



Pilot Project Partner



Lifeboats



# Aquatic Survival Water Safety Education Manual

NOVEMBER 2017

DEVELOPED FOR LOW-RESOURCE AREAS

# About this manual

The primary aim of the *Aquatic Survival Water Safety Education Manual* is to help save lives by giving people important water safety education.

The programme is focused towards young people living in low-resource areas with limited or no access to existing drowning prevention initiatives.

It has been developed to help organisations and individuals implement the Aquatic Survival programme as part of a local or national drowning prevention strategy.

This manual has been designed as a guidance document and can be adapted to suit the local environment. Where possible this document has incorporated existing best practice developed by drowning prevention organisations.

This manual will be reviewed after 3 years. Please send any comments and feedback to: [international@rnli.org.uk](mailto:international@rnli.org.uk)

## November 2017

Piloted and developed by:



### Lifeboats

Royal National Lifeboat Institution  
West Quay Road  
Poole  
Dorset  
BH15 1HZ  
England

Tel: +44 (0) 1202 663000  
Web: [RNLI.org](http://RNLI.org)  
Email: [international@rnli.org.uk](mailto:international@rnli.org.uk)

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Many of us use water daily for bathing, cleaning, recreational activities and transportation.

In high-resource areas, many of these activities are conducted in the safe environment of the home, or in supervised and regulated areas.

In low-resource areas, many people have no choice but to conduct these essential activities in open water despite understanding the risks involved. Water transportation is generally unregulated, and boats rarely contain adequate safety equipment.

Falling into water is a real risk, and the consequences can be serious – particularly if a person is unable to swim or be rescued.

Swimming is rarely part of formal education, and resources containing information on how to stay safe in and around water are generally unavailable.

The Royal National Lifeboat Institution (RNLI) and partner organisations have developed this Aquatic Survival programme, specifically designed for use in low-resource areas.

This manual contains simple but important guidance for organisations who wish to use the programme.



### Learning outcomes

- 1.1 Understand what drowning is.
- 1.2 Understand why people drown.
- 1.3 Know who is at risk of drowning.

# Unit 1: Understanding the drowning process

## 1.1 What is drowning?

About 70% of the earth's surface is covered by water. Water is used for many everyday activities such as recreation, bathing, washing, fishing and transportation.

In high-resource areas, day-to-day contact with water is generally limited to safe environments in the home or in supervised swimming areas. However, in low-resource areas, many people use open water sources such as ponds, rivers and the ocean to carry out the same activities.

Falling into water is a real risk and the consequences can be serious, particularly if a person is unable to swim or be rescued.

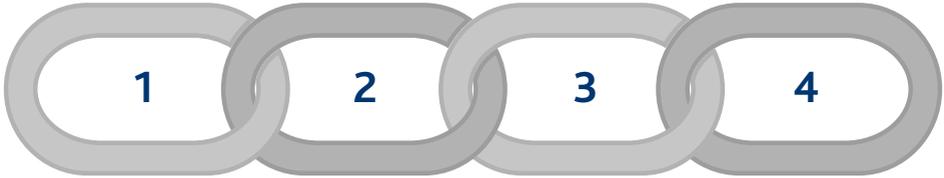
Drowning occurs when a person is unable to breathe because their head is submerged in water.



## 1.2 Why people drown

The reasons people drown can be shown by the drowning chain. Each link in the chain can result in drowning, or can lead to the next link.

Learning how to swim is a key skill to prevent drowning but it is also important that relevant safety messages are taught so that people are aware of the dangers posed by being in and around water.



|  | 1. Lack of knowledge, disregard for, or misunderstanding of the hazard  | 2. Uninformed or unrestricted access to the hazard   | 3. Lack of supervision or surveillance   | 4. Inability to cope once in difficulty  |
|--|---|--|--|--|
| Cause                                  | <ul style="list-style-type: none"> <li>Lack of education in water safety or the dangers of the local environment.</li> </ul>  | <ul style="list-style-type: none"> <li>Allowing people access to use dangerous areas of water – such as areas with strong currents.</li> </ul> | <ul style="list-style-type: none"> <li>Swimming in areas where there is no one to provide rescue.</li> </ul>   | <ul style="list-style-type: none"> <li>Being unable to swim to safety.</li> </ul>                      |
| Role of the Aquatic Survival programme | <ul style="list-style-type: none"> <li>To provide water safety education to water users.</li> <li>Through education comes recognition and therefore avoidance of danger.</li> </ul> | <ul style="list-style-type: none"> <li>To make people aware of the safe areas to enter water.</li> </ul>                                       | <ul style="list-style-type: none"> <li>To encourage people never to enter the water alone, and provide close supervision to young children.</li> </ul> | <ul style="list-style-type: none"> <li>To provide community swimming and rescue programmes.</li> </ul> |

Simple key water safety messages can help tackle the first three links in the drowning chain. In addition, some organisations and individuals may have the time and resources to teach swimming and to tackle the final link in the chain.

## Understanding the problem

**Why** and **how** people drown are influenced by their exposure to water, the risks they take while they are in and around water, and their ability to save themselves. Because of this, drowning affects different groups of people depending on their daily activities and the environment they live in.

In spite of these variations, the core ways of preventing drowning – being aware of the dangers and being able to swim – are key factors in breaking the drowning chain.

When running a programme it is important to ensure that the correct audience is targeted.

This will help to ensure your programme prevents the maximum number of drowning incidents at the lowest cost.

When designing a programme, it is important for an organisation to identify who they are going to target and how. This will largely be dependent on the resources available, the time-frame, and whether drowning incidents are known to occur within a specific group of people or the wider community.

The Aquatic Survival programme is split into two modules, allowing organisations to select and adapt sections of the programme to suit their environment and resources.

## 1.3 People at risk of drowning

Drowning is a risk for anyone who undertakes activities in or near water, irrespective of their swimming ability. Even strong swimmers can drown.

The risk of drowning is strongly linked with exposure to water and swimming ability. Recent research has shown that people who are unable to swim are at much higher risk of drowning.

Groups of people at high risk of drowning usually consist of people who are regularly exposed to water and lack the ability to swim, or are travellers who use poorly maintained boats.

The people within these groups will vary depending on local environmental and social factors. For example, in some communities it may be mainly women who take a daily ferry to trade at the local market, while in other communities it may be men who use boats to get to work.

To understand who should be targeted, it is vital to engage with local community leaders and community members to identify regular water users. Generally, they can be placed into five broad categories:

1. children aged under 5 years old
2. children aged 5–14 years old
3. adolescent and adult women
4. fishermen
5. travellers.

## Common high-risk groups

### 1. Children aged under 5 years old

Children aged under 5 years old are at high risk of drowning if they are left without adequate supervision.

