

TEACHING WASH IN SCHOOLS

YEAR 3–4

**Teachers'
supplementary
notes**



Acknowledgements

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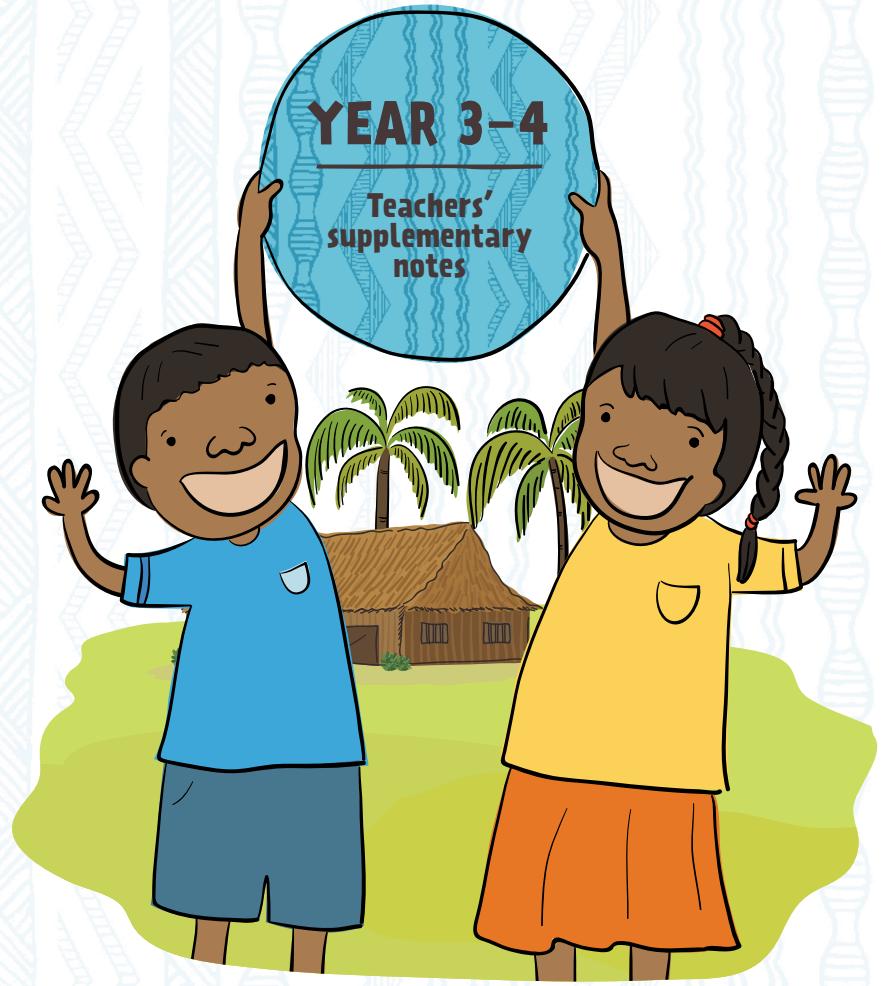
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Foreword

Honourable David Collins

Minister for Education

I am privileged to present this WASH Teacher Supplementary Notes and other toolkits as Information Education and Communication (IEC) materials that will guide/enhance the teaching, learning and assessment of WASH in Schools. WaSH – Water, Sanitation and Hygiene in Schools concepts are embedded in the Health component of the Year 1 & 2 Healthy Living subject, Year 3-6 Healthy Living Syllabus and are integrated across subject areas. This is part of the National Curriculum and Assessment Framework (NCAF) that was implemented after Cabinet's approval in November 2009.

The WASH resource toolkits include Y1-2, Y3-4, and Y5-6 and with supplementary notes, readers, fact sheets and some games.

As a nation of almost 100 primary schools established in 21 inhabited low atoll islands, with the geographical remoteness of these islands, this makes one of the biggest challenges for teachers to reach out to all children across and deliver education that is of good quality. The Ministry of Education has included amongst its nine goals one that looks into mitigating such a challenge; goal 4 that states *Provide a conducive learning environment in Kiribati schools*. The notes as supplementary guides serve the intentions of this goal in a manner where teachers are equipped and resourced with sufficient materials. No matter how remote the schools are, and with limited resources, these notes are readily made available to add to teaching materials and provide greater options for teachers to use in the classrooms and ensure quality education.

The provision of these notes is a critical component of teacher preparations, considering the long period of time needed from the initial stage of developments to this completion stage, the outstanding efforts and commitment of those involved in particular stages and most of all the funding support provided at all stages of which without, these notes would not have been progressing and completed. It is therefore my pleasure to take this opportunity and acknowledge all the good deeds of Partners and Stakeholders.

In particular the contractor Live & Learn Environmental Education (LLEE) that leads the works on these notes under the funding support of UNICEF, and every individual from both within and outside the Ministry of Education who has played a significant role for the success completion of these notes. I believe there will be more works in the future and I seek everyone's continuous support and collaborations to enhance mutual partnerships.

On behalf of the children of Kiribati, may our traditional blessings of Good Health, Peace and Prosperity prevail upon every one of us.

David Collins

Honourable Minister for Education



Important reminders to teachers

This Year 3-4 WASH Supplementary Notes is prepared to support teachers deliver WASH related contents reflected in the Year 3-4 Community and Culture Syllabus.

WASH is an acronym that stands for Water Sanitation and Hygiene – WASH. These notes focus on WASH in Schools and it is worth keeping in mind that much of what you do in the class will find its way home with students. WASH in Schools safeguards the health of children, supports and promotes the provision of safe drinking water and improves sanitation and hygiene facilities and practice. Students are encouraged to be agents of change and promote positive hygiene practices in the community.

Why teach WASH in Kiribati classrooms?

Globally every year there are 2 million diarrhoeal deaths related to unsafe water, sanitation, and poor hygiene. Most of these deaths occur among children under 5 years of age (WHO, 2012). Diarrhoea diseases kill more children than AIDS, malaria, and measles combined.

This makes diarrhoeal disease the second leading cause of death among children under five (CDC, 2012). Kiribati has the second highest number of diarrhoeal deaths under 5 years of age in the Pacific region.

Education will help our communities make the lifestyle changes required for a better tomorrow. Teachers are the key enablers of children and can support them as agents of personal behaviour change and community behaviour change and attitude.

The whole of school approach through classroom and club activities will improve good hygiene practices in schools and therefore will reduce sickness, improve your teaching outcomes, the standard of education in your school and improve your school's ranking. Improved education levels benefit the whole community and builds Kiribati's future.

How do children learn WASH concepts effectively?

Fun and Practical Activities

Year 3 and 4 children learn water, sanitation and hygiene concepts through practical and participatory activities in the classroom and on the field: they are child-centred and fun activities including:

- Songs, poems and rhymes
- Role Play
- Games
- Dances
- Stories
- Practical demonstrations and hands-on activities on the field.

Language of Instruction

The WASH concepts MUST be taught, learned and assessed in Te Kiribati. Children learn effectively through the language they know.

