each day!

Our tastes change as we get older. A baby, has taste buds, not only on the tongue, but on the sides and roof of the mouth. They are very sensitive to different foods. As the person grows, the taste buds began to disappear from the sides and roof of the mouth, leaving taste buds mostly on the tongue. The taste buds also become less sensitive, so that foods that tasted too strong as a child are eaten in adulthood.

The following websites have some useful information or activities on this topic:

http://kidshealth.org/kid/htbw/tongue.html

http://faculty.washington.edu/chudler/tasty.html

http://www.livescience.com/7113-tongue-map-tasteless-myth-debunked.html

Use this unit to also teach the children about nutritious food and the digestive system and how it works and how to keep their bodies in good shape.

Good nutrition has three key principles – balance, moderation and variety.

- There should be a balance in the foods we eat. This balance is best achieved by the following guidelines (sometimes shown as the food plate
 [http://www.choosemyplate.gov] or the healthy living pyramid
 [http://www.nutritionaustralia.org/national/resource/healthy-living-pyramid]
 - Eat mostly plant foods: vegetables, fruits, nuts, dried peas, beans and lentils, breads and cereals (preferably wholegrain). These foods contain many different nutrients and should make up the bulk of the food we eat.

- Eat moderately of fish, lean meat, eggs, chicken (no skin), milk, cheese and yoghurt.
- Eat small amounts of sugars and fats. These foods should be limited because they lack a good supply of the nutrients needed for growth, good health and quick energy. While small amounts of fats, oils and sugar are acceptable, larger amounts of these foods will cause less variety in the foods eaten. When choosing fats and oils it is better to choose the ones that have low levels of saturated fat and higher levels of omega -3 fats. It is also suggested that salt should not be added to foods.
- Drink 6-8 glasses of water a day.
- Exercise daily.
- 2. Moderation means that we should only eat what we need and not over-eat. Even good things can become bad if we have too much of them. What we take into our bodies needs to balance the energy that we use. If we take in more than what we need then we will become overweight and unhealthy. A lack of moderation in the balance mentioned above will also mean that the balance is also put out.
- 3. There should be variety in what we eat. God has made so many different fruits, vegetables, grains and nuts. We need to enjoy the different kinds of things He has made as they all have different nutrients which then work together to keep our bodies healthy. If we only ate one kind of vegetable or one kind of grain we would find that our bodies would start to suffer from a lack of one or more nutrients and we would not be as healthy as we should. One way to make sure that we have variety is to include different colours in our diet. See if you can eat a "rainbow" in the day's meals. There should also be variety in the way our food is prepared and in the texture of the food and the flavours. We need both fresh and cooked food; hard and crunchy or soft and juicy; sweet and savoury.

Have a cooking afternoon and help the children to prepare a simple but healthful recipe. Make a clown face on a plate with different types of fruit and then eat it together. Play a taste game to see if children can identify the object when blindfolded. Do another test with the nose blocked to see how smell can affect the sense of taste. Or have them eat a slice of apple with a piece of onion under the nose.

Cut out pictures of food from magazines and paste on a paper plate to represent the food plate and how we should eat in balance.

Make a wall poster of a rainbow and paste on pictures of different foods to match the rainbow. You can also make a set of traffic lights and paste on pictures of things that we should not eat or drink (drugs, alcohol etc.) for red [stop]; things to be moderate or cautious about for orange [slow]; and things to eat plenty of for green [go].

Memory Verses:

Psalm 34:8 Taste and see that the Lord is good; blessed is the man who takes refuge in him.

Psalm 119:103 How sweet are your words to my taste, sweeter than honey to my mouth!

Isaiah 5:20 Woe to those who call evil good and good evil, who put darkness for light and light for darkness, who put bitter for sweet and sweet for bitter.

Matthew 5:13A You are the salt of the earth.

Mark 9:50 Salt is good, but if it loses its saltiness, how can you make it salty again? Have salt in yourselves, and be at peace with each other.

Col. 4:6 Let your conversation be always full of grace, seasoned with salt, so that you may know how to answer everyone.