Children of this age often wander away from their parents' control and are at high risk of falling into an unprotected waterbody.

Death by drowning in this age group is likely to occur when parents are busy undertaking household chores, such as cooking and cleaning.

It is difficult to teach a child under 5 years old how to swim. Water safety education and rescue skills could be taught to parents and supervisors.



### 2. Children aged 5–14 years old

At this age children start to undertake bathing alone and also enjoy recreational water activities with friends. In many communities bathing activities may be conducted in sheltered open water, hidden from adult supervision.



### 3. Adolescent and adult women

As well as the daily activity of bathing, in many cultures adolescent and adult women use open water to carry out many of the household chores such as washing clothes, collecting water or washing dishes.

Although these activities are usually conducted in shallow water, an accidental step into deep water or a strong current may lead to drowning. In addition, women often enter the water while fully clothed, making it harder to keep their head above the water even if they can swim.



# Unit 1: Understanding the drowning process

## 4. Fishermen

Fishermen are exposed to the dangers of falling into water and they also face the additional risk of being far from safety, often in rough water. Despite being on the water daily, many fishermen are unable to swim and are reluctant to wear lifejackets.



## 5. Travellers

For many island and river communities, regular transportation by boat is necessary for trade. Boats are often overcrowded, poorly maintained and lack lifesaving equipment such as liferafts and lifejackets.

Ferry disasters occur regularly in Africa. People who use boats for transportation should be educated in how to use lifesaving equipment to keep themselves safe if the boat sinks or they fall into the water.

It is important that boat operators are aware of their responsibility to keep users safe. Ensuring ferry users understand the importance of lifesaving equipment may create demand for operators to install such equipment in their boats.





### Learning outcomes

2.1 Understand the role of the Aquatic Survival programme.

## Unit 2: Aquatic Survival programme

### 2.1 The role of the Aquatic Survival programme

The role of the Aquatic Survival programme is to prevent drowning by:

- providing water safety education
- teaching people how to save themselves in the water
- teaching people how to save someone else in the water.

#### Water safety education

Many drowning deaths can be prevented by learning how to stay safe in and around the water, and how to keep others safe.

Water safety education consists of 10 key simple key water safety messages and skills that can be taught without the need to enter water.

This can be taught on its own, or as part of a continued learning pathway prior to learning self-survival and rescue.

### Self-survival and rescue

Most deaths by drowning occur when people with poor swimming skills accidentally step or fall into water too deep to stand up in.

Self-survival and rescue teaches self-survival and gives people taking part the necessary skills to swim to safety or to float in the water and wait for help to arrive.

Entering the water to rescue other people can be very dangerous. Many people drown while trying to rescue other people in difficulty. People taking part in the rescue section will learn how to rescue a person safely without getting into the water.

Self-survival and rescue requires access to a body of water suitable for teaching swimming. To reduce the opportunity for increased risk-taking behaviour, all participants must have a good understanding of the key water safety messages.



### Types of intervention

Two types of intervention are possible using the Aquatic Survival programme:

#### 1. Community intervention

Simple key water safety messages are provided that can be passed on to large groups of people quickly and easily.

Lessons can be taught in schools, village meetings or community groups. In addition, the messages may be promoted in newspapers, on television or on the radio.

Messages can be taught in a short period of time with few resources, and don't require a swimming venue.

#### 2. Targeted intervention

If drowning is known to be an issue within a particular sector of the community, then a more targeted and comprehensive programme may be more cost effective.

### Funding

Those at high risk of drowning are usually from poorer backgrounds so it is important to ensure that poorer people are not excluded from the programme.

Funding may be required to pay for equipment and staff and could be obtained by:

#### Grants

Funding may be available from grant-giving organisations or the government. Grants are usually given to target specific issues.

Although the primary aim of the Aquatic Survival programme is to address drowning as a health issue, it may also be possible to apply for funding to target social issues, such as community leadership, and sport.

### Community donations

A drowning death will have an impact on a whole community. Individuals, organisations and businesses should be encouraged to support the implementation of the Aquatic Survival programme. Support may be given in a variety of ways, such as a financial donation or the donation of resources (including the use of a building).

### Training fees

In some areas, the people receiving the training may be able to afford to pay for an organisation to deliver the training. In others, the fees may be paid by a local organisation (for example a school or scout group), or by individuals who receive the training.

## Water safety education



### Aim

The aim of water safety education is to provide students with the knowledge they need to stay safe while in and around water.

The key water safety messages contained within this section have been developed to be simple and easy to understand, so that they can be passed on to large groups of people quickly and easily.



### Learning outcomes

- 3.1 Understand different methods for delivering the key water safety messages.
- 3.2 Understand why stakeholder meetings are important.
- 3.3 Understand the resources needed to teach the key water safety messages.  
Know the skills and qualities needed to become a community awareness teacher.  
Know the types of venues that can be used to teach the key water safety messages.

## Unit 3: Planning and preparation

### 3.1 Methods of delivery

Drowning is a leading cause of death. The majority of drownings can be prevented by taking simple precautions.

Key water safety messages can be used to educate people in how to stay safe in and around water.

The key water safety messages are designed to be:

- suitable for anyone living or working in or around water
- simple and easy to communicate to people of all ages
- adapted to suit the local environment
- taught with limited resources and in areas where learning how to swim is not possible due to waterborne disease or lack of a suitable swimming venue.

The key water safety messages are accompanied by pictures and can be taught to large or small groups of people. They can be taught in a short period of time with very few resources and do not require a swimming venue.

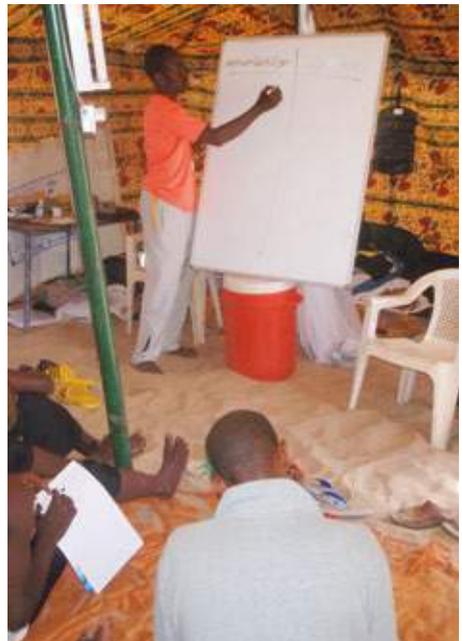
Lessons can be given in schools, village meetings or community groups. In addition, the messages can be promoted in newspapers, on television or on the radio.

An easy way to reach large numbers of people is to use existing networks and infrastructure.

Training on how to deliver the messages could be provided to people who already interact with your target audience.

These people may include:

- school teachers
- community outreach workers
- scout leaders
- community elders.