Year 3-4 students will consolidate learning of the WASH concepts through reading captions sentence, drawing, copying, labelling and printing, rhymes, poems, songs and games.

Year 3-4 students will learn the same WASH concepts as they develop their basic literacy skills: reading and writing based on sharing personal and factual experience, recounts, description, listing, labelling, and processes.

Classroom WASH displays must be in Te Kiribati. Do not write or display WASH concepts in English in Year 3-4 classroom. Stick to Te Kiribati language!

Multi-grade teaching

The multigrade teachers will find it easy to use this one handbook for Year 3 and 4 students. At this elementary level it is important to repeat themes while facilitating varied educative activities that are fun and inclusive of all ability levels.

- Give time and space so children can display their WASH work and encourage them to tell their own WASH stories from home and school.
- Always remember to congratulate your students for all efforts.

How to use this resource

All teachers must make the effort to learn WASH songs, poems and rhymes first; then recite and sing them to students so they can hear them as they come from you.

Note that this document is to be used when it comes to teaching the WASH topics under the health component of the Year 3–4 Community and Culture curriculum indicated as follows:

Topic 3: Time

Topic 7: Water and Food

Topic 9: Personal Health and Hygiene

Topic 15: Clean and Safe School Environment

What's in this resource kit?

The teachers WASH toolkit includes a bibliography of resources, a Te Kiribati/English glossary of WASH terms, posters, stories and a board game. All resources are designed to complement your classwork.

Kiribati WASH in School (KWinS)

WASH is an abbreviation that stands for Water, Sanitation and Hygiene.

WASH in Schools safeguards the health of children, supports the provision of safe drinking water, improves sanitation and hygiene facilities, enables children to be messengers of change and promotes lifelong health for children and their families.

WASH in school enables all children in Kiribati classrooms to learn the right to:

1. Safe and affordable drinking water
2. Basic sanitation facilities/services
3. Improved hygiene practices
4. Survive, develop and grow.

Please refer to the 3 STAR Approach poster for checking on the benchmarks achieved so far.

Roles and Responsibilities

Students

An efficiently and effectively implemented WASH in Schools programs will lead to students who:

- Are healthier
- Perform better in school
- Positively influence hygiene practices in their homes, among family members and in the wider community
- Learn to observe, communicate, cooperate, listen and carry out decisions about hygienic conditions and practices for themselves, their friends, and younger siblings whose hygiene they may care for
- Change their current hygiene behaviour and continue better hygiene practices in the future.

Parents and Guardians

Parents/guardians are expected to take an active interest in their child's education and support the WASH in School programs.

Community

The community is expected to:

- Respect, protect and promote the rights and cultures of children
- Support and celebrate WASH.

Schools

Schools through the school leaders are responsible for:

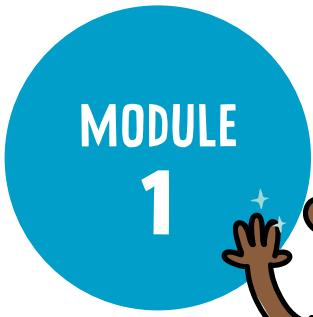
- Empowering children with knowledge, skills and values on WASH concepts.

Teachers

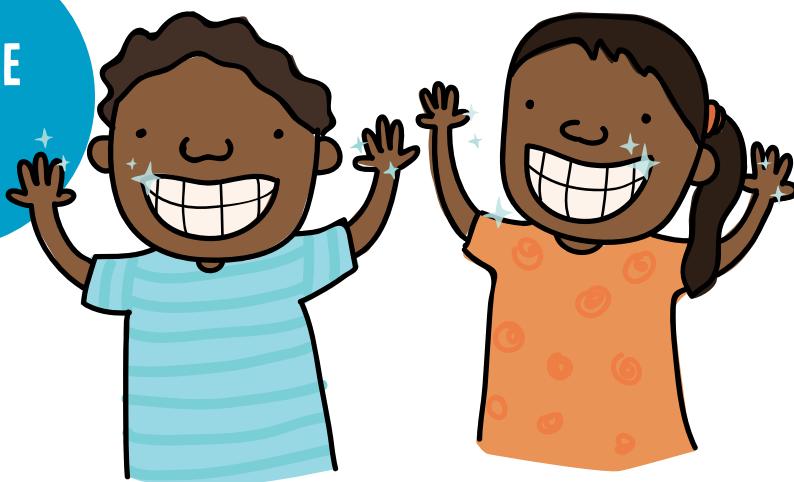
Teachers are expected to understand the implication of the WASH policy and concepts in order to deliver WASH related pragmatic lessons to exert effective learning, teaching and assessment that impacts on learner change behaviour.

The Ministry of Education supported by other relevant sectors, NGOs and UNICEF shall:

- develop, disseminate and train teachers on WASH- IEC materials
- assess, monitor and evaluate the rollout of WASH programs in all Kiribati schools



**MODULE
1**



Personal hygiene

What is personal hygiene?

Personal hygiene is a health practice employed to prevent or minimise the incidence and spread of diseases such as flu, fever and diarrhoea.

Personal hygiene practices or key healthy habits that children should learn and adopt:

1. Wash your hands with soap
2. Trim and clean your fingernails
3. Clean your teeth twice a day
4. Bathe every day with soap
5. Wash and comb your hair regularly
6. Cut and clean your toe nails
7. Treat and cover any sores
8. Always wear clean clothes
9. Sleep in a clean area
10. Always go to the toilet in a proper place and follow all the toilet rules.



Sing the song 'Ngkana Ko Kan Marurung'

What are Germs?

Our bodies are covered with microscopic germs. Germs want to live on our bodies because our bodies keep them warm and alive. In our contact with other people, we swap germs every day and we pick up germs from our surroundings.

Just because our hands look clean doesn't mean they are free of germs.

Handwashing

Why wash our hands?

Put up a poster of hand full of germs and discuss:

- We use our hands to eat, work and write.
- Our hands can cause the spread of diseases like cold, flu and diarrhoea.
- It is very important to wash our hands with soap and clean water.
- Water and soap remove germs that we can't see.

How to wash your hands

Take children out to the tippy taps to ensure they can demonstrate the correct way to wash hands.



Refer to handwashing factsheet on how to wash your hands.

How to encourage students to wash their hands

- Lead by example
- Place handwashing reminders, such as posters, at eye level by the bathroom/water points to remind students to wash their hands
- Make sure the sink or tippy taps are at the right height for the students to use.

Develop a 'Strong School Program' such as:

- Hand-washing bell 1-2 minutes before break time with thorough monitoring
- Prizes for active class/classes who regularly wash hands
- Maintain, clean and fill tippy taps regularly
- Check and provide soap for each tippy tap station
- Initiate WASH Club activities with good guidelines and supervision.

Keeping fingernails short and clean

Dirt and germs hide under fingernails. This is why it is important to keep your fingernails short. If fingernails are short they are easier to keep clean.