GW 1 Peter 2:2-3 Desire God's pure word as newborn babies desire milk. Then you will grow in your salvation. Certainly you have tasted that the Lord is good!

ACTIVITY SHEETS:

Activity Sheet 16: Read the Bible references and match them to the sense of taste that is mentioned. (9 - 12 years)

Activity Sheet 17: Colouring Activity (6 – 8 years)

MONTH 11 – 5 Month Theme - Maintaining the Temple

The last 5 months of this series is focusing on maintaining the temple. Any building or structure needs to be maintained and kept in good order. This is the same for our bodies. The body needs to be kept clean and good repair. The series looks at how to maintain clean air, good blood and cleansing of waste products and then at the roles of sunshine and rest in maintaining a good immune system.

Part 1 - Clean Air - Smoking - Lungs

Our ability to live and breathe comes from God and we need to recognise His continual lifegiving power that flows in and out of our body. We want to maintain this gift in the best possible way and treat it with the respect and understanding that it comes to us from God.

Pollution is an issue that is talked about all around the world. As industry and transport spills pollutants into the air, people have become increasingly concerned about the effect that this has on our well-being. It is important for our bodies to function well that we give our lungs fresh air. If you live in a city, make sure that you take some time to go out into country areas for recreation or to parks or bushland where the air is cleaned to some extent by the trees and vegetation which take in carbon dioxide and give out oxygen. Take an excursion to the mountains, or a picnic by a lake. Enjoy doing things in a home garden. Many of the pollutants in the air can also contribute to cancer so it is important to try and maintain clean air. People who smoke are not only causing pollutants to enter their own lungs but are contributing to polluting the air that non-smokers also need to breathe. This is called passive smoking.

For more information see: http://kidshealth.org/kid/htbw/lungs.html

The lungs are the body's system for getting oxygen to all the cells of the body.

They are one of the largest organs in the body, and they work with the respiratory system to take in fresh air, get rid of stale air, and talk. The lungs have about 600 million tiny air sacs called alveoli, which if stretched out would cover a tennis court. Each tiny air sac has a covering of very small blood vessels called capillaries which are so tiny that the cells in the blood can only pass through them in single file. Alcohol in the blood makes the cells sticky so that they clump together instead of moving in single file. This causes a blockage in the flow of oxygen to the cells and without oxygen, cells die. So alcohol and smoking affect the ability of the body to get oxygen into the cells and destroy the gift that God has given us.

Cigarette smoke damages the cilia in the trachea so they can no longer move to keep dirt and other substances out of the lungs. The alveoli get hurt too, because the chemicals in cigarette smoke can cause the walls of the delicate alveoli to break down, making it much harder to breathe.

Cigarette smoke can damage the cells of the lungs so much that the healthy cells die, and are replaced by cancer cells. Lungs are normally tough and strong, but when it comes to cigarettes, they can be hurt easily — and it's often very difficult or impossible to make them better. Make sure that protective masks are worn if working with chemicals or art supplies.

Exercise is good for every part of the body, and especially for the lungs and heart. Vigorous exercise (e.g. biking, running, or swimming), means that the lungs require more air to give the cells the extra oxygen they need. As a person exercises, they breathe more deeply and take in more air, and the lungs become stronger and better at supplying the body with the

air it needs to succeed.

Have the children do aerobic exercises. Plan an trip in the outdoors where the air is clean and fresh.

Talk about the need to sleep with a fresh air source so that clean pure air is circulating through the body.

Memory Verse:

Genesis 2:7 The Lord God formed the man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being.

Job 12:10 In his hand is the life of every creature and the breath of all mankind.

Job 27:3-4 As long as I have life within me, the breath of God in my nostrils, my lips will not speak wickedness, and my tongue will utter no deceit.

Job 33:4 The Spirit of God has made me; the breath of the Almighty gives me life.

Psalm 150:6 Let everything that has breath praise the Lord. Praise the Lord.

Acts 17:24-25 The God who made the world and everything in it is the Lord of heaven and earth and does not live in temples built by hands. And He is not served by human hands, as if He needed anything, because He Himself gives all men life and breath and everything else.