### 3.2 Engaging stakeholders

Before starting your programme, hold a stakeholder meeting.

Stakeholders are people who have an understanding of the problem or are able to help implement the programme. Make a list of all the stakeholders and invite them to a workshop to discuss your intentions.

Stakeholder meetings help to:

- identify problems before you start
- know who is able to help with the programme
- make sure everyone knows and understands your intentions.

A stakeholder meeting is also a great way to spread awareness of the programme, and engage people in drowning prevention.

Always keep stakeholders up to date with developments. This could be achieved using a newsletter or a website.



### 3.3 Resources

The key water safety messages have been designed so that they can be taught with a minimum amount of resources. The module does not require the use of a swimming venue.

The only things you need are:

- the teaching resources contained in this manual
- demonstration equipment (lifejackets, sticks and floating objects, if available)
- people to teach
- teachers
- a suitable venue.



## Unit 3: Planning and preparation

### Skills and qualities of teachers

Identifying suitable Community Awareness teachers is key to a successful programme. Good teachers lead to better learning outcomes – students are able to learn faster and retain the knowledge for longer periods of time.

Teachers should be enthusiastic about saving lives and keen to share their knowledge about water safety.

There is no recommended minimum age requirement for being a Community Awareness teacher. However, all teachers should have the following qualities:

- Trustworthy – be trusted to plan lessons appropriately.
- Reliable – arrive at lessons on time.
- Motivated – deliver lessons to the best of their ability.
- Understand local water hazards – be able to adapt the programme to the local environment.

All new teachers should be given appropriate mentoring so that they understand each of the key water safety messages.

### Venue

Almost any venue can be used to teach the water safety messages, as long as the students can hear and see the teacher.

The messages could be taught:

- in a classroom



- in a community hall



- on the beach.





### Learning outcomes

- 4.1 Know the key water safety messages.
- 4.2 Understand the structure of an effective lesson.  
Be able to teach an effective lesson.

# Unit 4: Teaching the messages

## 4.1 Key water safety messages

There are 10 key water safety messages, split into three themes.

### Theme 1: Spot the dangers

These messages teach how to identify dangers in the water:

1. Know the water and weather conditions before getting in the water.
2. Test the water for depth and underwater hazards before entering.
3. Be aware of animals.

### Theme 2: Keep yourself safe

These messages teach how to keep yourself safe in or near water:

4. Never enter the water alone.
5. Obey all safety signs and warning flags.
6. Know how and when to use a lifejacket.
7. Always tell someone when and where you are going near water.

### Theme 3: Keep others safe

These messages teach how to keep other people safe in or near water:

8. Learn safe ways of helping others without putting yourself in danger.
9. Constantly supervise children in or near water.
10. Keep your home safe.

Each of the 10 key water safety messages is accompanied by:



1. An illustration of the message.
2. An explanation as to why the message is important.
3. At least one action point for the students to carry out.
4. At least one teaching point for the teacher to engage with the students.

## 4.2 How to teach the key water safety messages

The messages may be taught using any method appropriate for the students and the environment. They may be introduced into an existing curriculum or taught as part of a separate lesson.

A simple lesson plan has been included in this manual to assist new teachers in teaching the messages. The lesson follows a simple format:

- Teach each of the messages by engaging with the students using the illustrations and teaching prompts.
- Encourage students to recall the messages using a creative exercise such as a poster, song or drama.

If the lesson is taught as a single lesson, this process should take approximately 1 hour.

## Lesson plan – Key water safety messages

### Aims

By the end of the lesson students will be able to:

- identify what each of the 10 flash cards mean
- apply this knowledge in order to help them stay safe in and around the water.

### Resources

- Flash cards (x10).
- A suitable teaching area.
- Paper and pens (not essential).

### Total time



### 1. Introduction

- Tell the students your name (and tell them the name of the organisation you work for if they don't know you).
- Explain that they are going to be having a fun lesson on how to stay safe in and around the water.

### Time



### 2. Warm-up exercise

- Explain that we use water for lots of different activities. Give the students an example.
- Ask the students to talk with the person sitting next to them for 5 minutes about what they use water for.
- Go around the group and ask each pair to give you an answer.
- Explain that water can be very dangerous if you fall in or the condition of the water changes while you are in it.

### Time



## Lesson plan – Key water safety messages

### 3. Flash cards

Use the flash cards (following this page) to explain that there are some simple things you can do to stay safe in and around water, and to keep other people safe in and around water.

Each flash card contains a key water safety message, an explanation of the message, an action, and a teaching prompt. They are separated into three themes:

1. Spot the dangers.
2. Keep yourself safe.
3. Keep others safe.

#### For each flash card:

1. Introduce the theme.
2. Show the picture on each flash card to the group.
3. Read out the key water safety message.
4. Read out the explanation about why it is a key water safety message.
5. Explain the learning action for the students to take home.
6. If appropriate, use the teaching prompt to engage with the group.



#### Demonstrations

Where possible, use real-life objects such as long sticks, containers and lifejackets to help engage with the class.

Time



### 4. Creative exercise

1. Split the class into small groups.
2. Give each group one of the messages to focus on.
3. Ask the students to create either a song, drama, story or poster of the water safety message. Allow 15 minutes to complete this part of the exercise.
4. Ask each group to share their work with the rest of the class.

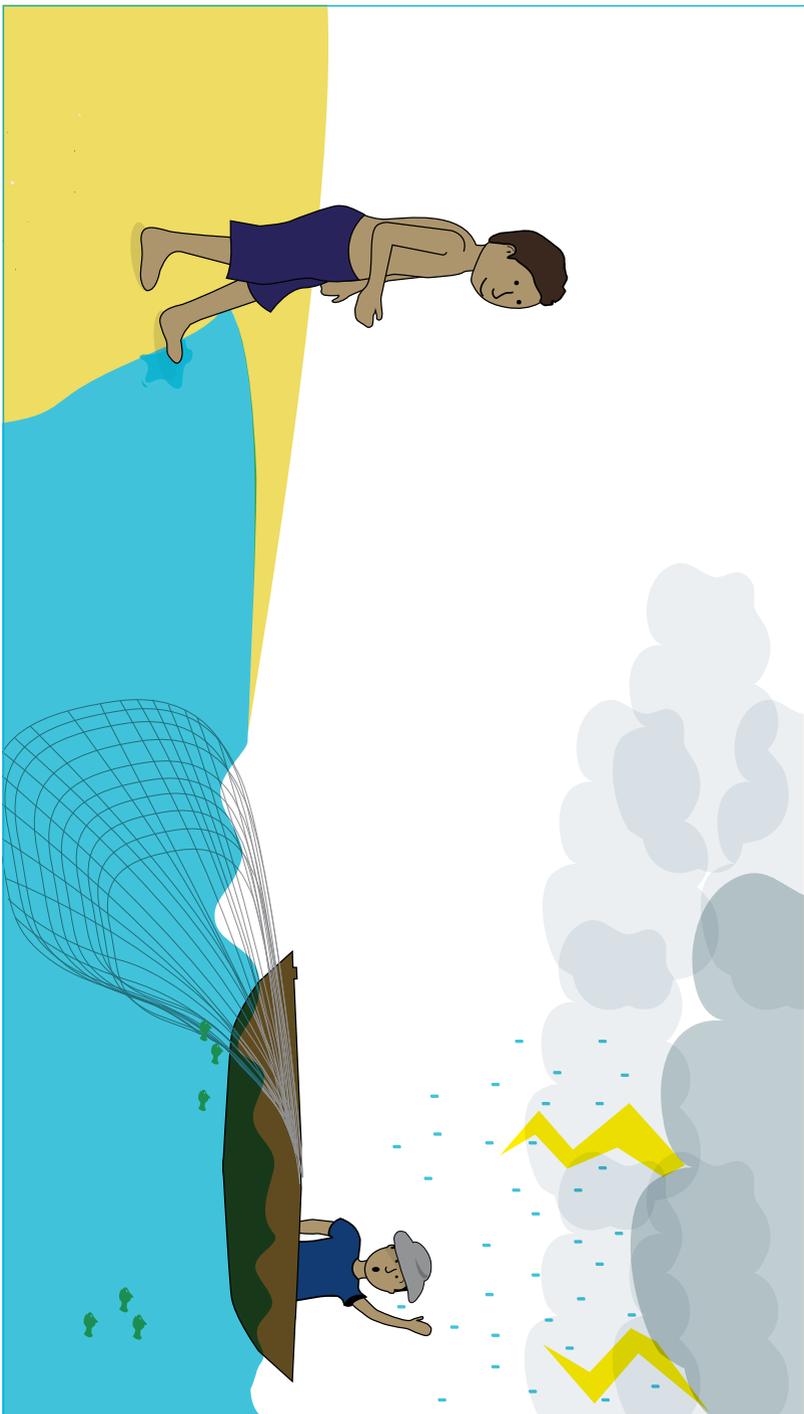
Time



Theme: Spot the dangers

# *Why?* Learn how to spot dangers in the water.

Spot the dangers:  
1. Know the water and weather conditions before getting in the water



## Spot the dangers:

1. Know the water and weather conditions before getting in the water

### ***Why?***

Water conditions can change very quickly.

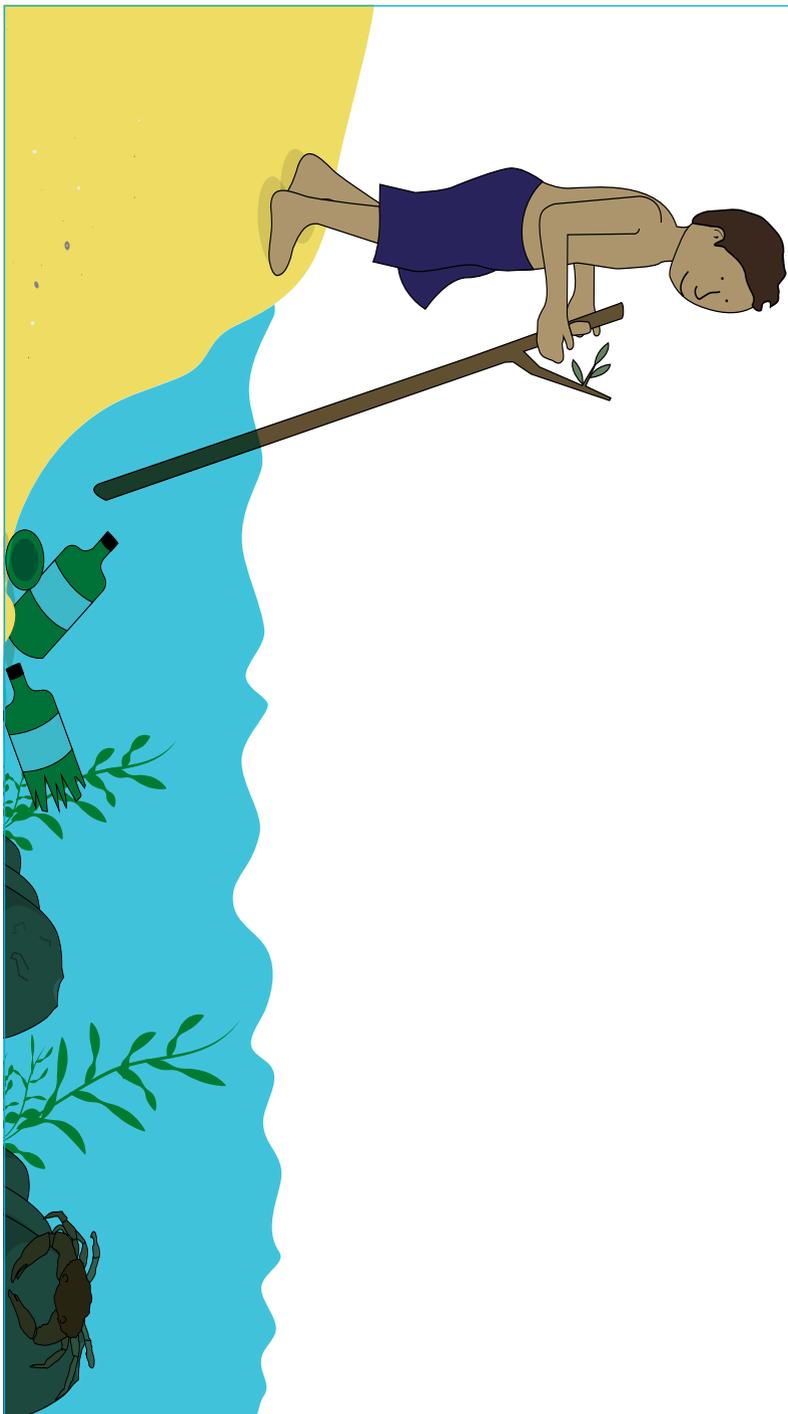
### ***Action***

- Always ask a local person if the water and weather conditions are okay for you to enter the water.
- Stay alert for changes while you are in the water.
- Stay out of the water if the water source is flooded, or if you hear thunder or see lightning.
- Stay out of the water if there are strong currents.

### ***Teaching prompt***

Ask the pupils who they would ask about the water and weather conditions.

Spot the dangers:  
2. Test the water for depth and underwater hazards before entering



## Spot the dangers:

### 2. Test the water for depth and underwater hazards before entering

#### *Why?*

If you cannot see the bottom it is difficult to know if there are any underwater hazards. You may step out of your depth, or hurt yourself on a dangerous object such as broken glass or a sharp rock. You may even get caught in the weeds.

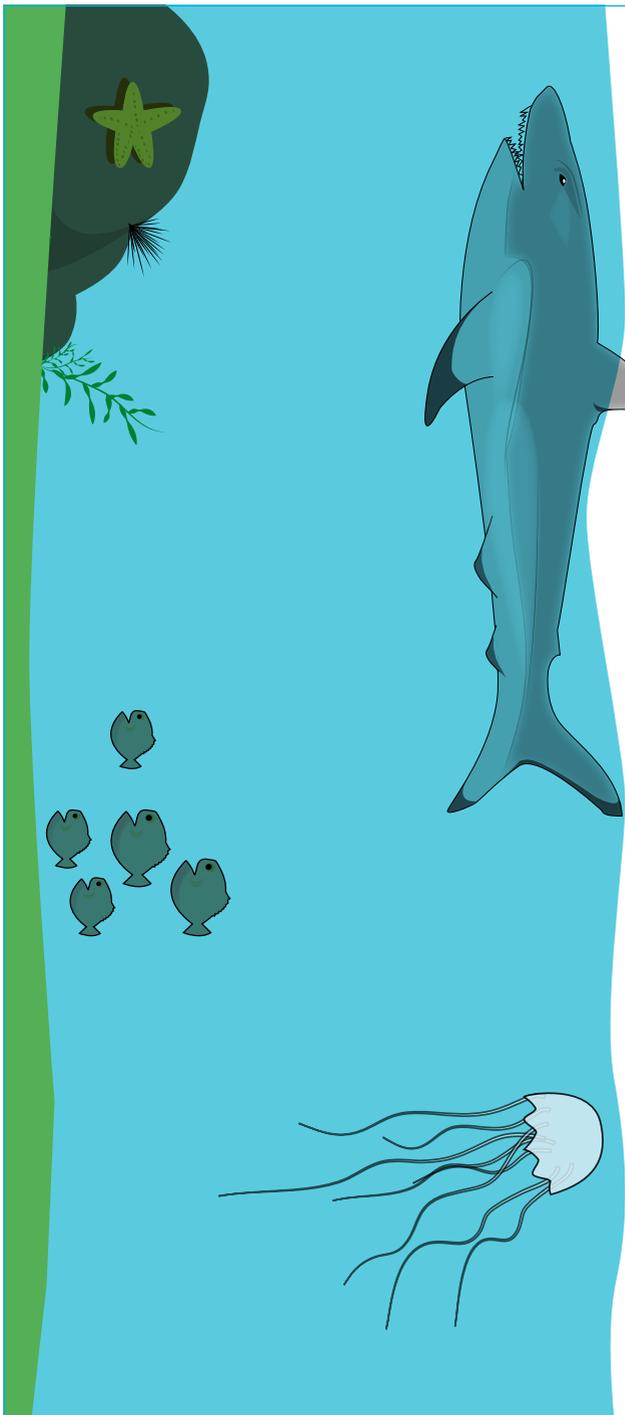
#### *Action*

- Ask a local person how deep the water is and if there are any steep banks or sudden change in depth.
- Where possible, enter the water slowly and use a stick to test the depth of water in front of you and feel for underwater objects.

#### *Teaching prompt*

Ask the students what kind of dangers they might find underwater.

Spot the dangers:  
3. Be aware of animals



## Spot the dangers:

### 3. Be aware of animals

#### *Why?*

Some waterbodies contain animals that can be dangerous to humans. They may bite or sting you if you get too close.

#### *Action*

- Ask a local person if there are any dangerous animals in the water.
- Stay alert and look out for animals in the water.
- If you see a dangerous animal then get out of the water immediately.

#### *Teaching prompt*

Ask the students what kind of dangerous animals they might find in the water.

This page has been left blank intentionally.

Theme: Keep yourself safe

***Why?***  
**Learn how to keep yourself safe  
when you are in or near water.**

Keep yourself safe:  
4. Never enter the water alone



**Keep yourself safe:**

**4. Never enter the water alone**

***Why?***

If you enter the water with a friend they may be able to help you if you get into difficulty or they may find help.

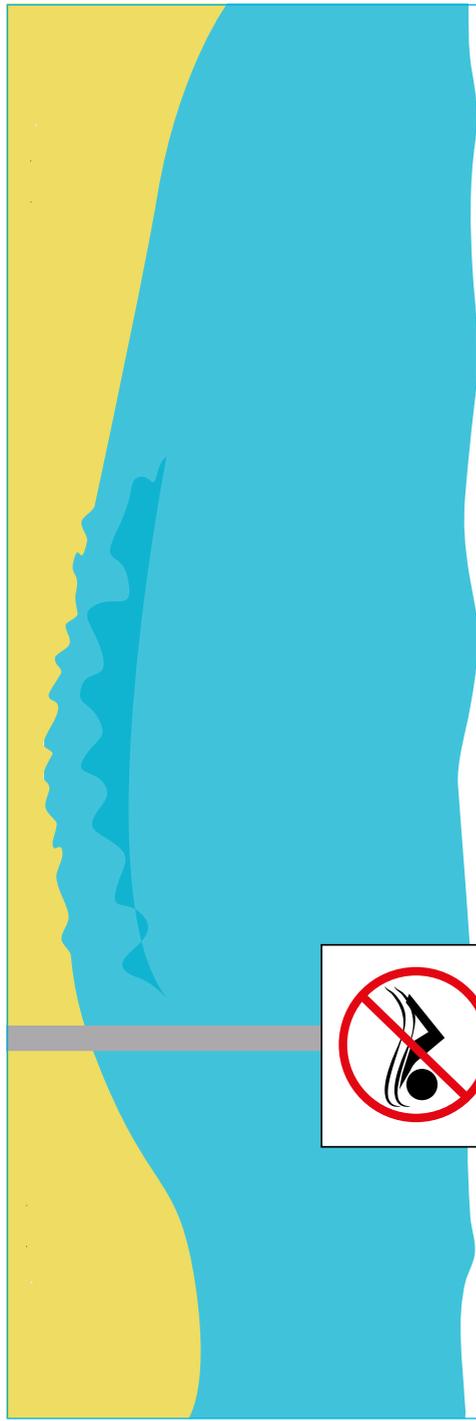
***Action***

- Always enter the water with a friend or an adult who can swim.

***Teaching prompt***

Ask the students who they would enter the water with.

Keep yourself safe:  
5. Obey all safety signs and warning flags



Keep yourself safe:

5. Obey all safety signs and warning flags

***Why?***

Some areas of water have signs or flags to warn you if it is dangerous to enter the water. There may be dangerous objects under the water or strong currents.

***Action***

- Always ask a local person what the signs and flags mean, and obey the warnings.

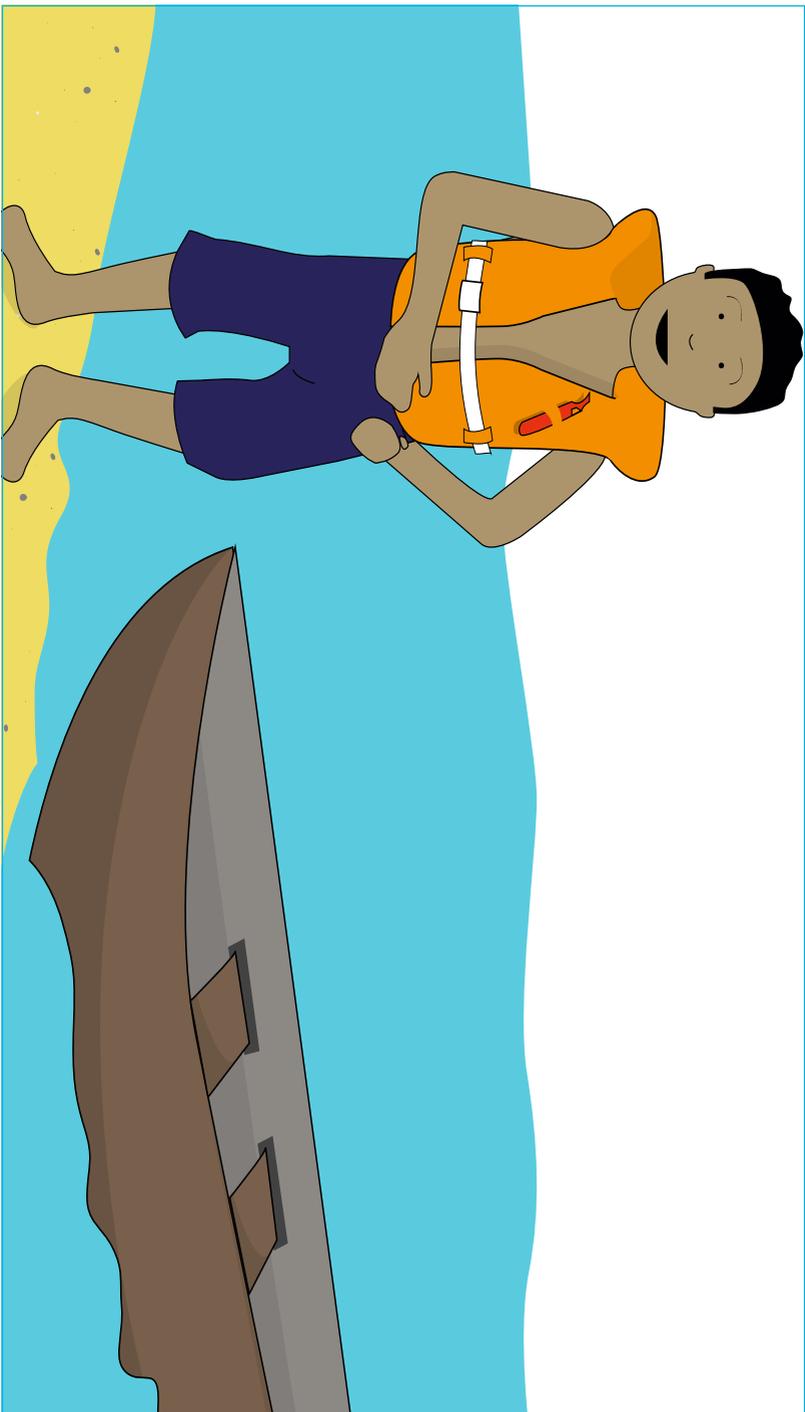
***Teaching prompt***

Ask the students if there are any warning signs or flags next to water in the local area.

What do they mean?

Keep yourself safe:

6. Know how and when to use a lifejacket



## Keep yourself safe:

### 6. Know how and when to use a lifejacket

#### **Why?**

Lifejackets keep you afloat if you fall into the water. They are brightly coloured and have a whistle that you can blow to attract the attention of rescuers. They keep your head above the water if you are injured, tired or unconscious.

#### **Action**

Before you travel on a boat make sure lifejackets are available.

- In an emergency, place the lifejacket over your head and secure it tightly around your waist.
- If no lifejackets are available, hold onto a floating object such as a water container.

**If possible, demonstrate to the class how to put on a lifejacket.**

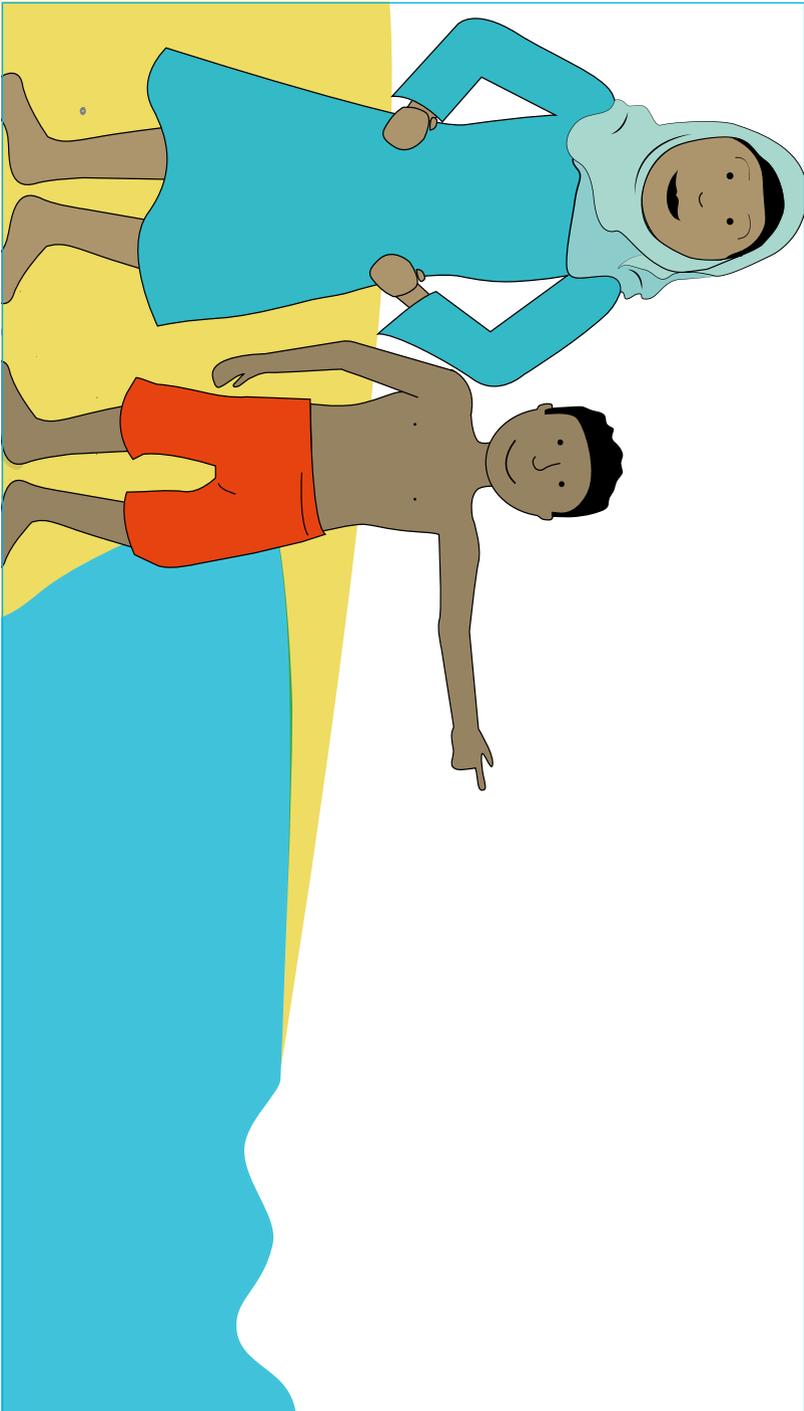
#### **Teaching prompt**

Ask the students if they have ever worn or seen a lifejacket. Where did they see it?

Ask the students what kinds of floating objects they could hold onto if no lifejacket is available.

Keep yourself safe:

7. Always tell someone when and where you are going near water



**Keep yourself safe:**

**7. Always tell someone when and where you are going near water**

***Why?***

If you get into difficulty then someone will know where you are, and they can come and help you if needed.

***Action***

- Make sure that you tell someone exactly where you are going, when you will return and the route that you will take there and back so they know where to find you.

***Teaching prompt***

Ask the students who they would tell if they were going near or entering the water.

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Theme: Keep others safe

***Why?***  
**Learn how to keep other people safe  
when they are in or near water.**

Keep others safe:  
8. Learn safe ways of helping others without putting yourself in danger



**Keep yourself safe:**

**8. Learn safe ways of helping others without putting yourself in danger**

***Why?***

Rescuing a person from the water by swimming to them can be very dangerous. Many people drown while trying to rescue other people.

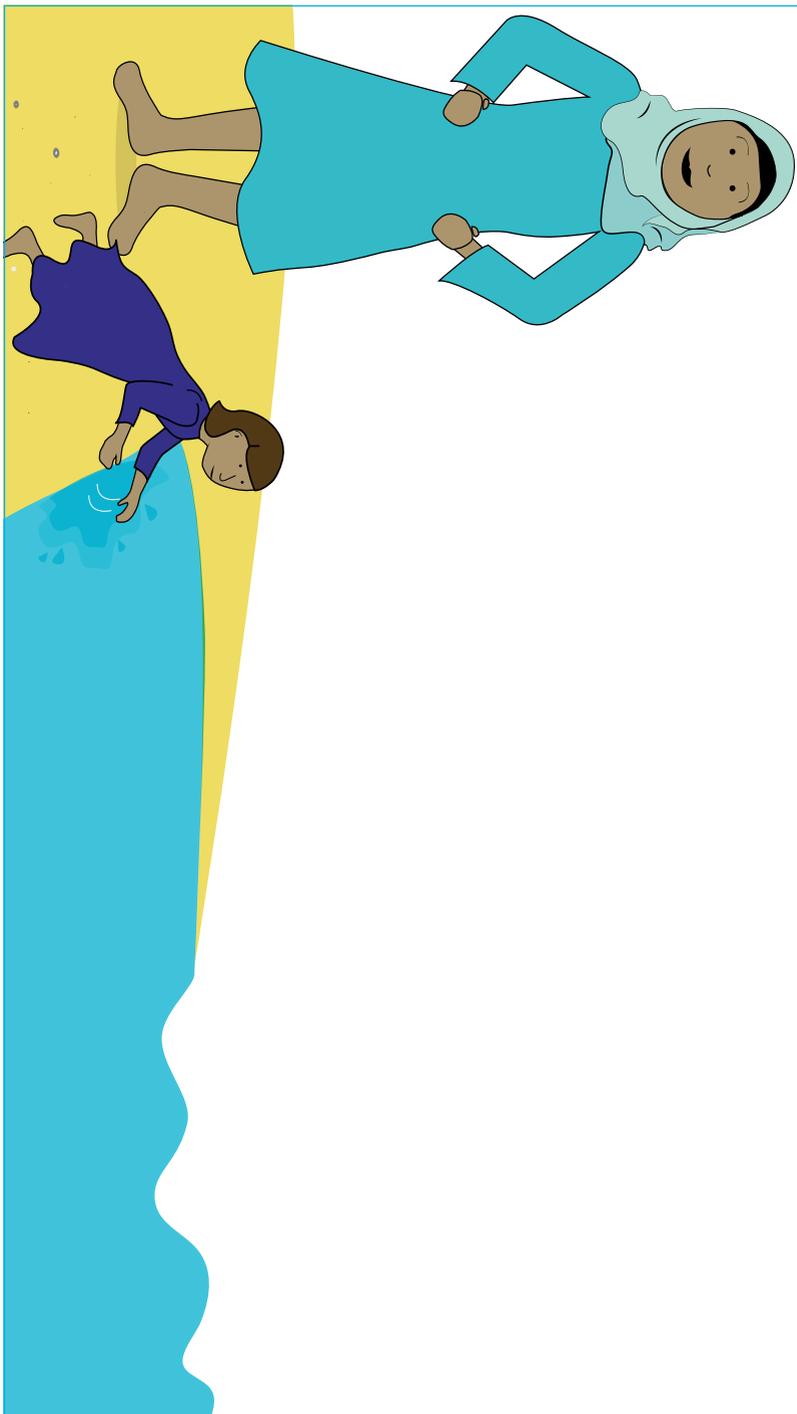
***Action***

- If you see someone in difficulty in the water, use a long object such as a stick to reach them, or throw them a floating object such as a water container.
- If you cannot find a stick or floating object, go and get help.

***Teaching prompt***

Ask students what floating objects they could use to throw to someone to help rescue them.

Keep others safe:  
9. Constantly supervise children in or near water



Keep others safe:

9. Constantly supervise children in or near water

***Why?***

A child can easily walk out of sight and fall into water.

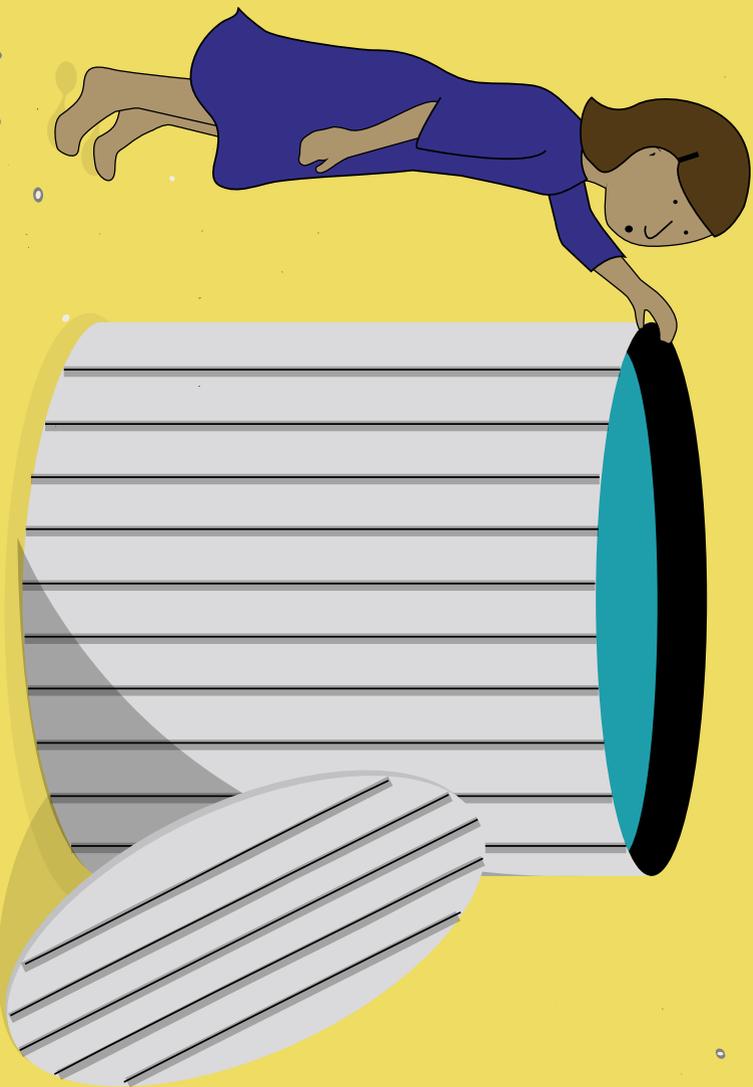
***Action***

- Never leave a child alone when they are in or near the water.
- If you have to do another activity at the same time, ask someone else to supervise the child.

***Teaching prompt***

Ask students what kind of things could distract them when supervising a child.

Keep others safe:  
10. Keep your home safe



**Keep others safe:**  
**10. Keep your home safe**

***Why?***

Children may fall into unprotected water in or around the home.

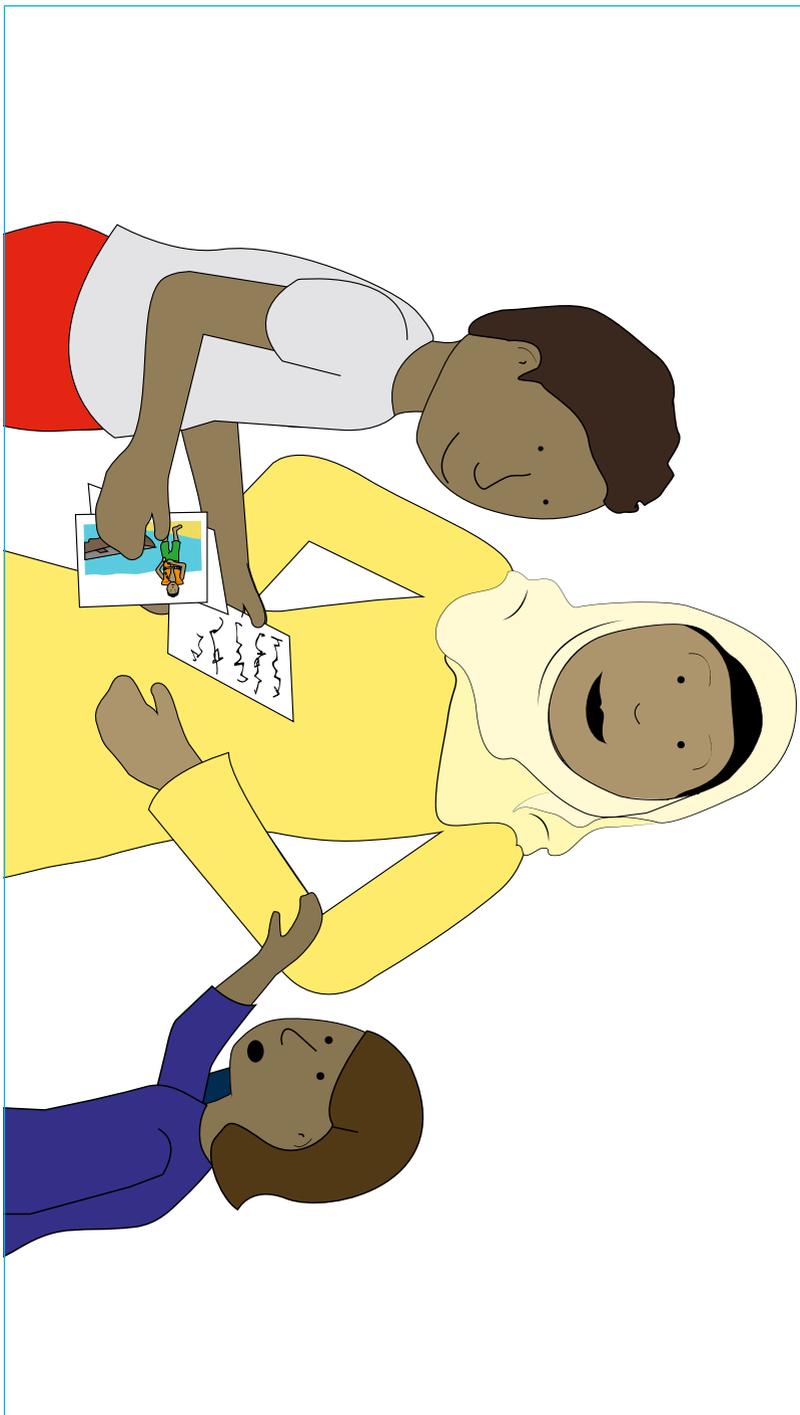
***Action***

- Remember to cover buckets, toilets and water storage tanks.
- Always close doors and gates to stop small children from wandering outside alone.

***Teaching prompt***

Ask the students what kind of waterbodies they have in and around the home.  
What could they do to protect them?

Share the messages





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