You should only use nail clippers or nail scissors to cut your finger nails. Do not bite them because this will mean you will swallow dirt and germs.

Clean your fingernails for about 20 seconds for each hand. Don't forget to clean your thumbnails.



Experience and Reflection

Questions for students

1. What activities trigger you to wash your hands most?
Would this be sufficient to stop people getting sick?
2. Why or why not? When should we wash our hands with soap?
Do you think this is sufficient for disease prevention? Why or why not?
3. Why is it important to keep our fingernails trim and clean?
4. What are the reasons we wash our hands?
5. Do you think your classmates always practice healthy hygiene?
Can you give examples?
6. How can we encourage each other to continue our healthy habits?
7. Explain clearly why we should keep our finger nails and toe nails short and clean. Ask children to list some problems if we do not cut our finger nails.
Use questions such as:
 - Look at your finger nails. Are they clean? When did you last clean under your fingernails? When did you last trim your fingernails?
 - What will happen if you keep your nails long?
 - Is it hygienic to have long dirty finger nails?
 - Why is it important to keep our fingers short and clean?

Class Activity

Do this experiment with students to encourage them to always use soap when they wash hands:

1. Spread oil on a quarter or half the students' palms.
2. Tell those who have oil on their hands to shake hands with others who do not have oil on their hands. What happens?
3. The oil spreads to both people. The oil is similar to invisible germs that spread to other people we shake hands with.
4. Explain that the germs may have come from not washing hands after going to the toilet and after playing with animals.
5. Now wash hands without soap. What happens? The oil remains on their hands.
6. Now wash hands using soap. What happens? The oil is easily removed.
7. Tell the class that soap effectively removes dirt, germs or oil
8. Explain that we do not mean to spread germs BUT if we do not wash our hands with soap and clean water, then we will spread germs.

Other suggested activities

1. Plan a school inspection to check students have short and clean finger nails.

Brushing teeth

Oral hygiene (oral care)

Our mouth cavity is full of bacteria and is a good environment for bacterial growth. It has a temperature of 37°C and is often rich in food particles that support bacterial growth.

The decaying process that takes place on the surface of the teeth eventually produces a build-up called plaque that is hard, yellowish, calcified deposit on the teeth. The result is tooth decay. In addition, unpleasant smelling breath, teeth and gum infections can be the result of poor oral hygiene.



That's why we need to clean our mouths by doing the following:

1. Rinse the mouth after each meal.
2. Brush your teeth with a fluoride-containing toothpaste twice a day – before breakfast and before you go to bed. Cleaning the mouth with twigs is possible if done carefully.
3. During the day, fill your mouth with water and swish it around to get rid of anything sticking to your teeth.
4. In addition to regular brushing, it is advisable to floss your teeth at least once a day, usually before you go to bed.

How to brush your teeth

We need to look after our teeth as poor hygiene can cause bad breath or, worse, infections in our mouth. Sore teeth can be painful and make eating and speaking difficult. We also want our teeth to grow strong. Poor hygiene can cause cavities and our teeth to rot.



Refer to factsheet on how to brush your teeth.

Classroom discussion

Generate a discussion by asking students the following questions:

1. How many times should you brush your teeth?
2. When is the right time to brush?
3. How would your mouth smell if you don't brush your teeth?
4. What can cause tooth decay? How can we prevent tooth decay?
5. When will you buy a new brush? How do you know it is the right time to get a new toothbrush?
6. Demonstrate basic two-three steps to follow when brushing your teeth.
7. Ask children if they remember to brush teeth before sleeping and when they get up in the morning.
8. List things needed to brush your teeth: tooth brush, small amount of toothpaste and clean water.

Make up a story about a child who eats too much sweet food while not brushing their teeth. They end up with tooth decay. Explain to children that it is cheaper to use a toothbrush and toothpaste rather than having to suffer the pain of tooth decay.

Ask students if they can identify with the characters in the story.



Experience and Reflection

Questions to ask students

1. When do you brush your teeth?
2. When will you buy a new brush?
3. Why should we brush our teeth two times a day?
4. How long does it take to brush our teeth properly?
5. What kind of toothpaste should we use?
6. What happens if we do not brush our teeth in the morning or evening?
7. Who's going to suffer with toothache?

Discussion

Nawerewere Hospital Dental report (2016)

The dental ward at the national hospital informed the public during its open day in late July 2016 that 7 out of 10 Year 1-3 children have tooth decay problems. Nawerewere Dental Hospital is now working on a strategy to cut this number to 3-4 out of 10 children.

Discuss with your students how they can contribute to lowering the high levels of tooth decay.

Class Activities

Brushing Teeth

1. Tell children to bring their toothbrush to school. Teacher will need to prepare toothpaste to spread on each toothbrush..
2. Teach children how to brush by following the instructions on the factsheet.
3. Encourage children to talk at home about the problems of having a toothache.
4. Ask the class what would they say if their family experienced the pain of a toothache?
5. Ask the class how could they encourage their younger siblings to brush their teeth to avoid tooth decay?

Comb and wash hair regularly

If we do not wash or comb our hair, we risk being infected by lice. It is unhealthy to have lice in our hair. The best way to avoid lice is prevention. To avoid lice, wash and comb your hair regularly, wear clean clothes and never share hats, hair brushes or combs with anyone.

Students with long hair have a higher chance of catching lice. Girls, for example, need to take care when their head or hair touches other students.



Read a story 'Ai Rarabwara Au tia Reirei!'



Experience and reflection

Questions to ask students

1. Why is it important to wash hair regularly?
2. What can live in our hair if we do not wash our hair regularly?
3. How can we get rid of lice from our head? Is it hygienic to live and sleep with lice or to crack lice with our teeth? What do lice bring?
4. How do you feel if you have lots of lice on your head? Do you concentrate in school? *Actually, you can't concentrate because lice makes your head itchy, breaking your concentration.*
5. Refer to children's usual practice of washing hair they have learned from home. Allow children to share how they use shampoo. Anticipate that young girls of Year 3 do not know exactly how to wash hair with a shampoo.

Class activity

1. Ask children to work in groups to draw a timetable of when hair should be washed at school or at home; who's going to bring shampoo or soap for each hair washing day, etc. The timetable should be displayed and strictly followed.
2. Plan a road show or a skit to inform audience how to get rid of head lice, why should we remove lice and why we should not put lice in our mouth or crack lice with our teeth.
3. Demonstrate how to wash hair with shampoo and tie the hair afterwards. Children should emphasise the need for parents/audience to remove lice because it hinders concentration in school.

Other suggested class activity

Take children out and carry out a practical lesson washing their hair with shampoo.

Demonstrate a procedure washing hair with shampoo. Refer to the instruction on factsheet. You can do this practical lesson towards the end of school, so that children return home with shampooed hair with a towel.

Plan that hair and head inspection is carried out as part of a weekly school program. Teachers, head-teachers and school committees must create and enforce a school law that children and teachers must not come to school with lice. Write a letter informing parents of the new school rule.

Bathe with soap and clean water

We need to bathe with soap every day in order to stay clean, healthy and hygienic. Soap removes dirt that spread on our skin, germs and excess oil from our skin.

We should use a gentle soap and a soft cloth to wash our body, concentrating on those parts that need most attention: face, hair and neck, under your arms, your groin and bottom and feet. Try and have your own personal soap, do not allow others use your soap or vice versa. It's more hygienic. Do not use really strong soap like laundry soap to wash skin.



Skin problems are common and people who have skin problems, such as rashes, know that soap can make the problem worse. Some people prefer to use less soap.



Experience and Reflection

Allow children to share how they bathe. Give children time to reflect on better ways to bathe by using a cloth, not sharing soap, rinse with clean clear water, not milky water that is caused by soap lather.

Suggested class activity

1. Tell children to apply bathing at home, as explained above.
2. Ask different individuals to recount on the application of bathing they did at home.
3. Allow children to share their feelings of being clean.
4. Integrated literacy work - journal writing: children can write about what they have learnt about regular bathing.

Importance of washing face

Features which are part of the face

Just as we need to keep our hands and our teeth clean we need to wash our face every day. We use our face much more than we think. If we list all the main features of our face – ears, eyes, nose and mouth we see that these features are entry points to the body.



Refer to factsheet on how to wash your face.

Importance of treating and covering sores

A sore is an injury or an external break in the skin.

Sores are where germs and bacteria can get into our skin, this is why we keep them clean and make sure they are healing properly.

Do not pick or scratch a sore, it will create a scar and will heal slower. Sores that are not covered attract flies and flies carry germs. The sore will get infected and will take a long time to heal. Cleaned and covered sores will heal more quickly, and control the spread of germs.

Some sores can be caused directly by germs or bacteria, these are usually called 'school sores'. Bacteria can live harmlessly on and inside various parts of the body, such as the skin surface and nose. However, cuts and abrasions or itchy skin can allow the same bacteria to cause an infection to deeper skin tissue. Healthy, intact skin can sometimes develop school sores too. School sores are characterised by collections of small, crusting blisters that usually form on the face or limbs.

School sores spread very quickly. A child with school sores should be kept at home and will need to go to the clinic for antibiotics, which need to be reapplied until the sores have completely healed. It is important to follow all the instructions from the clinic and finish all antibiotics. Always finish the antibiotics and cover school sores.

Suggestions for home care include:

- wash the sores with soap every eight to 12 hours
- after each wash, pat the sore dry. Use a clean towel or cloth or tissue every time
- apply a dressing to stop the spread of infection. Use a bandage to hold the dressing in place and help stop scratching sores
- go to the clinic if the sores spread and get worse or if you become unwell
- change your clothes every day and change linen (towels, sheets, face washer, sleep wear) daily while the infection is present
- wash hands with soap and clean water every after touching the sores.



Experience and Reflection

Class activity

Healthy habits presentation

1. Break the class into groups and have each group review one key healthy habit to make an oral presentation to the class.
2. Group members should use their own experiences at school and at home.
3. They will have to explain each healthy habit step by step, from start to finish.
4. Encourage group members to explain why they see something as a good hygiene choice.
5. Ask the class to think of barriers to good personal hygiene using their own personal experience. List the barriers to good personal hygiene and discuss them with the class. Try to find out which barrier is linked to any of the healthy habits. For example, it is pointless to wash your hands with water if you don't have soap. Use ashes if it's impossible to get soap.
6. At the end of each oral presentation ask questions based on what you know of their routine – do they always have soap, toothpaste, toothbrush, laundry soap, a clean towel; do they have to share some of these things with family? Ask these questions so the real day to day picture is clear.

Follow up class activity

Taking the Message Home

Over the year the class will do activities which the students can discuss with their families so their families will learn about and support students' healthy habits. Students will do activities outside the classroom, for the community, to build a common understanding that good personal hygiene will contribute to good public health.

1. Tell students to talk to their family about that healthy habit. They should talk to them about handwashing and other hygienic practices.
2. Encourage the students to encourage their family members to wash their hands after going to the toilet and before eating.
3. Students should record the presentation as pictures and captions in their daily journal.

Presentation

1. Students can present a recount based on their experience when they talk to their family members about healthy habits:
 - Did they sing the WASH song or perform the WASH poem and actions?
 - What did their parents, sisters or others say?
 - Did they talk to the community?
2. Praise children for what they have done.
3. Explain that this is an example of being a hygiene hero – an agent for good hygiene change in the community.



MODULE 2

Common childhood diseases

Diseases

Disease is a sickness caused by the spread of germs. Some diseases can spread through germs from one person to another. Examples of diseases include influenza, tuberculosis, scabies, hepatitis B and diarrhoea.

Common childhood diseases include:

- Diarrhoea
- Vomiting
- Pneumonia
- Colds and flu.

What is diarrhoea?

Diarrhoea is having frequent, loose, watery poo (which may be referred to as 'stools'). You may get diarrhoea after being in contact with someone else who has it, or you may get it from food poisoning - after eating contaminated food or drinking contaminated water.

One of the biggest killers of children under the age of five in Kiribati, and throughout the world, is diarrhoea. Diarrhoea is caused by germs that get into our stomach; they cause pain and trigger constant liquid waste.

Diarrhoea causes us to lose too much of our bodies water and natural body salts, we become dehydrated and can die if that water is not replaced. The infection that causes diarrhoea can be passed on through contaminated food or drinking water, or from person to person through poor hygiene. Diarrhoea can last several days and can deplete the body of the water and salts that are necessary for survival. Most people who die from diarrhoea actually die from severe dehydration and fluid loss.

Causes and impacts of diarrhoea

- As a waterborne disease diarrhoea is caused by drinking dirty/contaminated water
- Infection commonly results during drinking, preparation of food and eating that contaminated food
- Chronic diarrhoea leads to malnutrition as nutrients cannot be absorbed
- Retards children's growth and development.

How to prevent diarrhoea

Hygiene practices including the three interventions can significantly reduce the incidence of diarrhoea:

- Improving water quality at household treatment and keeping food safe
- Hand-washing with soap and fresh water at critical times
- Proper disposal of adult, child and animal faeces.



Tell a water story about Teraakoro and his family.

Relate the events of the story told to children's life experiences.



Experience and reflection

Questions to ask students

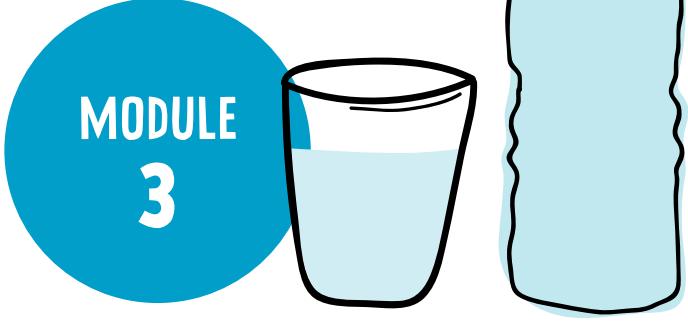
1. Have you had diarrhoea? How did you feel?
2. Did you know why you had diarrhoea?
3. How many days did you have diarrhoea?
4. What are the causes of diarrhoea?
5. Has your younger brother or sister ever had diarrhoea?
6. Does your mother know the cause of diarrhoea?
7. How would you help to prevent diarrhoea in your family?

Suggested class activities

Group work

Tell children to work in groups to prepare a presentation to any audience on:

- The causes of diarrhoea
- How to prevent diarrhoea
- How members of your family can be affected when they have diarrhoea (e.g. missing work or school, unable to look after the family).



MODULE 3

Water

Water - a basic need

Water is essential in our lives because it is one of the basic needs for human life. That is why we hear people say "Water is life."

We stay healthy if we drink sufficient, clean and safe water. Water is linked to our health, general well-being and livelihood.

Water is necessary for the maintenance of good health because it:

- detoxifies the body preventing tiredness, headaches and constipation
- protects and moisturises the joints and skin
- helps our organs to absorb nutrients better
- regulates body temperature.

How much water should I drink each day?



5-8 years
drink one litre of
boiled water

9-12 years
drink 1.5 litres
of boiled water

13 years and above
drink 2 litres
of boiled water

Other uses of water

- **Basic human need:** to be able to breathe.
- **Reduce disease:** water is critical to good hygiene.
- **To keep clean:** bathing, hand washing, brushing teeth to keep bodies healthy and strong.
- **Cooking:** to clean and boil food such as fish and breadfruits before cooking.
- **Growing food:** to grow food for ourselves, we must water our plants such as cabbage; babai need to grow in wet pits.



Refer to Water Factsheet for uses of water

What is 'safe water'?

Safe Water is drinking water which is free from bacteria and other sources of contamination. Water that is safe to drink is called 'potable water'

The World Health Organization (WHO) says 'safe water' is water that:

- does not pose any significant health risk over a lifetime
- is suitable for drinking and all domestic purposes
- has no objectionable smell or taste
- is available in sufficient quantities.

Why is it important to drink safe water?

- Unsafe water leads to a high risk of water-borne diseases such as diarrhoea and typhoid fever. Kiribati has one of the highest rates of deaths of children under five from diarrhoea in the Pacific region. Drinking water that has been contaminated by bacteria in faeces can cause diarrhoea. Even clear water can be contaminated.
- Childhood death or mortality from diarrhoea is more common in Kiribati than in other Pacific Island countries. Health officials report an average of three outbreaks of acute diarrhoeal disease in South Tarawa every year.
- If water becomes contaminated, it is not safe and can be harmful to one's health. Drinking water that has been contaminated by bacteria in faeces can cause diarrhoea. Even clear water can be very contaminated.

Reducing the health risks of drinking unsafe water

- **Rainwater is not safe to drink.** We need to boil it before drinking.
- **Well water is not safe to drink.** E-coli bacteria is rich in wells and must be boiled or disinfected (using the SODIS methods) before drinking.
- **PUB Water is not safe to drink.** There is a leak along the pipe that can contaminate water. We need to boil PUB water before drinking.
- **Drinking contaminated water or eating food that has been washed by untreated water can contain bacteria that will infect people.** We need to boil water when preparing food.

Kiribati's water sources

Well water

Well water is the main source of water in Kiribati. The surrounding area of a well should be kept clean, covered and built 30 meters away from any source of possible contamination such as graves, pig stys, toilets or a babai pit.

Wells take the water from the lens beneath a house. On South Tarawa, these water lenses are often contaminated. Contamination happens because germs get into the water. Water from these wells should be used with caution as well water is highly contaminated.

Well water needs to be boiled with two full minutes of **rolling boil** to make it safe.



Refer to Water Factsheet for water table diagram



Refer to a dance/song 'Tararua Ranin Am Mwanibwa Dance' that teaches children where to build well.

What is a rolling boil?

A rolling boil is when liquid is heated up and then boiled rapidly with lots of bubbles. A rolling boil will kill germs. Simmering water will not kill or break up germs.



Rainwater

Rainwater is the safest water to drink in Kiribati. When it is raining allow 15 minutes before collecting rainwater in closed containers or water tanks. Once the rainwater is collected, keep the containers closed. Rainwater should be boiled using the rolling boil method or solar disinfection (SODIS).

PUB water

PUB is a government company within the Ministry of Public and Work Department that stands for Public Utilities Board.

PUB water is underground water collected from the water reservoir in Bonriki and Buota close to the international airport. The PUB treats or purifies this underground water with chlorine then distributes to all households in the government quarters as well as some private homes. Families pay for water bills every month. PUB water should still be boiled or disinfected.

Bottled water

Bottled water sold in stores is safe to drink and does not need to be boiled. However, it can be very expensive.

Desalinated water

Desalination is the process of removing salts and minerals from sea water to produce water suitable for human consumption. Desalination provides an alternative water source for Banaba Island.

- People on Banaba use desalinated water for drinking, washing, bathing and cleaning
- The Ministry of Works operates the desalinated plant on the island.
- Tarawa Motors at Teaoaereke in Tarawa process desalinated water.
- Taotin Trading Company processes desalinated water from brackish well water.
- Richard Turpin is a resident living in Ambo who processes desalinated water for everyday consumption by the hotel guests he owns and for neighbours.

Other sources of water in Kiribati

SODIS Water

SODIS (Solar Disinfection) is a simple, low-cost solution for preparing drinking water at the household level. SODIS uses both sunlight and the heat of the sun to kill 99.9% of germs in water. Rainwater, well water and PUB water can be treated through the SODIS process.

SODIS trials in Kiribati have shown its effectiveness and potential for wide spread use across this region.

Kiribati has a perfect environmental conditions for solar disinfection systems.



**Refer to Water Factsheet for the procedure of how to do SODIS Water.
Or watch the film on how to prepare SODIS water for children. It can
be applied at school and at home.**

Water Lifestraw

The Australian Rotary Club has donated the Water Lifestraw to schools and clinics in South Tarawa in an effort to eradicate waterborne diseases.

The water Life Straw removes almost all of waterborne bacteria and parasites.



Experience and Reflection

Questions to ask students

1. How do your family members get their drinking water? (Allow several individuals to share about how they gather family drinking water).
2. Do you help to fetch and purify drinking water?
3. How do you help? What do you do?
4. Do you feel it is okay to drink unsafe water?
5. How would you feel when you drink untreated water?
6. Can you name and explain any water treatment methods?
7. Have you had diarrhoea because of drinking unsafe water? What did you do, how do you react afterward?
8. If you have siblings around five years of age, have you observed them suffering from diarrhoea? Do you know the cause of the diarrhoea?
9. What do you think you would do in order to avoid that problem happening again in your family?
10. Do you have a lifestraw at school? Is it still working? How do you help to keep that lifestraw functioning?
11. Do you all carry your water bottles? How can you get safe water for drinking in school?

Class Activity 1

Explain to children the class is going for a walk to observe the types of water used by different families in the community. Students should form small groups. Each group will need to use words related to water (WASH) to describe their walk.

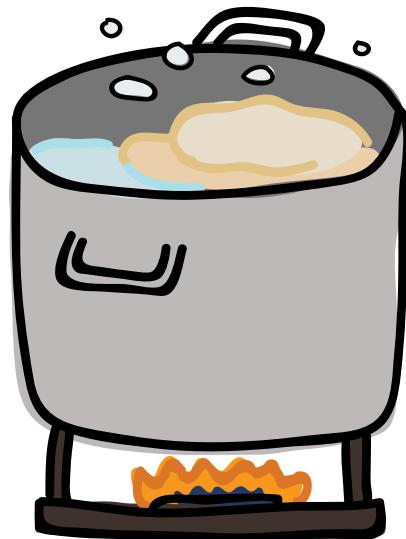
1. Make sure you instruct the students to discuss and remember what they see. They should notice how different families take care of the well, PUB or their rainwater. Is there a rainwater tank? Is there a cover for the well, are the PUB taps inside or outside the house?
2. Back in the class tell students to sit in their small groups and discuss what they saw.
3. What did they see that they liked and what did they see that they think they could make better?
4. What was most interesting for them ask them to draw a picture of how it looked. Remind them to make sure their picture includes how the water collection could be improved and what they can do as a class to help improve water quality.

Other suggested class activities

1. Get students to conduct SODIS (refer to SODIS method on factsheet) if there are PET bottles available in school.
2. Prepare a skit/dance/poem on teaching the audience of a water message and interventions to high death rate of children under five years of age in Kiribati due to waterborne diseases.

Class Activity 2

Photocopy or draw these picture cards and show them to students:



- What kind of water do we use for handwashing, drinking, bathing, and cooking?
- Should drinking water be boiled or not? Do you help your family boil drinking water? Tell the class what you did.
- Draw pictures and captions to illustrate how you help.
- How do you help to boil drinking water?
- Why do you help to boil drinking water? Share this with your groups/class.



MODULE 4

Toilet and sanitation

What is sanitation?

Sanitation refers to the management of human waste. Infectious bacteria that cause conditions like diarrhoea can spread through contact with human waste. Toilets are constructed to manage human waste and to be a barrier to the spread of disease.



Refer to Toilet factsheet for information about toilets.

Types of toilets

There are three types of toilets in Kiribati. They are septic toilet, pit toilet and Kamkamka (compost toilet). A toilet with a septic tank is the preferred type of toilet in Kiribati to minimise contamination of underground water.

Sanitation in schools

Access to clean toilets in schools is a fundamental human right. School children have a right to clean toilets. Schools with clean toilets can increase the attendance and productivity at school. Schools must teach important hygiene practices for safe disposal of human waste and how to use and clean a toilet after use. Sing the Toilet song and do the actions while singing (Refer to the big book story)

Clean and safe toilets

Students are more likely to access and use the provided latrines/toilets if they are clean, safe and suitable for their use. It is important to consider the following factors:

- **Access:** Consider the access to the toilets, both inside and outside and whether the students can sit on the toilet easily and comfortably. Also consider any special needs that exist in the school, e.g. students with disabilities, illness, etc.
- **Privacy:** Ensure that toilets are private so the he students feel comfortable using them.
- **Segregated toilets:** It is critically important to ensure that boys and girls have separate, secure and clearly marked toilet blocks. It is recommended that there should be one toilet for every 25 girls and one toilet for every 35 boys.
- **Safety and security:** Ensure the toilets are in a safe and secure location close to the school. This is particularly important for girls and women.
- **Cleanliness:** Students are more likely to use a toilet if it's clean. This will be possible through a cleaning roster for students supervised by a teacher. This will enable students clean the toilets regularly to keep toilets at a reasonable standard.

Why do we use and keep our toilet clean?

No matter what sort of toilet the school has, students need to understand and apply the rules to use and keep the toilets clean. Cleaning the toilet every after use, or banning open defecation is a healthy practice that break the chain of infection transmission in the home, school and community.

- What will happen if you do not clean the toilet after use? If the school and class do not bother to develop a routine to clean the toilets, what will happen to the toilet block?
- What will be the effect on children?

Currently most schools do not have toilets. It is very important to identify the toilet area for boys and girls and that children must keep that area clean.

Reminder: Students must only pee in the toilet or toilet area. They must cover or bury their waste, not expose it if they use the beach or bush. Stop the children from going to the toilet in the open. Encourage children to bury their waste.

Never use the beach or bushes if there is a toilet you can use.



Read a story based on maintaining a healthy toilet 'Beka N Te boo, Kaitiakia Raoi'.
Discuss the story with children. Relate to children experiences at home.



Read a poem 'Te Nango' and perform the actions.



Experience and reflection

Class Activity

The toilet is a shared environment at school.

Take the class out to the school toilet and see if it is clean or not. If the toilet is not clean, encourage students to clean it straight away. It is the students' responsibility to clean the toilet and the bathroom every day. Summarise the steps that will help us to keep the toilet as a shared clean and healthy environment:

Language Game

Play the game Germs and Ladder.

Suggested discussions

Brainstorming

Ask this question: Why should we keep a toilet clean?

List all the answers that children contribute to the brainstorming session.

When you are finished, discuss each answer and decide if it is correct, incorrect, or needs to be amended. Examples of correct answers are:

- A clean toilet is free from germs
- Germs living in the toilet will make our family sick
- It is not healthy to live with a filthy toilet. Faeces left in a bowl attracts flies
- Flies live in the faeces in the bowl, then carry bacteria, land on our food, and so make us sick.

Homework

Tell children to observe their toilet at home to note if it's clean or messy.

- What will they do if there are faeces stain on the bowl? Can they clean the toilet applying the procedure they learn in class?
- How often must they clean the bowl?
- Remind them that this is a shared environment and it should always be clean.

Public Toilet Campaign

It is a health issue that toilets such as at the national hospital and airport are never cleaned.

Ask students:

- Have you been to the public toilets at Nawerewere Hospital? What are your observations? What should you do if you use that public toilet?
- Do you usually clean the toilet after using it?
- Do you have time to clean and scrub the bathroom?

It is our responsibility to clean the toilet and bathroom. Go through the procedures of cleaning a toilet. Explain to them that dirty toilets/bathroom is filthy and is full of germs. Explain that a clean toilet/bathroom is appreciated and it is a healthy shared environment. It should be germ free.

Tell children to work in groups to brainstorm ideas on:

- how to support the council or government by helping to clean public toilets.
- a strategy that the government can adopt to motivate toilet users in public places such as airport, hospital, offices, etc to keep the toilets clean.

Avoid open defecation (ODF - Open Defecation Free)

Going to the toilet at the beach or the bush is called open defecation. Open, because it is being done in the open and the faeces are left uncovered. Defecation, because it is the expelling of human waste.

Open defecation increases the spread of diseases, especially diarrhoea, and especially among children. This results in high infant and child morbidity and mortality rates and damage to the environment as human waste is left in the bush and the beach.

Some families have flush toilets but they prefer to use the beach or the bush for open defecation.

School rules for open defecation

1. Always go to the right place

All students must go the designated toilet area. Boys to the boy's area and girls to the girl's area. Boys and girls must not go to the wrong area and teachers and school committees will monitor the toilet areas.

2. Always cover your waste

Do not expose your faeces. Flies will land and carry germs away to food.

All student must cover their waste. Anything used by students to clean up must also be covered. If you use a spade, make sure you clean it thoroughly with soap.

3. Clean yourself properly

Always remember to wash hands with soap. Handwashing prevents a spread of germs to another person.



Read stories 'Ara Bike Rerei' and 'Katoka Te Nango, Totokoa Te Mannaoraki'



Experience and reflection

Questions to ask students

Observe your toilet or bathroom at home to note if it's clean or dirty.

1. What will you do if it's dirty? Can you clean the toilet applying the procedure you have learnt in class?
2. Can you clean the bathroom? How? Do you take away hanging clothes in the bathroom and put them somewhere?
3. Is it good to have dirty clothes hung in the bathroom or toilet? Do you remove rubbish out of the bathroom or toilet?
4. Do you scrub the bathroom and toilet? How often must you clean/scrub the bathroom?
5. Do you see anyone defecating in the open? What would you do if you saw people defecating on the beach? What are the key messages you would share with them?

Presentation

- Have a morning news presentation by asking a handful of students to discuss the practical homework of cleaning the toilet at home
- Praise children for the great work they did (even if it was amusing to their parents).
- Put children together in a group to draw and write a description or explanation of how they clean their bathroom/toilets; record how their family members acknowledged their work. Present to the rest of the class.

Class activity

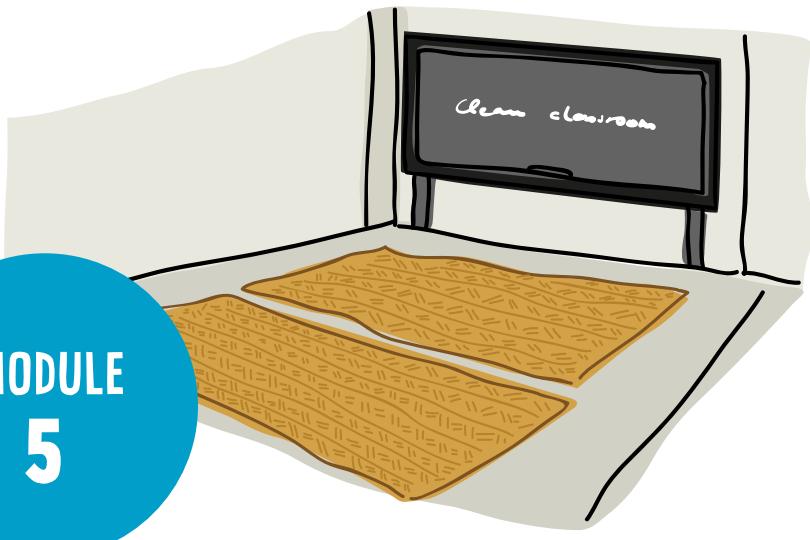
Clean toilets or toilet area

Using the same indicators to assess classroom cleanliness, assess the class/school toilets or toilet areas.

Grade your assessments using **A for achieved**; **B for in progress**; and **C for needs**

improvement. Make sure you enter student comments on each indicator. The student comments will help you show that they understand the importance of keeping the toilet or toilet area clean, and ready to display that attitudes and practise it every day. Praise your students for a changed behaviour and keep motivating them to keep doing it. Tell them this is one simple hygiene practice that can prevent the incidence of diarrhoea.

Class toilet/toilet area	Comments	grade
Is the toilet bowl clean?		
Is there access to water to flush the toilet?		
Is there water hand wash after using the toilet?		
Is there a clean toilet brush to use?		
Is the toilet bowl covered?		
Is there toilet or tissue paper to use?		
Is there soap and water ready to use for handwashing?		
Is there a toilet for both boys and for girls?		
Is the toilet area well cleaned?		



MODULE 5

Clean and safe school environment

Students need to keep their school environment clean and healthy as part of their hygiene program. By learning simple cleaning methods and the importance of keeping the school environment clean, students will contribute to a school that is clean and safe.

A neat and clean classroom

A clean classroom is a healthy place to learn and the first step to a clean school.

Teachers are in charge of students in the classroom and it is the teacher who manages students to see that they keep the classroom and the school grounds clean. An organised environment helps children to be more independent. When students know where things belong, they are more able to do things by themselves.



A clean classroom and school environment:

- Will encourage students to contribute and see education as a positive experience.
- Makes a good impression about you as a teacher.
- Help children stay healthy and be a barrier against the spread of germs.



A dirty classroom and school environment:

- Will lead to laziness and a lack of concern for the classroom and school equipment.
- Creates a poor impression of leadership in the class and the school.
- Is a place where dirt and germs can do well at the expense of children.



Teacher to think of a song and recite the rhyme and poem on cleanliness.



Experience and Reflection

Class activity 1

As we develop our sense of responsibility for looking after the class we will now develop some rules we can all follow to make sure the class stays clean and promotes personal hygiene and builds on our hygiene habits.

1. Get students to work in a group to come up with some new rules for keeping the classroom neat and clean. As a group, discuss what activities each of the clean and tidy classroom rules will require.
2. Have students' own rules written on the chart in Kiribati language and hang it up on the wall.
3. The teacher should assign students **responsibilities** to for each of the rule for a week each time. Some of the tasks may need to be done in groups, others can be done in pairs.
4. Teacher should decide if some jobs have to be done every day, or once a week.
5. If the task is a large one assign the class WASH Club members to that task but make sure you provide supervision to each group.

Examples of class rules:

- Our classroom must be neat and clean every day.
- Books and pencils must always be placed neatly in the classroom.
- School bags must be hung on a line of hooks either outside or inside the classroom.
- The black board must be cleaned by a student at the end of every day.
- All rubbish must be put in the bin and the bin emptied in the school rubbish pit every day.
- We must wash hands with soap before coming into the class.
- Everyone should make sure students use the toilet properly, clean it after use and take the responsibility to wash hands after using and cleaning the toilet.
- Keep the toilet room neat and clean. Arrange things in the toilet room, do not let it wet.

Example of responsibilities:

- Someone to make sure everyone washes their hands.
- Someone to make sure everyone wipes their feet.
- Someone to check books are clean and to make sure they are stacked neatly.
- Someone to make sure all rubbish goes in the bin.
- Someone to take the rubbish away and put it in the right place.
- Someone to clean the blackboard and shake out the class mats

Follow up for Class activity 1

What is the best way to make sure all these jobs are done at the right time?

- Throughout the week give encouragement and feedback to students so they know how well they are doing.
- Observe how each pair or group work and encourage each to make an equal contribution to making the classroom and school area neat and clean. Explain to them it is because a classroom and a school are shared environments and our willingness to help contributes to the common good.
- Talk to the students about how everyone doing their job contributes to a neat and clean classroom.

Class activity 2

Tell students to look at their homes and to report how things are put neatly in the kitchen, sleeping room, in the veranda, in the sitting room, inside a hut and inside the toilet room.

Allow students to discuss in groups and let them:

1. Draw about their story
2. Report on their homes.

Questions for students

Remind students that they have a right to a clean and conducive school and home, yet they have a responsibility to help in to make their school and home environment clean and healthy.

1. Do you have a tippy tap at home or do you usually wash hands under running water with soap after cleaning in the house/toilet?
2. Do you clean the toilet at home?
3. Do you help to arrange things in the toilet room, in the kitchen, in the sleeping room or in the hut?
4. How does your home look? Is it clean and neat?
5. Do you clean the cupboard so there are no germs in the kitchen?
6. Do you usually clean the dishes, rather than leaving it till noon or dark?
7. How often do you change water for cleaning the dishes?
8. Do you clean around the house before you come to school?
9. How do you find your classroom? Is it like your home that is clean, neat and tidy?
10. Are there germs in clean homes and classrooms?

Glossary

A	Acute diarrhoea	Te bekanako ae ti uabong manna, e kona n toki irouna
B	Bacteria	te mannaoraki
	Banning	katokia
	Bite	tenaia
	Brackish	tarika
	Breathing	ikeike
	Bury	taunna
C	Chronic diarrhoea	te bekanako ae reitinako nakon uoua te wiiki ao e riai n waekoa n uotaki nakon te onnaoraki ibukin te karin ran
	Chest	bwabwam
	Circulation	kabutana
	Common	i bukin te botannaomata,
	Concentration	bane nanou n ongoraea ke ni karaoia
	Consider	rinanona, iangoia
	Contaminated	e on te mannaoraki, e baareka
	Cover	rabunna
D	Dangerous	e kangaanga, kakamaku,
	Dehydrated	akea ran rabwatana
	Dehydration	e bwatakataka, akea ranna
	Desalinated water	te ran ae e mano ae e karaoaki man taari, ranin te mwanibwa ae e tarika,
	Diarrhoea	te bekanako
	Digest	kamantia, e kamantaki te amwarake i biritora
	Digestion	kamantakin te amwarake i birotora
	Dirt	te bareka
	Diseases	aeakan aoraki
	Disposal	aron kaitiakan ke kanakoan te maange
E	e coli	te mannaoraki ae e mena n te nakotaari
	Effective	nako raoi karaoana/arona
	Encourage	kaungaa
	Enforce	kamatoaa
	Exposed	katikua ni kaotaraa, katangainaa
F	Faecal oral cycle	aron butin te mannaoraki n te nakotaari
	Faeces	te nakotaari/te butae
	Fetched	karekea, itiia
	Flush	katinakoa n te kainnakotaari
G	Germs	aeakan nako maninnaoraki

H	Harmful	kakamaaku, kaaoraki
	Health	te mauri
	Healthy	marurung
	High blood pressure	te rietata n rara
	Human	te aomata
	Human waste	nakotaarin te aomata
	Hygienic	maiukina te aaitiin,
	Hygiene	te aaitiin
I	Immediately	ngkai naba
	Incidence	te bwai ae e ririki,
	Indication	te kanikina ke kaotakina
	Infected	rootaki
	Infectious	eweewe
	Invisible	aki nooraki
J	Joints	taian tomwa n riira
L	Lessons	taian reirei
	Lubricate	oiranna ni kamaraua
	Linger	tiku ni kabane tai
M	Mess	takanana
	Microscope	te mitiin ni kataratara are e kabuburai bwaai aika ti aki kona n nooria ni matara
	Mumble	taetae bon irouna ae a aki oota nake irarikina
O	Open defecation	ko nakotaari i aon te bike ke n te buakonikai ao ko aki tauna mwiim
	Organisms	taian man aika a uarereke/ maan aika a
	Outbreak	butinako
P	Painful	e kamaraki
	Peace	te raoi
	Pee	mim
	Poo	nakotaari
	Potable water	te ran ae e mano ao e tauraoi n nimaki
	Pour	kabwaroa
	Powerful	rangi ni kakai ke mwaaka
	Prevention	totokoana
	Procedure	aron karaoana
	Prosperity	te tabomoa
	Protect	totokoia, kawakinna

R	Rainwater harvesting	kawaewaea te karau ibukin te mooi/ kanoa karau
	Reduce	kakerikaaka
	Remove	kanakoa
	Respectful	rangi ni karinerine
	Responsible	onimakinaki
	Risk	te kanganga
	Rite of passage	taian mwaneka i nanon maeura ma n arom n ataei nakon te aoraki n aine, ke
	Rolling boil	buroburo
S	Safe	mano
	Sanitary napkins	te moti ibukin te aoraki n aine
	Sanitation	aron tararuaan ma kaitiakan te nakotaari
	Split	bwenua
	Spread	kabutinakoa, butinako
	Sugar diabetes	te aoraki ae te tioka
T	Tear	raeuaki,
	Toilet manners	Aroaro ibukin kaboongan te kainnakotaari
	Toxins	te boitin
	Transmitted	e butinako, ewe
	Trimmed	koreaki ni kauareerekeaki
	Trigger	make you/cause/ ae e kaungako bwa
V	Vaccine	te iti
	virus	te mannaoraki ae e ti kona n kaabung i nanon te aomata, te man ke te aroka
	voice	bwanam
W	warm	aabue
	waste	te nakotaari
	Waterborne diseases	aoraki aika a reke man te ran
	Wound	te ikoaki/te maneka

References

- 2010, *Kiribati National Sanitation Policy*
- 2013, *Year 3 Healthy Living Teacher Guides.*
- 2014, *Year 4 Healthy Living Teacher Guides.*
- A. Mooijman, M. Snel, S. Ganguly and K. Shordt 2010, *Strengthening Water, Sanitation and Hygiene in Schools – A WASH guidance manual with a focus on South Asia*. The Hague, The Netherlands, IRC International Water and Sanitation Centre. (TP Series 53).
- International Save the Children Alliance 2005, *Practice Standards in Children's Participation*.
- International Save the Children Alliance 2010, *Putting Children at the Centre*.
- Live & Learn Environmental Education 2011, *Hands Up for Hygiene, Teaching Hygiene Behaviour in Pacific Schools*.
- SPLASH, 2015. Menstrual Hygiene Management Toolkit. Washington D.C., USA. USAID/WASHplus Project.
- UNICEF 2012, *Water, Sanitation and Hygiene(WASH) in Schools*.
- White I, *Coordination of the Water and Sanitation Sector: Background to the Kiribati National Water and Sanitation Coordination Committee*