ACTIVITY SHEETS:

Activity Sheet 18: Which Way Maze – Find the right road away from pollution to the park.

Activity Sheet 19: Lung diagram and coded memory verse – Job 33:4

MONTH 12 - Part 2 - Liver - Clean Blood - Keeping the Temple Pure

The body has a great system for keeping itself clean on the inside. The liver is the organ that is vitally important in this process. It is the second largest organ in the body and has some very important tasks to do. Some of these tasks are:

- To clean and filter the blood taking out toxins and changing nutrients in the blood into forms that the body can use. If there are too many poisons or toxins for the liver to deal with they are stored until it can process them. However, this causes damage to the cells and to the body. The liver can become clogged and not function properly and liver disease can result.
- 2. To produce bile which helps to digest fat. Some of the waste products from the cleaning process go into the bile and are taken out of the body through the digestive tract.
- 3. To store energy in the form of glycogen for when the body needs it.

The best way to look after the liver is to

- 1. Be active being very overweight can damage the liver.
- 2. Eat healthy food, high in antioxidants which help the liver to clear toxins from the body. This means that the more fresh, whole plant foods you eat, the better your liver can work.
- 3. Keep poisons, like alcohol and other drugs, out of the body as they will cause damage to the liver.
- 4. Drink plenty of clean pure water.

Websites: http://kidshealth.org/kid/htbw/liver.html

Talk about Jesus as the one who purifies or cleanses us from sin and who takes away the poison of sin. If we reject Jesus, we are unable to be cleansed and death is the result.

Memory Verse:

Psalm 51:2 Wash away all my iniquity and cleanse me from my sin.

Jeremiah 33:8 I will cleanse them from all the sin they have committed against me and will forgive all their sins of rebellion against me.

2 Cor. 7:1 Since we have these promises, dear friends, let us purify ourselves from everything that contaminates body and spirit, perfecting holiness out of reverence for God.

1 John 1:9 If we confess our sins, he is faithful and just and will forgive us our sins and purify us from all unrighteousness.

Activity Sheet 20: Clean on the Inside - Coded message on how to care for the liver – the blood's filter.

MONTH 13 - Part 3 - Cleanliness - Water - Kidneys

The body cannot survive without water as it is approximately 60 - 80% water depending on age and gender. Water is more essential to life than food – the human body can survive without clothing, shelter or food for weeks, providing there is water, without food and water we soon become lethargic, mentally confused and will finally die. It is important that we are continually taking in water to replace the water that is lost. Water is lost from the body by

- 1. evaporation from the skin sweat
- 2. evaporation from the lungs breath
- 3. excretion from the kidneys urine
- 4. digestion waste faeces

If we do not drink, then we suffer the results of water loss.

> 2.5 % loss = no adverse symptoms 10% loss = serious dehydration

20% loss = fatal

Dehydration causes headaches, tiredness, lack of energy and endurance, confusion, disorientation and death.

Water is needed for:

- Essential body functions.
 - o transportation & sharing of vital nutrients
 - o regulation of body temperature
 - lubrication you couldn't blink your eyes, if tear glands didn't constantly moisten the front of your eyeballs. Lack of water would cause great pain and eventually blindness.
 - o excretion of waste cleansing
- Brain function The brain is 70% water.
 - o It is the first to suffer the effects of dehydration
 - Lack of water may affect our
 - Concentration
 - Disposition
 - Pain thresholds
 - The first medication for a headache should be a glass of pure water.
- Helps protect the heart
 - O LOMA LINDA STUDY:

People who drank at least 5 glasses of water a day were less likely to die from a heart attack than those drinking less than 2 glasses a day.

Women - 41% risk reduction
 Men - 54% risk reduction

Those drinking other fluids (coffee, tea, juice, milk, alcohol) were more likely to die from heart attack.

- Women two fold increase in risk of death
- Men 46% increase in risk of death

Mechanism of protection: Water decreases blood thickness

"Water is a cheap, easy and harmless way to help your heart."

Dr Jacqueline Chan

• Helps our endurance - Harvard Study showed that those who drank as per their

thirst plus 1/3 more (actual amount lost in perspiration) could maintain their body temperature while walking at 5.6 km per hour in a hot environment. They felt they could continue even after 7 hours of walking.

Infants; persons suffering with diarrhoea; people who don't drink; those engaged in heavy physical exercise; and those living in hot conditions are more at risk of dehydration than others.

Good water drinking habits:

- In the morning, before breakfast flush out the system with 1 2 glasses of water, preferably warm.
- Between breakfast and lunch drink 2 3 more glasses of water.
- In the afternoon, drink another 2 3 glasses
- In the evening, drink 1 glass at least an hour after eating. This will prevent you from feeling thirsty and take care of your body's needs.

The body needs at <u>least</u> 6 to 8 glasses a day. When doing active work or perspiring heavily you need to drink extra water to compensate for the extra loss. You usually need twice as much as your thirst indicates.

The kidneys (there are two of them) are an organ comprised of about one million filtering tubes, each one closely linked to its own blood supply. The kidneys act as an automatic cleaning and filtering system for the body, removing waste products from digestion and metabolism, surplus nutrients and vitamins (water-soluble varieties), water and many toxic or unwanted substances.

The kidneys also regulate the balance of water and electrolytes in the body and produce some hormones. All we need to do to keep normal kidney function is to drink plenty of water. If a person is drinking sufficient fluid, the bladder should be emptied at least every three hours during the day and the urine should remain clear and odourless.

The main function of water in people, houses, streams and oceans is to clean.

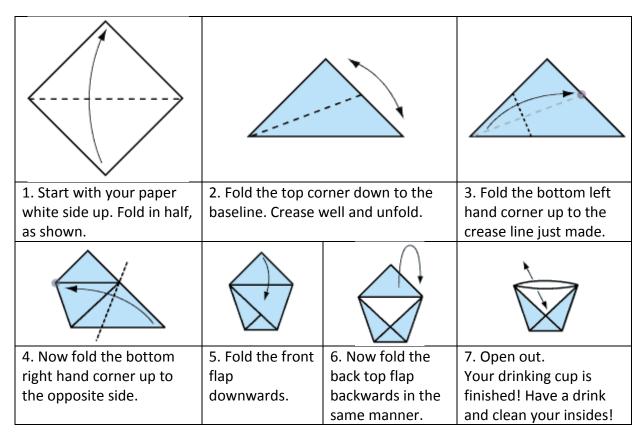
Every homemaker uses water almost continually to clean the family's food, clothes, dishes and surroundings. Outside the body, hot and cold water is well known to relieve pain and to prevent infection and skin diseases by removing bacteria. When you have a bath or shower, your skin breathes more easily, the dead skin cells, toxins and waste products in your skin are removed. Bathing makes the muscles more flexible, it refreshes and soothes the nerves, and can improve circulation. A daily bath or shower and thorough washing of the hands throughout the day helps to keep the body healthy, clean and sweet smelling.

Link our need of water to our need of Jesus – the water of life. He provides nourishment to our spiritual life, cleanses us from sin and gives us endurance in our Christian walk. Like physical dehydration, a lack of Jesus causes a lack of enthusiasm, confusion, disorientation and eventually death as it means a rejection of salvation.

Play water games with the children.

Involve them in helping to provide clean water to communities that do not have water.

Make origami cups from a paper square (use grease proof paper) and have the children use them to drink a cup of water.



Websites:

http://www.adra.org/site/PageNavigator/work/what/providing food and water http://kidshealth.org/kid/htbw/kidneys.html

Memory Verses:

Psalm 51:7 Cleanse me with hyssop, and I will be clean; wash me, and I will be whiter than snow.

Isaiah 12:3 With joy you will draw water from the wells of salvation.

John 4:13-14 Jesus answered, "Everyone who drinks this water will be thirsty again, but whoever drinks the water I give him will never thirst. Indeed, the water I give him will become in him a spring of water welling up to eternal life."

Rev. 22:17B Whoever is thirsty, let him come; and whoever wishes, let him take the free gift of the water of life.

ACTIVITY SHEETS:

Activity Sheet 21: Pictograph – Isaiah 12:3

Activity Sheet 22: Questions on water. Find the kidneys that are in the right place and the number of glasses hidden in the picture.

Answers: shower, glasses, toxins, kidneys, urine. Essential for life – WATER. No. of glasses – 8.

MONTH 14 - Part 4 - Sunshine - Skin

Sunshine plays an important part in health. SAD (Seasonal Affective Disorders) has been related to the lack of sunlight in countries where the winter sun is limited. A spot of sunshine doesn't just lift your spirits, it also boosts your immune system.

Research shows that vitamin D, made when our skin is exposed to sunlight, plays a key role in activating white blood cells that protect the body from flu, food poisoning and even cancer. Without this vitamin, the cells do not join the fight against disease. A series of laboratory tests showed that the vitamin triggers dormant white blood cells into turning into 'killers' that seek out and destroy infections. Other white blood cells turn into 'helpers' that enable the immune system to build a 'memory' of the infection, allowing it to mobilise more quickly on the next encounter.

It is well known that vitamin D is also vital for calcium absorption and bone health and some studies have suggested it has an anti-cancer effect.

In countries which have a lot of sunshine, warnings have been given regarding avoiding exposure to sunshine. This occurred because studies showed a link between cancer and the ultra violet (UV) spectrum of sunlight.

However, while there is a link, it is more to do with getting no sunshine all week (working / studying inside) then getting badly sunburned on the weekend. A high fat diet has also been associated with higher incidence of skin cancer from exposure to sunlight. After 20 years of warnings, scientists are now finding an epidemic of vitamin D deficiency (vitamin D is produced by sunshine on the skin) that is causing all sorts of health problems. The solution is moderation. Daily moderate exposure to sunshine is necessary for good health.

Sunlight is the best and only natural source of vitamin D. Unlike dietary (found in oily fish and eggs) or supplementary vitamin D, when you get your 'D' from sunshine your body takes what it needs, and de-metabolizes any extra. Because too much 'D' from dietary supplements may cause the body to over-process calcium, nobody really knows for sure how much supplementary vitamin D is safe. On the other hand, sunlight-induced vitamin D doesn't have that problem – it's the way your body is intended to make it! In making the Vitamin D, sunlight uses cholesterol and some of the plant-derived sterols deposited just under the skin. In doing so, it uses up some of the body pool of cholesterol. This can help to lower cholesterol levels that are too high.

Therefore it is important to make sure you have a moderate exposure to sunlight every day and allow your body to be on guard to fight disease.

At the same time, protect your skin from over exposure to the sun and enjoy good health and the healing that sunlight can bring.

Sunlight in our homes also helps to kill germs. Clothes dried in the sun smell fresh and clean.

Some drugs have a direct impact on our skin and looks. Ice (methamphetamines) can quickly age a person. So in order to maintain good looks and healthy skin, stay away from drugs.

Have fun writing Haiku poems with the children. Here is an example.

Sunshine

Gold, bright rays of light -Bring-ing light and warmth to earth: Sun-light beam-ing down.

They only have three lines. Each line has a certain number of syllables. The syllables are shown with a (-) in the example above.

Line 1 = 5 syllables Line 2 = 7 syllables Line 3 = 5 syllables

Try some of these themes – Air; Water (in its different forms – ice, snow, steam, clouds, rivers, fog, frost); Sunshine; Rest.

Memory Verses:

Malachi 4:2A (NLT) But for you who fear my name, the Sun of Righteousness will rise with healing in his wings.

Matthew 13:43 Then the righteous will shine like the sun in the kingdom of their Father.

Activity Sheet 23: Sunshine code.

Answers: Vitamin D

- 1. Boosts immune system.
- 2. Strengthens bones.
- 3. Kills germs.
- 4. Lowers cholesterol.

MONTH 15 - Part 5 - Rest - Immune System

Another vital principle in maintaining the body temple is that of obtaining adequate rest. It is as important to health as is activity. You must rest well to stay well. Rest is a time when energy is restored. The body is designed so that it cannot function without adequate periods of rest. To maintain vibrant health, you must have a balance between activity and relaxation. Only in this way can mind and body be restored.

The heart is one of the best examples of the balance between rest and activity. After every contraction (called systole) of the heart, there is a brief rest period (called diastole). A healthy heart contracts in about one-tenth of a second. During the remainder of that second it rests. During this resting period, the heart is nourished with oxygen and nutrients, enabling it to continue at peak efficiency.

Other organs of the body have this cycle of work and rest. For instance, the filters of the kidneys operate in shifts, one-third of the cycle in action, one-third in rest, and one-third in preparation for action. The cells of the liver and pancreas have cycles of work and rest. The fibres of your muscles work and rest in shifts, unless they are engaged in strenuous activity. The digestive system needs a period of rest between meals in order to replace the enzymes needed for digestion. Every cell of the body follows a cycle of rest and work. The entire body is filled with rhythm.

Proper rest habits contribute to the quality and length of life. Rest also improves mental and physical efficiency. One day of rest each week is a prescription written in history by God Himself.

Rest is also a healer. Acute infections like pneumonia, influenza, and even the common cold respond favourably to rest. Rest gives your body a boost in overcoming infection. The natural killer (NK) cells in the immune system are especially affected when sleep is not sufficient as they are made while sleeping. Lack of adequate rest or sleep can contribute to a breakdown in health. A broken arm or a sprained ankle needs a period of rest in order to heal. Wise use of rest brings healing and restoration. Yet, too much rest is harmful.

During rest the body is replenished, waste products removed, and body systems are reenergized by the master glands. Everything is prepared for renewed activity. The internal workings of the brain with its electrical currents and chemical messengers have much to do with the state of consciousness and sleep cycles. The neurotransmitters have many other functions. Dopamine causes the release of growth hormone by the pituitary which occurs mainly during sleep. Alcohol and certain drugs, can affect the sleep patterns of the body and deplete the neuro-transmitters in the brain that control these rhythms.

Depriving yourself of sleep will interfere with all your body functions. It will seriously restrict your efficiency. Losing too much sleep can even cause paranoid delusions and hallucinations.

The amount of sleep needed for good health differs with age. Newborn babies may sleep 16 to 20 hours a day. Young children need ten to twelve hours of sleep daily. By age 40 most adults need six or seven hours of sleep a day.

One study on sleep showed that those who had seven hours of sleep per night had the lowest death rates. Those who had more, or less than seven hours had death rates that increased in proportion to the difference. The best sleep comes from an uninterrupted period of six or seven hours. The best sleep is in the hours before midnight.

Other rest breaks are also important.

- Take regular five-minute breaks every two hours. If you are engaged in a sedentary occupation, a brisk walk is helpful.
- Plan for time with your family and friends.
- Carefully plan for a "fun" vacation (even a short one) every six months.
- Remember the cyclic "rhythm of sevens" and take a day each week for reflection and relaxation.

Memory Verses:

Exodus 33:14 The Lord replied, "My Presence will go with you, and I will give you rest."

Psalm 116:7 Be at rest once more, O my soul, for the Lord has been good to you.

Isaiah 30:15A This is what the Sovereign Lord, the Holy One of Israel, says: "In repentance and rest is your salvation, in quietness and trust is your strength.

Matthew 11:28-29 Come to me, all you who are weary and burdened, and I will give you rest. Take my yoke upon you and learn from me, for I am gentle and humble in heart, and you will find rest for your souls.

Hebrews 4:9-10 There remains, then, a Sabbath-rest for the people of God; for anyone who enters God's rest also rests from his own work, just as God did from his.

Psalm 4:8 I will lie down and sleep in peace, for you alone, O Lord, make me dwell in safety.

Proverbs 3:24 When you lie down, you will not be afraid; when you lie down, your sleep will be sweet.

Activity Sheet 24: Sleep Picture and Memory Verse (Proverbs 3:24) – Colour by numbers: