Safe Boating is

- a teaching and learning programme for Year 5 to 8 students about safe boating
- intended to be used in preparation for a class EOTC boating experience
- a cross-curricula programme principally linked to the Health and Physical Education curriculum, but with links to Technology, Science and English
- a knowledge based classroom programme with one practical lesson wearing life jackets to be conducted in a swimming pool
- intended to be used with students who have some boating experience or knowledge of boating in their local area
- a programme where the learning is enhanced if local resource people can be brought into the classroom.

Introduction to Safe Boating and Safe Boating

Safe Boating and **Introduction to Safe Boating** are two programmes developed by Coastguard Boating Education for years 5 to 8 that focus on an EOTC boating experience.

Safe Boating is designed for students with some water experience, for example students who have some familiarity with a local waterway and some boating experience, and where a significant number of students are competent and confident swimmers.

Introduction to Safe Boating is designed for students who have no experience of being in or on water.

Some core activities are common to both resources, but the activities in **Safe Boating** assume a higher level of prior knowledge about boating. Activities from both programmes can be combined to build a learning programme specifically suited to students' identified needs.

Links to an EOTC boating experience

The endpoint of the **Safe Boating** programme is to prepare students to enjoy a safe experience in a boat. The programme will lead into any preparation a contracted EOTC provider or teacher leader is providing before students go on the water.

In the programme there is an emphasis on relating the activities to the types of boats students will either meet in EOTC experiences or are likely to use in school holidays. This gives a focus on

- small boats propelled by oars or small outboard motors
- kayaks
- small yachts like optimists.

Many of the activities relate first to a small boat propelled by an outboard as this type of boating is recreation for many New Zealanders but often results in incidents, rescues and drownings.

Boating with the family

Safe Boating makes a small beginning toward developing the individual decision-making and risk management skills students need to make safe boating decisions. If you have students who are involved in leisure activities on the water you may wish to consider using sections of the **Safe Boating** programme that has more focus on developing decision-making and risk management skills.

Schools and safe boating experiences – the context for this programme

Student Capability

Many schools include aquatic experiences, including boating, in their EOTC programmes. Whenever schools are organising activities in, on or around the water they must ensure that the planned experience is within the capabilities of the students and can be conducted safely.

Records over the last five years indicate there have been incidents with school groups that have resulted in drownings or injury and other incidents where the student's experience is a negative one and means they do not want to participate in any further aquatic activities.

Section 8 provides website links and access to publications that assist teachers to

- select appropriate activities for their students
- employ qualified individuals to conduct the activity
- conduct appropriate planning
- manage the activity safely.

One of the issues facing schools who wish to have students participate in boating experiences is the range of student water knowledge, skills, attitudes and confidence and swimming ability within a class. Before students go on the water teachers need an accurate knowledge of each student's ability to swim and their confidence in water. An ability to swim in a warm, wave-less swimming pool where a student can either put their feet down or rapidly reach the side of the pool does NOT equate to the ability needed to swim in the sea or river, or stay calm if they unexpectedly end up in the water.

Students in years 5 to 8 vary considerably in their physical strength, co-ordination, agility and stamina. In EOTC experiences, such as kayaking or yachting, the student's physical strength and agility to pull themselves back into a vessel may be a significant factor.

The aim of any aquatic experience is for students to enjoy being on or in the water. Activities developed must be safe for non-swimmers and poorer swimmers and provide them with a positive experience that will encourage them to learn to swim or be involved in further aquatic activities.

Aquatic accidents and their impact on teaching safe boating

It is important to be aware of any students who have been affected by a traumatic boating experience and to consider this when planning or conducting any aquatic or boating experience or learning activity.

In New Zealand every year around 100 people drown and 5,000 are involved in a boating situation that requires rescue or assistance. In some classes there will be students who have had an aquatic experience that leaves them unwilling to, or unable to, participate in an EOTC boating experience. Other students may have had family or friends involved in a drowning or boating accident. The impact of boating accidents will affect both schools and wider communities.

Teachers need to involve parents in the planning for an EOTC boating experience and inform them that students will be engaged a learning programme about safe boating.

Student aquatic leisure activities

Students from years 5 to 8 should not be in charge of a boat, or out in a boat on the water without adult supervision. However there may be some instances where students are out on the water without adult supervision. This programme is designed to make students aware of the dangers of taking boats out without adequate knowledge and skills. It does NOT give students the knowledge, skills and attitudes to make safe decisions if they are boating without adult supervision.

Safe Boating encourages students who develop an interest in boating to learn to swim competently and confidently, learn water survival skills and to join a club where they can become involved in activities and training opportunities.

Families and boating

The programme focuses on essential boating safety. Some students may be able to take the safe boating information home to their parents and either persuade them to change some current boating practices or to take a Coastguard Boating Education course like the Day Skipper course.

For some students finding out about safe boating practices may be distressing, if they realise how unsafe their family members are when they go boating but know they are not in a position to change the adult behaviour. This behaviour may focus around wearing life jackets, making decisions about safe weather and water conditions, or drinking alcohol while boating.

Some students may need support in finding ways to discuss these issues at home, or accepting that they cannot change their family's risk management behaviour and boating practice.

Links to Coastguard Services

Safe Boating highlights the Coastguard's role in providing education for those interested in boating and in providing nationwide voluntary rescue and assistance services.

Schools with Year 7 and 8 students interested in boating can consider participating in Coastguard Day Skipper Experience. Interested schools visit: www.cbes.org.nz

Coastguard Boating Education gratefully acknowledges the support of TRILLIAN Trust Inc.

Curriculum Links - NZ Curriculum 2007 (Ministry of Education)

Safe Boating is linked to the Key Competencies – Thinking; Using language, symbols, and texts; Managing self; Relating to others and Participating and contributing.
It is linked to the English, Science and Technology curricula.
It is linked to the Health and Physical Education curriculum and particularly to:

Personal Health and Physical Development

Safety management

Sudents will:
- identify risks and their causes and describe safe practices to manage these. (Level 3)

Relationships with Other People

Interpersonal skills

Students will:
- identify the pressures that can influence interactions with other people and demonstrate basic assertiveness strategies to manage these. (Level 3)

Healthy Communities and Environments

Societal attitudes and values

Students will
- identify how physical activity practices are influenced by community and environmental factors. (Level 3)

Learning Intentions

To have students develop knowledge, skills and attitudes about safe boating that will prepare them for a boating experience.

Students will
- describe different types of boating that occurs in your area, the features of the boats involved and describe when and where the boats can be used safely
- describe the essential equipment that should be carried on a boat
- describe the need for life jackets or other personal flotation device (PFD) and describe when and how to use them
- explain a marine weather forecast and relate weather forecasts and weather conditions to safe boating decisions
- explain what people need to wear and do to make sure they are safe in boats and enjoy their boating experience
- explore their own and other people's attitudes to safe boating practices
- describe what to do in specific emergency situations like a person overboard and a boat capsize
- describe planning for a class boating experience
- investigate the role of Coastguard in keeping New Zealanders safe on water

Activity Overview

SECTION 1 Introduction to boating

Learning intention

Students will
- describe different types of boating that occur in their area, the features of the boats involved and describe when and where the boats can be used safely.

Activity	Title Explanation	Type of activity
Activity 1 - Pg 10 What is a boat and what are boats used for? Introductory and language revision activity	An introductory activity that introduces relevant technical language including a definition of a boat and names for parts of a boat (dinghy, kayak and yacht).	Exploration of student prior knowledge leading to a definition of a boat and exploration of what boats can be used for. Outdoor game to familiarise students with names of boat parts and other technical language relating to boats.
Activity 2 - Pg 18 Who goes boating and where do they go boating? Introductory diagnostic activity	An introductory diagnostic activity that indicates individual student' experience with boats and boating. The activity explores students' knowledge of boating in your local area.	Initial post box activity that produces information that could be graphed. Focus on class knowledge about boating in the local area. This knowledge could be extended with use of a local resource person who is familiar with boating in the local area.

SECTION 2 Essential equipment for safe boating

Learning intention

Students will
- describe the essential equipment that should be carried on a boat.

Activity	Title Explanation	Type of activity
Activity 3 - Pg 21 Essential equipment for safe boating Core activity	The activity has students consider what equipment is essential for a boat like a dinghy with an outboard motor, and can be extended to research what equipment is essential for a yacht, and a kayak or a ferry or other passenger carrying ship.	The activity is a group activity involving discussion and sorting and then checking responses with supplied information. Extension involves internet research.
Activity	**Title Explanation**	**Type of activity**
Activity 4 - Pg 27 How does it work? Extension research activity	In this activity students research how some of the essential equipment used on boats operates and what needs to be done to keep it working safely.	This activity could be extended to be a technology challenge but is currently set up as a limited group internet research task.

SECTION 3 Life jackets and flotation devices

Learning intention

Students will
- describe the need for life jackets and other personal flotation devices and describe when and how to use them
- explore their own and other people's attitudes to using safe boating practices.

Activity	Title Explanation	Type of activity
Activity 5 - Pg 29 What is a life jacket & why do we need it? Core activity	Students explore what a life jacket is and why we need it.	Observation of a life jacket and discussion around some provided facts.

SECTION 3	Life jackets and flotation devices continued	
Activity 6 - Pg 31 Wearing a life jacket Core activity in pool	Practical experience of wearing a correctly fitting life jacket.	Pool based activity where students experience wearing a life jacket in a variety of situations.
Activity 7 - Pg 33 What is a life jacket made of and how does it work? Extension research activity	A technology challenge to investigate life jackets.	Technology challenge where students devise ways to test the properties of the closed cell foam and nylon that some life jackets are made from.
Activity 8 - Pg 34 Are all life jackets the same? Extension research activity	An activity that introduces the concept of personal flotation devices (PFDs) that are designed for specific use in particular aquatic activities.	An internet research activity.
Activity 9 - Pg 35 I'll wear a life jacket Values exploration activity	An activity that explore's people's attitudes to wearing life jackets.	Individual or group presentation of knowledge gained about the need to wear life jackets and people's attitudes to wearing life jackets.
Activity 10 - Pg 37 Why do things float? Practical science activity	An activity that explores the concept of floating or buoyancy.	Practical science experiment using polystyrene cups and coins that requires observation of floating and sinking and applies knowledge gained to practical boating situations of loading and overloading boats.

SECTION 4 Clothing to wear when you are boating

Learning intention

Students will
- explain what people need to wear to make sure they are safe in boats and enjoy their boating experience.

Activity	Title Explanation	Type of activity
Activity 11 - Pg 42 What to wear when you are boating? Core activity with an additional research component	Research task to determine the most suitable clothing for a range of boating experiences.	Research activity that has students • explore properties of different fabrics • determine suitable clothing for a range of boating activities. The activity includes determining suitable clothing for the proposed EOTC experience and determining how individual class and students will obtain suitable clothing.

SECTION 5 Safe weather and safe conditions for boating

Learning intention

Students will
- explain a marine weather forecast and relate weather forecasts and weather conditions to safe boating decisions.

SECTION 5	Safe weather and safe conditions for boating continued

Activity	Title Explanation	Type of activity
Activity 12 - Pg 44 Finding out about our local weather Research activity	Students investigate local weather conditions.	Practical activities where students practice observing the weather and develop an understanding of the vocabulary associated with weather forecasting.
Activity 13 - Pg 45 Using marine forecasts Core activity	Students learn to interpret marine weather forecasts.	Students access and analyse marine weather forecasts and relate weather information to planned boating trips. Information source about marine forecasts is internet based.

SECTION 6	Know your local area and the 'rules of the water'

Learning intention

Students will
- explain what people need to do to make sure they are safe in boats and enjoy their boating experience.

Activity	Title Explanation	Type of activity
Activity 14 - Pg 50 Know the area you are boating in and the rules of the water Core activity	Students find out about local conditions for boating and the need for rules and regulations.	Students gain knowledge by questioning a local resource person. This could be an EOTC activity.

SECTION 7	Being a safe and responsible boatie and boat crew

Learning intention

Students will
- explain what people need to do to make sure they are safe in boats and enjoy their boating experience
- explore their own and other people's attitudes to using safe boating practices
- describe what to do in specific emergency situations like a person overboard and a boat capsize.

Activity	Title Explanation	Type of activity
Activity 15 - Pg 54 Communicating with others Core activity	Students determine what information to leave behind when they go boating and find out how to communicate in an emergency situation.	Students complete a two minute form that gives the intentions of a boating trip (proposed destination, expected time of return, number of persons on board) and practice preparing emergency messages and making SOS with sound and light.
Activity 16 - Pg 59 Being a safe and responsible skipper Core activity	Students consider the responsibilities a boat skipper takes on when they take a boating trip.	Students • watch a video of a boating incident • explore the responsibilities a boat skipper has • analyse a newspaper report of a boating incident • develop some rules for safe skippers.

SECTION 7 Being a safe and responsible boatie continued

Activity	Title Explanation	Type of activity
Activity 17 - Pg 62 **What to do when things go wrong?** Core activity	Students identify and describe what to do (and what not to do) if someone falls overboard or the boat capsizes.	A theoretical activity supported by the practical activity in the pool and the video.
Activity 18 - Pg 65 **What is Hypothermia?** Core or extension activity	Students investigate hypothermia, what causes it, why boaties need to be concerned about it, and what they can do to prevent and treat hypothermia.	A research activity that can be internet based or use an identified and easily obtainable written information source.
Activity 19 - Pg 66 **Keep it safe and enjoy it too** Core activity	Students discuss the need for safety rules when on the water and develop some rule for their proposed boating experience.	Class discussion related to the proposed EOTC boating experience, and on how to gain further experience in boating.
Activity 20 - Pg 68 **What have we learned about safe boating?** Assesment activity	Assessment and reflection activities.	Students reflect on the unit of work. Includes using the game *Anchors and Flares*.

SECTION 8 Planning our boating experience

Learning intention

Students will
- describe planning for a class boating experience.

Activity	Title Explanation	Type of activity
Activity 21 - Pg 70 **Planning our boating experience** Core activity	Planning activity using your school's planning processes.	Activity for teachers to develop that involves students in planning for the proposed boating experience.

Section 1 Boating

Teachers' note

This section is an introduction to the unit and can be used as a diagnostic assessment to gain information about individual students' (and class) boating knowledge and experience.

Activities explore the student's current knowledge about boating in your local area, and individual student's experience of boating in different types of boats.

The activities introduce students to language relating to boating that will be used throughout the unit.

Learning Intention

Students will

- describe different types of boating that occurs in your area, the features of the boats involved and describe when and where the boats can be used safely.

Key messages

- There are different types of boats.
- These types of boating occur in our area.
- There are parts of our local area that is generally safe for boating, and parts of the area that are unsafe for all or some boating activities.
- There is some specific vocabulary around boating including (students to name vocabulary new or important to them).

Activity 1

What is a boat and what are boats used for?

Teachers' note

This introductory activity explores students' concepts of what a boat is and how boats are used. It begins an exploration of the specific language relating to boats and being on, in or around water.

Resources/essential equipment provided

- access to the internet or publications that include pictures of boats
- models for each of the three types of boat for groups of students to assemble
- copies of **Boating terms and definitions** factsheet for each group.

Part A What is a boat?

Please note in these activities you need to define your local area.
It may be useful to use the area in which an EOTC event based on this boating resource takes place.

- Organise the class to work in groups, or as a class, and have the students brainstorm as many types of boating activity they can think of that occurs in your local area and the sorts of boats that are operating in your local area.
- Have the students select one type of boat and name and explain all the features of the boat that they can and write a definition of a boat.
- Have the students
  - carry out some internet research or
  - use the information sheets provided to revise the features of the boat they have selected and revise their definition of a boat.
- Have the students share their work and compare their definitions of a boat with this definition.

A boat is something that people can be carried in. It floats on water and has some way of moving (propulsion). Movement can be by using a motor, sails, a paddle or oars.

- Have the students look at the illustrations of the types of boat they have selected and compare and contrast the features of flotation, means of propulsion and ways of steering in all the types of boats.
- Have groups of students assemble and correctly label the three models of types of boat provided (dinghy, kayak, and Optimist yacht).
- Ask the students if an inflatable raft, a body board, (a boogie board) and a surfboard can be described as a boat, and why or why not. Note that people kicking can be a means of propulsion but the surfboard and body board are technically not boats because you can not be in them, you are on them.

- Have the students brainstorm language about boating that they have heard or understand and make a class list of the words that will be used throughout the unit. Students can add new terminology to this list throughout the unit.

Part B What are boats used for?

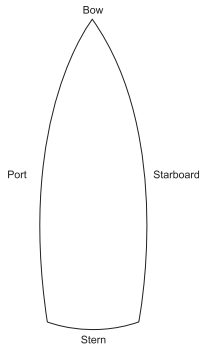
- Ask the students what people use boats for and make sure their responses include

transport (people and things e.g. ferries, cargo ships, cruiseships)	sport e.g. water skiing, yacht racing, river and sea kayaking, white water rafting	catching or gathering food
income (e.g. charter boats)	sight seeing	defence (navy vessels)
rescue work and water safety patrols	fun, recreation, leisure time activity	sport fishing (e.g. marlin fishing)
assist ships manoeuvre in a harbour (pilot boats and tugs)	conservation work	

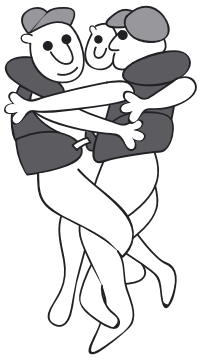
Extension Activity Person Overboard

This version of the Person Overboard game is designed to get students familiar with parts of a boat and is intended to be played outside.

- Take the students outside and define and mark out a suitable size space that they can run or move fast in.
- Identify the boat direction showing bow, stern, port and starboard.
- Give the students the instruction that when you call the word they move fast in that direction until you call out another direction and they stop and move in that direction. Play initially using just bow, stern, port, starboard and then add variations like



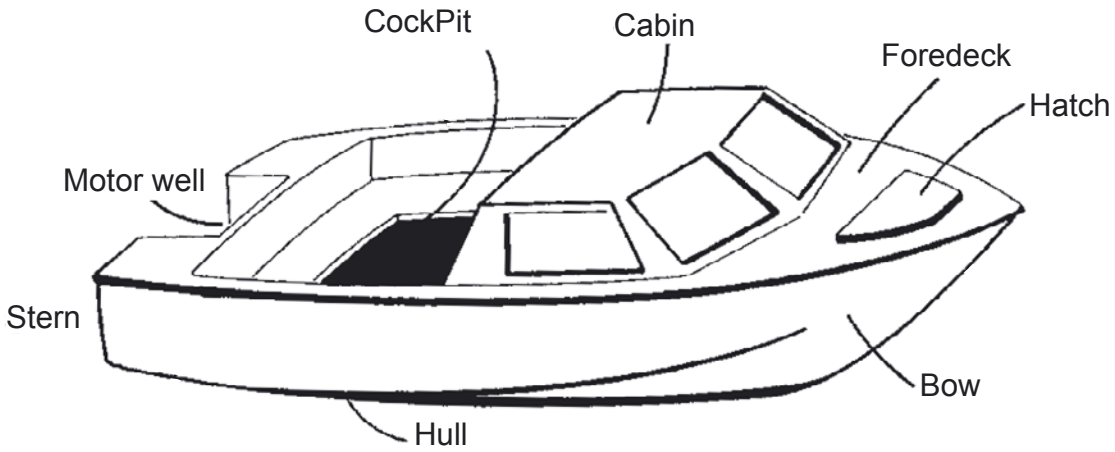
- row a dinghy - sit on the ground and row
- climb the mast - stop and pretend they are climbing up
- paddle the kayak - sit and mime paddling action
- we are in trouble - stand and slowly and repeatedly raise and lower arms at the side.
- person overboard - stop and mime throwing out a rope or lifebuoy
- all overboard- stop and stand in a group of three or four, facing inwards, arms linked behind the back in the huddle position.

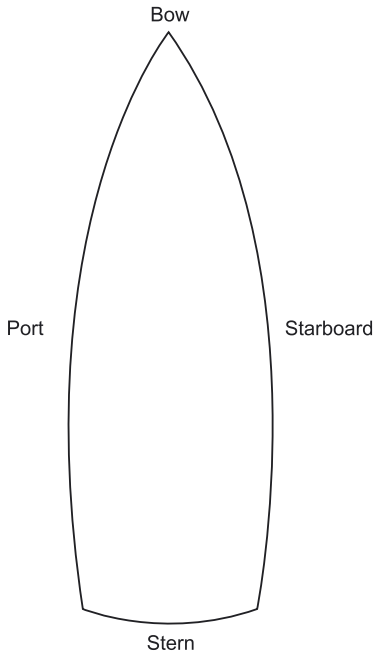


Huddle position in water

Boating terms and definitions

Small boats

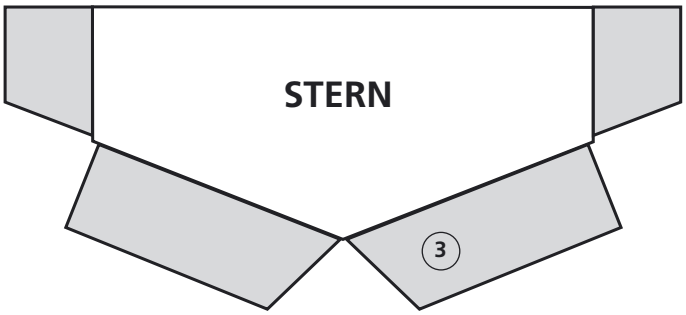


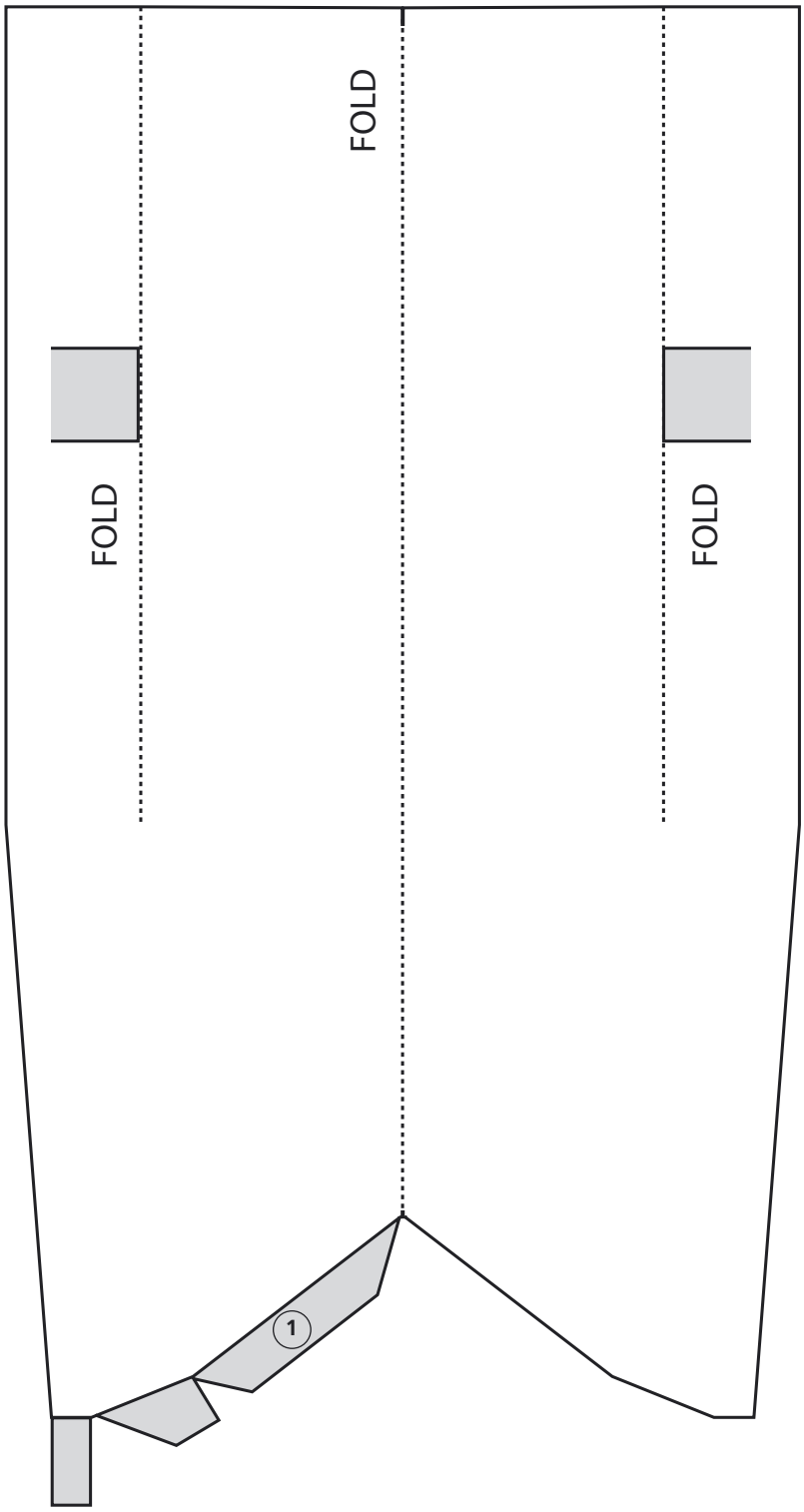


Optimists

Optimists are built and have buoyancy bags so they will not sink, even when they capsize. The mast is locked in and the rudder has a lock to stop it from falling off. The centre board and bailer are tied on. Optimist sailors are taught how to right their boat if it capsizes.

Model - Dinghy





INSTRUCTIONS

- Carefully cut around the edges of the largest part of the boat shape ① and the grey tabs.
- Fold the dotted lines up towards you.
- Fold the tabs at the bow inwards so that both sides of the boat meet. Proceed to glue them down inside the right-hand side of the dinghy.
- Next cut around ②. Proceed to fold these tabs inward also.
- The two tabs on section ② fit on to ① and act as a seat in the dinghy. Glue the tabs to the grey positioning marks on the inside of the dinghy.
- Finally cut carefully around ③ and the tabs.
- Fold the tabs inward and glue the bottom tabs to the bottom inside stern end of the dinghy and the side tabs to the inside sides.
- Good luck and happy sailing in the future.

Model - Optimist Yacht

INSTRUCTIONS

- Carefully cut around the edges of the largest part of the boat shape ①. Make sure that you do not separate the sides from the hull.
- Use a ruler to rule the heavy straight lines that you have not cut along. Fold them away from you. Fold the dotted lines up towards you.
- Cut two slits (very carefully) in the stern for the rudder to attach at the end.
- Now fold over the top edge of the port and starboard sides to the inside of the boat (Yachting New Zealand logo is on the outside). Make up the Bow and the Stern (remember to tuck in all the side flaps). The top edges fold in a similar way as the sides. You may need to glue these or you can hold them with paper clips.
- Next repeat instructions for mast step②. There are lines on the inside top edge of the port & starboard sides to help you line up the mast step.
- Repeat again with ③ and ④and fit together.④slides into③. Glue in place on boat.
  Finally glue the rudder together folded over a tooth pick for a tiller and push the tabs through the slits in the stern.
- A straw or pencil will make a good mast and you can design the sail that will fit your boat. Every boat needs a great paint job (remember Black Magic).
- Good luck and happy sailing in the future

RUDDER

RUDDER

Insert in slits in Stern

Insert in slits in Stern

Fold rudder around tooth pick here

Slit the two small lines in stern first and insert rudder tabs last.

Fold these bits in and glue to middle of boat as in picture

CENTERCASE

Cut both dotted lines

③

Tuck this flap inside the stern (back) of the boat.

STERN

Tuck this flap inside the stern (back) of the boat.

Line up ↓ internal frames ↓ with these lines

Fold this edge to the inside of the boat twice

PORT SIDE

STARBOARD SIDE

Line up ↑ internal frames ↑ with these lines

Fold this edge to the inside of the boat twice

Tuck inside bow.

HULL

BOW

Tuck inside bow.

②

MAST STEP

Stick ① on top of this instruction and then to the area just inside the bow of the boat.

①

④

Insert this Tab into Centrecase ③

Boating terms and definitions
Kayak

SEA KAYAK TERMS & EQUIPMENT

SEEK ADVICE

Seek advice from instructors and experienced sea kayakers before buying your boat.

HIGH VISIBILITY

All gear, kayak and paddle blades, in bright and visible colours.

INSIDE THE KAYAK

- Bulkheads, which form waterproof compartments
- Footrests or rudder pedals

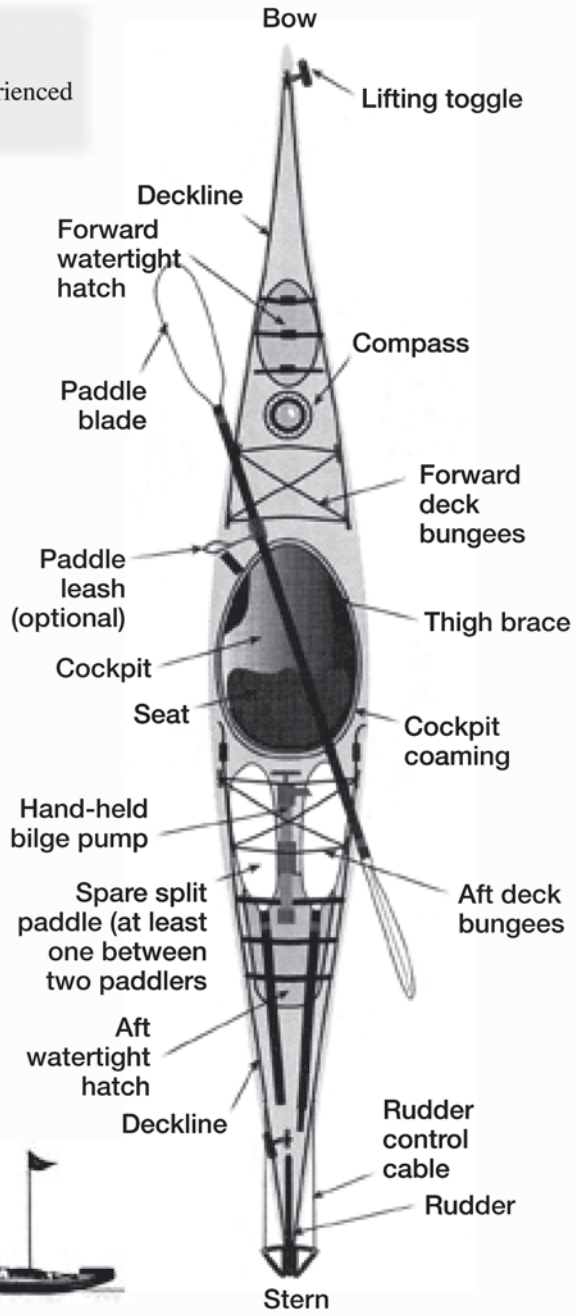
ON DECK

- Paddle float
- Spare paddle
- Map or chart
- Pump

IN THE BOAT

- Waterproof Torch
- Emergency food
- Change of warm dry clothes in a dry bag
- Thermal space blanket or survival bag
- Waterproof matches or lighter
- Sunscreen
- First aid kit
- Survival kit
- Repair kit
- Water / drink bottle

Kayak with high visibility 'chopper' guard flag.



Boating terms and definitions
Kayak

ESSENTIAL FOR THE PADDLER

EQUIPMENT

- Lifejacket or Personal Floatation Device (PFD) – always to be worn
- Towline
- Pump
- Sprayskirt

CLOTHING

- Synthetic fibres; polypropylene or polyester longjohns and top
- Multi layers of thin clothing allow more flexibility
- Sun hat with chin tie or warm hat
- Sunglasses (with cord loop)
- Waterproof outer jacket
- Suitable footwear, such as wetsuit booties, that you can swim in.

COLD WATER PADDLING

- Long John wetsuit, dry suit or 'Gore-Tex' immersion suit
- Neoprene booties
- Neoprene hood or balaclava
- Pogies or neoprene gloves

SIGNALLING DEVICES

To be carried on your person or lifejacket.

- Whistle
- Signal mirror
- Day / night flares
- Emergency light
- VHF radio and or mobile phone (in a sealed plastic bag or waterproof container)

Good timing in a surf breakout – cresting a wave before it breaks.

Model - Kayak

INSTRUCTIONS

- Carefully cut around the edges of boat shape ① and the grey tabs.
- Proceed to fold the grey tabs inwards.
- Fold the sides of the kayak inward so that they start to form the sides of the boat.
- Then take the tabs that form a set of two and glue them to the inside base of the kayak.
- Proceed to take the top tabs at each end and glue them to the opposite side of the inside of the kayak so that it makes up your boat.
- Finally cut carefully around section ② and the tabs.
- Fold the tabs inward.
- Tuck the tabs inside the kayak so that section ② sits on the kayak, like a lid.
- Good luck and happy sailing in the future.

Activity 2

Who goes boating and where do they go boating?

Teachers' note

This is a diagnostic activity that indicates your students' association with different types of boats and their knowledge of boating that occurs in your area.

Resources/equipment needed

- post boxes
- a map of the local area.

You could use a resource person who is familiar with boating in your local area for Part B of this activity.

Part A The boating experience of our class

- Give students this fact, **In New Zealand one in three people goes boating each year.**
- Make a post box of each type of boating activity the class identified as occurring in your area. Include a final post box where students write down the number of post box entries they have completed.
- Have each student walk around the post boxes and, for each activity they have experienced, have them complete and 'post' a piece of paper that describes
  - how often they have taken part in the activity
  - who they were with when they did the activity (possible categories: family, school group, friends, club, other)
  - what, if anything, they liked about the activity
  - what, if anything, they disliked about the activity
  - what they did to keep themselves safe during the activity.
- Discuss the information you can gain from the results of the post box exercise and how you could present the information. The activity could be extended to include the use of graphs.
- Give each post box (that has completed information in it) to a group of students and have them present the information to the class.
- As a class draw some conclusions about the local boating experience of the class.
- Students could use this information as a starter for a pair discussion or a piece of descriptive writing about a trip they had in a boat that was .... (student words like fun, exciting, awful, scary etc). Alternatively some students with an interesting boating experience could describe it to the class.

Part B Boating in our local area

- Display a map of your local area and have the students identify
  - what boating activities there are in your local area
  - where specific types of boating activities occur e.g. sailing in small yachts and rowing dinghies in the inner harbour
  - where it can be too dangerous for these activities (e.g. sailing in small yachts and rowing dinghies outside the harbour in the open sea or in a busy harbour)
  - whether boating is on the sea, on a river, on another inland waterway like a lake or dam
  - any areas that are too dangerous for any boating activities and why
  - places where a number of different boating activities or other water-related activities occur in the same area
  - areas where people in boats may need to take special care and why
  - areas where boats can generally be used safely if people are well prepared and use safe boating practices.

You may want to bring in a local boating expert to extend student knowledge during this activity.

- Divide the students into groups and have each group choose a type of boating interests them that occurs in the area. If possible include the types of boating students are most likely to experience e.g. yachting in small yachts, kayaking, boating in dinghies.

- Have each group of students use their current knowledge and experience to complete a chart like the one below.

Type of boat	Positives of this type of boating	Possible negatives of this type of boating	Risks or safety issues with this type of boating	Places and conditions where you can use the boat safely	Places and conditions where it could be dangerous to use this type of boat

Section 2 Essential equipment for safe boating

Teachers' note

This section focuses on the essential equipment that should be carried on a boat.

Learning intention

Students will

- describe the essential equipment that should be carried on a boat.

The activity has students consider what equipment is essential for a small boat with an outboard motor, and then conduct some research to determine what equipment is essential for a yacht, and for a kayak.

Key messages

- There are six essential items you should have with you to be safe in a small boat.
- The essential items are
  - life jackets
  - an anchor and chain
  - a bailer e.g. a bucket
  - an alternative means of propulsion like oars or paddle, a sail or an auxiliary (extra) motor
  - a signalling device to use if you are in trouble like a Marine VHF radio or flares
  - a fire extinguisher.

- If you use a specialised boat like a kayak or yacht there will be some essential items you need to be safe.

Activity 3

Essential equipment for safe boating

Teachers' Note

This activity has students consider what gear they think is essential for boating in a dinghy, then check their assessment with provided information and modify their responses if required.
It is designed to be a group discussion activity with pictures of objects being moved around as they are discussed.

Resources/essential equipment provided

- copies of the dinghy cut-out for each group
- copies of the **What do you need for safe boating?** Activity sheet for each group
- copies of the **Essential equipment on a boat** Information sheet for each group.

- Ask the students to work in groups and have each group assemble a boat.
- Give each group the **What do you need for safe boating?** Activity sheet and have them complete it.
- Give the students the **Essential equipment on a boat** Information sheet, and have each group modify their essential and useful gear if they need to.
- If your EOTC experience is to be kayaking or yachting, or these are leisure activities your students may be involved with, have your students complete some research to determine the essential equipment to carry on a yacht and on a kayak. Information about kayaking on pages 15 and 16.
- Have the students prepare a poster demonstrating the essential safety equipment to carry on a dinghy or runabout, on a yacht or on a kayak.
- If your students use a ferry for transportation or you are planning a ferry trip the students could carry out research to find out what essential safety equipment passenger boats must carry.

Activity Sheet 1

What do you need for safe boating?

Your task

You are planning a day out in the boat for you and two adult family members. From the items provided you need to decide

- what do you need to carry with you as essential equipment
- what could be useful on the trip
- what is dangerous to have on the boat or could be dangerous in some situations.

1. Assemble the boat and cut up the equipment items and the two heading cards.

Useful items	Dangerous or potentially dangerous items

2. Discuss each item of equipment.

- If the group thinks the item is **essential** place the equipment item in the boat or
- if the group thinks the item is **useful** place it in a pile by the useful items heading card

or

- if the group thinks if it is **dangerous (or possibly dangerous)** place it in a pile by the dangerous items heading card.

Essential equipment on a boat

The six essential items that every power boat should have on board are

1 life jackets or other personal flotation devices like a buoyancy aid or wetsuit - one correctly fitting life jacket for every person in the boat
2 an anchor and chain, so you can anchor the boat in one place provided the water is not too deep
3 a bailer e.g. a bucket, so you can get water out of the boat
4 an alternative means of propulsion like oars or paddle, a sail or an auxiliary (extra) motor, so you can still return to shore if lose your main way of moving
5 a signalling device, to use if you are in trouble. This could be a VHF radio or flares. It could be a torch or a cell phone, but the torch will only alert other people if they are close by and the cell phone may not work if you are out of its reception range, or if it gets wet. Any signalling device must be kept dry, for example kept in a 'zip lock' bag
6 a fire extinguisher.

There are some items that could be carried on a power boat because they increase safety. These are

1 a first aid kit
2 spare engine parts
3 tools to carry out repairs on the engine or other parts of the boat
4 a length of rope
5 a boat hook
6 a chart of the local area
7 a compass or GPS (global positioning system)
8 a change of warm clothing
9 water and food (emergency rations)
10 a knife.

Safe boating equipment

life jacket

cell phone

first aid kit

make up

anchor

compass

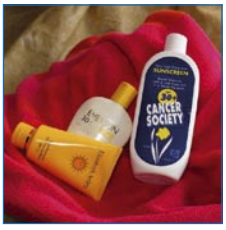
lighter

magazines

oars

charts

sunscreen



music

dog

tow rope

iPod

flippers, snorkel and mask

cigarettes

water

towel

food and fruit

beer

knives

fuel can

buckets

chilly bin

extinguisher

rainwear

portable bbq

tools

picnic seats

fishing tackle and bait

umbrella

fishing line

flares

Look at the items and group them under these headings.

What I might need to get me there and back safely

What I could need if there is an emergency.

What I need to allow me to stay in one place away from danger

What I need to tell people I am in trouble

What I will need if someone is hurt

Some useful additional information

- Water and food are useful items to make sure you enjoy the trip. You need to drink the water to make sure you do not get dehydrated and start to feel sick.

- Gear to protect you from weather will make sure you are comfortable and are looking after your wellbeing.

  The clothing could be

  - protection from the sun e.g. 30+sunscreen, a sunhat, sunglasses and a long-sleeved top and trousers

  - wet weather gear to keep you dry

  - warm clothing like polypropylene underclothing, warm hat, gloves and jacket.

- If you are planning a trip to fish or snorkel you would take fishing gear (hooks, line, bait and rod) or snorkelling gear (snorkel, flippers, mask and a wetsuit).

- Some people may want to read or listen to music when they are out boating. These items are not essential. They are only potentially dangerous if they are very heavy and could overload the boat, or distract the skipper.

- If you are planning to go ashore you may want to carry the cricket gear, the picnic set and the portable barbecue, but these could overload the boat.

- A dog on board a small boat is potentially dangerous because they could move about and make the boat unstable, or fall in, or knock someone else into the water.

- Cigarettes and matches are a fire risk on the boat. If there is fuel escaping and a match is lit the fuel can ignite and cause a rapid and serious fire or an explosion.

- Alcohol should not be drunk when you are out boating. Alcohol and boating are a bad combination because, as people drink, they may not make good boating decisions and can get into unsafe situations.

- People going out in boats should always take their personal medication (like an asthma inhaler) with them.

Activity 4

How does it work?

Teachers' note

This extension research activity has students use the internet to investigate how some boating equipment works.

Resources/equipment needed

- access to the internet

- Have the students work in groups and allocate each group one of the following items.
  - GPS (global positioning system)
  - flares
  - fire extinguisher
  - VHF radio
  - nautical chart
  - compass

- Have the students conduct some internet research and present some information to the class that explains some, or all of these things, about their chosen item
  - what the item is
  - what it is (usually) made of
  - how it works
  - what it is used for in a boating situation
  - how someone in a boat uses the item safely
  - any limitations of the item
  - what you need to do to maintain the item so that it remains useable.

Section 3 Life jackets

Teachers' note

This section is about wearing a life jacket, (a personal flotation device). It includes a pool-based session where students experience wearing life jackets. For this activity you will need to provide a range of different sized life jackets so that each student can wear one that fits them correctly. Your local sports trust should be able to provide a list of organisations that loan suitable life jackets. This pool-based activity introduces students to the H.E.L.P. (Heat Escape Lessening Position) and huddle positions that reduce heat loss and reduce the risk of getting hypothermia. You may want to prepare for this activity by reading the pamphlet Hypothermia provided by Water Safety New Zealand or reading the information on www.watersafety.org.nz. Go to good advice/hypothermia.

Activities explore the idea of flotation, what happens if you overload a boat and why it is advisable to wear a life jacket at all times. The information sheet outlines New Zealand laws about wearing life jackets, but the activities here recommend that all those in boats wear a life jacket at all times.

Please note this resource follows the direction of other water safety resources for years five to eight and focus on term life jacket, rather than focusing on life jackets and other personal flotation devices (PFDs), like buoyancy aids, that individuals can wear that will keep them afloat.

Learning intention

Students will

- describe the need for life jackets and describe when and how to use them
- explore their own and other people's attitudes to using safe boating practices.

Key messages

- A life jacket will keep you float in water with your head out of the water.
- People should wear life jackets at all times when they are recreational boating.
- Life jackets must fit properly to keep you afloat.
- Children under 12 must wear a life jacket at all times.
- Throw other things that float to someone who has fallen overboard to help them stay afloat until they are rescued.
- Don't overload a boat.
- Move carefully on a boat so you don't capsize it or fall overboard.

If you wish to do further work on water survival skills and wearing life jackets investigate In at the Deep End at www.watersafe.org.nz and Swim Start (Swim Safe) www.swimmingnewzealand.org.nz

Activity 5

What is a lifejacket and why do we need it?

Teachers' note

This activity introduces a life jacket to students who may never have seen or used one. It is designed to be used with a demonstration of one or more different life jackets.

Resources/essential equipment

- a life jacket (or more than one style of life jacket) for students to observe. While pictures of a life jacket could be downloaded from the internet if a real life jacket is not available the activity will be less effective.
- copies of **Life jacket-Facts** for the teacher and/or students.

- Show the students a life jacket and assess students' prior knowledge by asking questions like the following questions. Supplement the student's knowledge with information from the **Life jacket-Facts.**

  - What is this?
  - Who wears one?
  - What does a life jacket do?
  - What were you doing when you wore it?
  - What was it like to wear it in a boat?
  - What was it like in the water wearing the life jacket? You could indicate to the class that they will be doing that during their pool session.
  - What other safety features does it have?

Life jacket - Facts

- A life jacket is a safety device that someone wears that can be used in an emergency when they end up in the water. A life jacket provides buoyancy or flotation. Some life jackets allow a person wearing it to float in the water with their head out of the water and to float without using energy. The person can conserve their energy and reduce the risk of getting cold and developing hypothermia before they are rescued.
- People who are not strong swimmers gain confidence by wearing a life jacket when they are in the water, even if they are going for a swim.
- Wearing a life jacket saves lives - 75% of all those who drown in boating accidents could have stayed alive if they were wearing life jackets.
- In New Zealand the skipper of a boat must make sure there is a correct sized life jacket for everybody on board the boat.
- It is recommended that everyone on a recreational boat wears a life jacket at all times. Accidents happen quickly. There may be no time for someone to look for a life jacket and put it on before they are in the water.
- Children under 12, elderly and non-swimmers should always wear a life jacket.
- A skipper must make sure that everyone in the boat is wearing a life jacket in situations of high risk like crossing a bar, in rough water and during an emergency.
- If the life jackets are not being worn they must be placed where they are easy for people to get them.
- If you travel on a large commercial boat they must carry a suitable life jacket for everyone on board and carry correct sized life jackets for children.
- Life jackets have added features to help rescuers find someone in the water. Life jackets are brightly coloured and some have a whistle, light and reflective tape.

Activity 6

Wearing a Life jacket

Teachers' note

This is a pool-based activity and requires enough suitable sized life jackets for (ideally) students to work in pairs.

This activity is designed to occur in a swimming pool where (ideally) all students can comfortably stand up in less than chest high water. However it can be extended to having students in a pool where they cannot touch the bottom, in a wave pool or in a pool where students create waves.

This activity may be best conducted over two pool sessions.

Resources/essential equipment

- swimming pool
- life jackets for students
- swimming costumes and t-shirts, shorts, jeans, long sleeved sweaters for students to wear in the water
- objects that float like a chilly bin and lid, a bucket, a life buoy, a plastic ball
- possible teacher preparation about H.E.L.P. and huddle position and hypothermia by reading the pamphlet Hypothermia or by visiting the website, www.watersafety.org.nz. Go to good advice/hypothermia.

On the side of the pool or in the classroom

- Demonstrate how to put the life jackets on then model the drill you want students to follow on their EOTC experience such as
  - students putting on their own life jacket, checking it fits properly and that the fastenings (buckles, zips) are done up correctly
  - students checking with a partner that each student has their life jacket done up correctly
  - an adult checking that the life jacket is a correct fit and done up correctly.

In the pool

- Have each student enter the water and experience floating in a life jacket.
- Have the students find out what happens and what it feels like in the following situations.
  - If the students are in a life jacket that is too big for them.
  - If the life jacket is not done up properly.
  - If the students are wearing jeans and a long sleeved top, or a t-shirt and shorts.
  - If the students try to put the life jacket on while they are standing in water.

- If the students imagine they cannot reach the bottom, and try to put the life jacket on while they are floating in the water. (Open up the life jacket, float on the front panel of the life jacket and place one arm through it, turn onto back and put second arm through. Zip and click).
- If the students float for two or more minutes with the life jacket on and then compare this with floating for two minutes or more without a life jacket.
- If the students wear their life jackets in a situation where there are waves or currents. If the pool you are using has a wave machine this will be easy to create, other wise create a current by having half the class in the centre of the pool walking around in a circle to create a whirlpool. You will need to experiment to establish situations where students in life jackets can feel the force of the water.

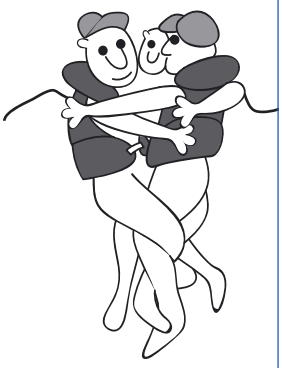
- As an extension, wearing a life jacket in deep water (where the students cannot touch the pool bottom. (See in at the Deep End.)

- Explain to the students that if you are in the water in a person overboard situation you risk getting cold in the water and getting hypothermia. Swimming uses energy and makes your body cool down faster. You need to let yourself float in the water and conserve energy and keep your self warm.

H.E.L.P

- Demonstrate the H.E.L.P (Heat Escape Lessening Position) to the students and explain that floating in this position does not use energy and makes sure you stay as warm as possible in the water. Note that H.E.L.P. in this context is the heat escape lessening position not the swimmers 'assistance' or 'help required' signal of waving one hand above the head.

- Have the students practice the huddle position and discuss what it would be like if you had a boating accident and unexpectedly ended up in the water. Being in the huddle position keeps all of the group together. They can float more easily as a group, conserve their energy, and stay as warm as possible. They can look after each other and reassure each other. If one person is getting cold or is hurt they can be placed in the centre of the huddle and be kept warmer.



Huddle position in water

- Have the students take off their life jackets and float in the water. Give them an item like a bucket, a chilly bin or the pool life buoy, rescue tube, ball, kickboard, noodles or other personal flotation device and have them experience how much less energy you use to stay afloat if you can hold onto something that is buoyant (can float).

In the classroom

- Discuss the pool experiences with the students by asking questions about each of the situations that were created.

Activity 7

What is a life jacket made of and how does it work?

Teachers' note

This technology challenge is to devise some experiments to determine why nylon and closed cell foam are used in life jackets.

You can contact Coastguard Boating Education at www.cbes.org.nz or 0800 40 80 90 to obtain samples of the closed cell foam. You may need to purchase some off-cuts or nylon or use some fabric from an unwanted nylon garment.

Resources/essential equipment

- closed cell foam
- nylon pieces
- possibly an old life jacket
- equipment students will use to carry out the tests/experiments.

- Ask the students to describe key design features of a life jacket.

Answers are likely to include the following ideas.

- Must make you float.
- Must be light.
- Must be easy to wear and allow you to move in it.
- Must be waterproof or not fill up with water and make you sink.
- Must be brightly coloured.
- Must last for a reasonable time
- Must be strong, not easily ripped or likely to fall apart.
- Does not allow UV rays to reach the wearers skin.

- Most life jackets are currently made of closed cell foam and nylon. Provide some closed cell foam and nylon and/or an old life jacket and have the students devise some tests/experiments to determine why closed cell foam and nylon are ideal materials to make life jackets.

Please note it is the air contained in the closed cell foam that allows the life jacket to float. The nylon is a protective covering. Other life jackets provide flotation by containing air and are 'blown up' by the user.

Activity 8

Are all life jackets the same?

Teachers' note

Life jackets and other personal flotation devices are designed for particular aquatic uses. This activity is an internet-based independent research activity for students who want to find out about different types of life jackets or other personal flotation devices.

Resources/essential equipment

- access to the internet.

- Explain to the class that there are specialised personal flotation devices designed for people to wear for specific water activities.

If you end up in the water in an emergency situation in a bouyancy vest you will have to use more energy to float with your head out of water, you may get tired more easily and may lose heat from your body more quickly and risk getting hypothermia.

- Have the students visit the website **www.hutchwilco.co.nz** (or other suitable sites) and find out about the range personal flotation devices available for different types of aquatic activity.

- Have the students decide which personal flotation device would be best for them and an adult to use if they were
  - kayaking
  - yachting
  - in a dingy or small cabin cruiser with an out board motor
  - on a ferry
  - commercial white water rafting
  - water-skiing.

Activity 9

I'll wear a life jacket

Teachers' note

This activity explores people's attitudes to wearing life jackets.

Resources/essential equipment

- copies of **Statements about wearing life jackets** for students
- equipment required for chosen information presentation medium e.g. computer, art supplies etc.

- Conduct a class discussion about why it is a good idea to wear your life jacket all the time you are out boating.

- Ask the students if they wear life jackets when they are boating. Have they seen people out in boats not wearing life jackets, or know people who do not wear life jackets all the time when they are boating. Why do the students think people don't wear a life jacket?

Alternatively you could take students to a local boat ramp or other place where boats are launched (or are able to be observed) and have students observe and record situations where people are wearing, or not wearing life jackets.

- Tell the students that:
  In some countries, including Australia, there is a law that requires everyone in a boat (that is recreational boating) to wear a life jacket at all times.

- Conduct a class discussion about whether New Zealand should introduce a law that requires everyone involved in recreational boating to wear a life jacket at all times. The students could complete a plus, minus, interesting activity in preparation for a class discussion or debate.

If the new law was passed it would have to apply to waka racing, dragon boating, being out in a dinghy, yacht in a shallow estuary where you can always touch the bottom or on a 40 foot launch.

It is the law that every boat must carry correctlyl fitting life jackets for everybody on board, and they must be worn in any at risk or dangerous situation.

- Have the students work as groups or individuals and allocate one of these statements to each group or individual and ask the students to respond to the statements. The responses could be presented as a drama, cartoon or poster.

Statements about wearing life jackets

‘I don’t need to wear a life jacket, if anything goes wrong I’ll put it on then.’

‘It’s a bit big but it will be ok.’

‘The life jackets are here somewhere, we won’t need them anyway.’

‘I don’t like the way it feels, and it makes me look like a geek.’

‘My uncle says only weekend boaties wear life jackets, regular boaties don’t bother.’

‘We don’t have one small enough for him, but you’ll be watching him all the time.’

‘The guy water skiing is wearing one - those of us in the boat don’t need to.’

‘Three life jackets are enough for the six of us - we’re not all likely to fall in are we!’

Activity 10

Why do things float?

Teachers' note

This activity explores the concept of flotation and stability using very simple science experiments involving cut-off polystyrene cups, an ice-cream container of water and some small weights like 10 cent coins. The students could do the experiments individually or in groups. The focus in the experiments is on accurate observation.

Resources/essential equipment

- copies of the **Why does it float?** Activity sheet
- one paper cup, one ice-cream container, and about five ten cent coins (or other small weighted objects that can be stacked up on each other) and some salt per student or group.

- Have the students complete the **Why does it float?** Activity sheet.

Why does it float?

How does a large ship carrying a lot of cargo and made of steel float?
Well, it all has to do with how much water is pushed out of the way by the hull of the ship. This principle is called buoyancy or displacement.

The weight of the water 'displaced' or pushed out of the way is equal to the weight of the ship and everything on board it.

- Use the following equipment to carry out some experiments about floating and sinking.
  - a polystyrene cup cut to be 35cm high
  - an ice-cream container of water
  - five ten cent coins or something small (like washers or nuts from nuts and bolts) that weigh about the same weight as the coins.

  - Place the cup in water and describe what you see happening.
  - Add one coin and describe what you see happening.
  - Add more coins and describe what happens.
  - See what happens if you spread the coins out over the bottom of the cup or stack them in one corner.
  - Place the cup and two coins in the water, and mark the level where the cup floats. Dissolve about three tablespoons of salt into hot water and add this to the ice cream container. Observe what happens to the floating level of the cup.
  - Write a report about what you have learnt about floating and sinking.
  - Read this information to relate your experiment to boating.

Most boats have the same basic shape. This shape helps boats to float.
Some traditional boats used in Ireland and in Norway were round rather like the polystyrene cup.

All boats can sink if they are overloaded or too much weight is placed in them. It is easier to sink the boat if all the weight is placed on one side.

If a boat has only a small amount of space between the top of the boat and the water it is easy for a large wave to come into the boat and sink it.

When the skipper is placing people and things into their boat they need to place them around the boat so that it floats evenly in the water. They need to make sure the

boat floats high enough in the water so it cannot get swamped by waves.

People can overturn small dinghies, boats, canoes, kayaks rafts etc if they put too much weight on one side.

When you are in a small boat the skipper will explain the rules about moving around the boat. These rules are making sure you move safely, and hanging on to the boat when you are moving so you don't end up falling overboard.

There is a simple rule that for moving about on a boat that helps to prevent people falling overboard. Always have three points of contact with the boat.

These could be
- two footholds and one handhold
- two handholds and one foothold or
- seated and one handhold.

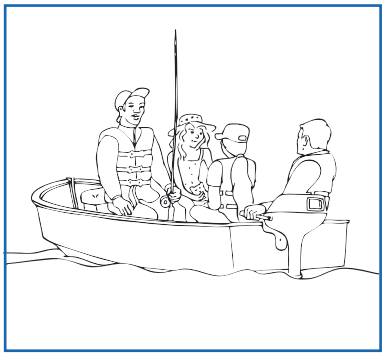
The rules will include not riding on the bow of a small boat as this is dangerous. If a big wave breaks over the boat you could be washed off. Riding on the bow also affects the way the boat moves and floats in the water.

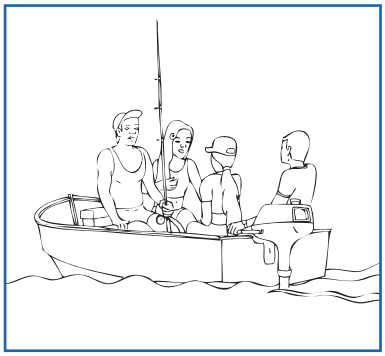
Always have three points of contact with the boat

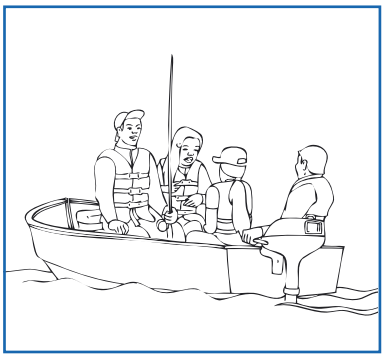
If everybody sat in the stern of the boat, the bow would be high in the water and the stern very low. A wave could come into the boat over the stern of the boat and capsize it. People sit throughout the boat to balance the weight over the boat and make it move through the water easily and safely.

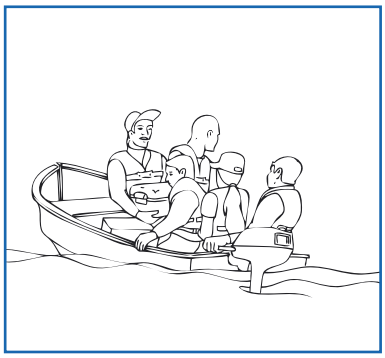
We float more easily when we are in salt water than when we are in fresh water. It is easier for us and other objects to float in the sea than it is in a river, lake or dam.

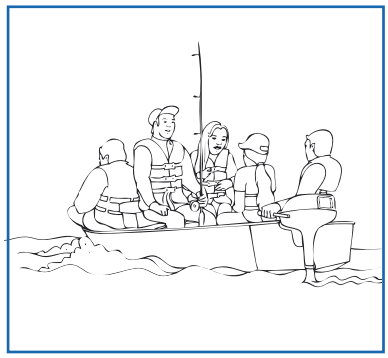
- Look at each of these pictures and decide if the boat is safe or unsafe and give a reason for your answers.











Section 4 Clothing to wear when you are boating

Teachers' Note

This section has one activity that has students identify suitable clothing to wear for a number of selected boating activities, including the planned EOTC boating experience.

There is a focus on

- safety, wearing a life jacket or other personal flotation device
- protection from the sun with clothing, sunglasses and sunscreen
- protection from cold to avoid hypothermia
- specialist protection provided by a wetsuit etc.

The activity could be adapted to be targeted to your proposed EOTC experience and the end product could be a checklist of suitable clothing that will need to be provided by the student, the school or the EOTC provider so students can do the activity safely.

Relevant information about clothing for boating is provided on many websites.

Learning intention

Students will

- explain what people need to wear to make sure they are safe in boats and enjoy their boating experience.

Key messages

- You need to wear the correct clothing for the type of boating activity you are doing.
- You need to wear, or take, clothing that will protect you from the sun, cold and rain when you go boating.

Activity 11

What to wear when you are boating

Teachers' note

A group research task where students investigate suitable clothing for a range of specific boating activities.

Resources/essential equipment needed

- samples of denim, polypropylene, polar fleece, cotton knit, wool, lycra, nylon, pvc
- access to the internet or printed resource material
- possible visit it the local sports store or interviews with 'experts' involved in specific boating activities.

- Conduct a class discussion about

  - what it was like to wear different clothing and move in water during the pool activity. Have the students recall what items they wore in the pool, what fabrics they were made from and what it felt like to wear them in water.

  - what weather conditions you could meet if you are out boating and what clothing you would need for those conditions

  - why you need to be especially SunSmart when you are on the water. (The water reflects back the sun's UV rays and can reduce the time it takes for the sun's UV rays to damage your skin. You need to re-apply 30+ broad spectrum sunscreen after you have been in the water, or use water resistant sunscreen and apply it often. The sunlight reflecting off the water can be very bright so you need to wear sunglasses to protect your eyesight. Too much exposure to the sun can dehydrate you and begin to make you unwell with sunstroke so you need to sit in the shade e.g. in the cabin of a boat, or wear a wide brimmed sunhat. You may need to limit how much time you spend out on the water. You need to make sure you drink plenty of water and wear long sleeved clothing).

- Discuss with the class the range of boating activities they want to investigate. This can relate to Activity 3 and should include the proposed EOTC experience.

- Explore with the students how they can find out what clothing you need to wear to carry out that activity easily and
  - be safe e.g. provide flotation in an emergency situation
  - be protected from the sun

- be protected from cold to avoid hypothermia
- have some specialist qualities suited to the particular boating activity e.g. wearing a wetsuit with hood, boots and gloves to keep warm while kayaking.

Their investigation could be internet research, talking with a local club or selected expert associated with a particular recreational activity, or visiting a local sportswear shop that specialises in selling clothing for boating.

- Have all the groups present their information about what to wear when you are involved in their chosen boating experience with two dressed models, one in appropriate clothing with an explanation of why the clothing is suitable for the activity and another person inappropriately dressed for with an explanation of why the clothing is not appropriate for the activity.

- Discuss with the class your proposed EOTC boating experience and make a list of the clothing students will need to wear to complete the activity safely.

- Have each student work out how they will obtain the correct clothing to wear. (Obviously some clothing like life jackets or wet suits will be provided by the school or hired from an EOTC provider but this activity may reveal some students who will need assistance to obtain suitable clothing for the EOTC experience).

Section 5 Safe weather and safe conditions for boating

Teachers' note

This section is about understanding marine forecasts and knowing why people going out in boats need to use them. Activities in this section explore using weather vocabulary, accessing the most current marine forecasts and making appropriate decisions about whether it would be safe to go out in a boat given a range of weather conditions.

It is suggested that a local resource person speaks with the class about local weather conditions and how they affect boating, (Activity 13) and (in Section 6) about the local area and some 'rules of the water' (Activity 14). These can be combined in one visit.

Learning intention

Students will

- explain a marine forecast and relate weather forecasts and weather conditions to safe boating decisions.

Key Messages

- People need to check the marine weather forecast before they go boating.
- People who are out boating need to check for signs the weather is changing and get back to shore BEFORE the weather becomes bad.
- If there is any doubt about the weather conditions DON'T GO OUT.

Activity 12

Finding out about the weather

Teachers' Note

This activity has students record the weather at intervals during the day. You will need to work with the students to develop suitable ways to record temperature, cloud cover, rainfall, wind speed and direction.

The activity has students use information provided on the website www.metservice.co.nz to understand weather forecasts and become familiar with the technical language used in forecasts.

Resources/essential equipment

- science equipment like thermometer
- access to the internet.

- Set a homework task for students to find a weather forecast for the next 24 hours from at least two different sources (e.g. newspaper, radio, internet, television).

- Share findings and list some of the weather vocabulary. Check that students understand terms used. The website www.metservice.co.nz has a Learning Centre with Weather Topics – How to read weather maps, Weather Terminology.

- Devise a recording chart and suitable methods for the class to record temperature, cloud cover, rainfall, wind speed and direction. Record these hourly over a school day, for up to five days and compare results with daily forecasts for that day.

- Write a brief report on how accurate the forecasting was. Decide how the knowledge you have gained could affect people out in small boats?

Activity 13

Using Marine Forecasts

Teachers' Note

This activity has students explore marine weather forecasts and then relate them to decisions about whether the weather is suitable for a particular boating activity.

The activity suggests students obtain a current marine forecast for your area (or another area). You can print off some marine forecasts for different conditions and use these in the group activity.

Resources/equipment needed

- copies of the **Is it safe to go boating?** scenario cards one or more per group
- copies of a marine weather forecast or access to the internet to obtain a current marine weather forecast
- local resource person
- range of materials for presentation.

- Have students consider what other weather information they would want if they were planning to go out in a boat. What weather conditions might place them in danger on the water?

- Share these facts with students -*Weather and sea conditions play a large part in over 40% of all fatal boating accidents. In 13 out of the 19 accidents where weather and sea conditions played a large part, a weather forecast was not obtained or not acted on.*

- Download the Marine Weather Info.pdf containing a glossary of terms used in marine forecasts. This can be found at **www.teachingonline.org/Sept04pdfs/MaritimeWeather.pdf**. Have students use this information to find out three important/interesting facts about marine forecasting. Have each student share one fact with the class (no repeats) until ideas run out.

- Have students work in groups to use the website www.metservice.co.nz to find several different sea area forecasts, or provide a marine weather forecast for each group. Using these forecasts give each group one or more of the **Is it safe to go boating?** scenario cards. You may wish to select the scenario cards that relate to your area or write scenarios that relate to your local area.

- Ask the students to consider how safe it would be to do the activity with the marine forecast they have.

- Invite a resource person who is an experienced local boat skipper to come and talk about the weather and the seasons and what weather conditions they look for safe boating in your area. Work with the students to develop questions that look at information the skipper can gain from the marine forecast, but also what weather conditions they are checking to make sure it is safe to stay out on the water.

- Discuss with the students the idea that just because the weather forecast says the weather will be good, the weather in New Zealand can change very rapidly. People out boating need to ALWAYS be watching out for signs that the weather is changing, and choosing to return to shore if the weather begins to deteriorate or change for the worse. Relate this to the weather observations the class recorded.

- Ask the students what things people in boats could notice about the weather changing. Make sure answers include feeling the sea getting rougher, noticing white caps on waves, feeling the wind get stronger or change direction, noticing it getting colder, seeing dark clouds on the horizon, seeing clouds rushing across the sky.

- Discuss with the students how hard it can be to stop doing something that is fun, and how some people stay out fishing or kayaking or yachting a bit too long, thinking they can ‘ beat the weather home’, and get caught out in bad weather.

- Collect any newspaper articles or reports of people in the water or on land, who are ‘caught out’ by unexpected changes in the weather and have the students work out what went wrong and what the consequences of being caught out by the weather were.

- Have the students return to their selected boating activity and create three marine weather forecasts that could apply to that boating activity.
  - Weather forecast one: a situation where it is safe to go out boating.
  - Weather forecast two: a situation where it is clearly not safe to go boating.
  - Weather forecast three: a situation where a wise boatie would stay home or would be constantly keeping a watch on the weather and be prepared to quickly return to shore.

Optional Activity

For use if you are assembling a safe boating display or as a language extension.

- Ask the students to make a, drama, story, poem, rap, PowerPoint presentation or poster for one of these messages about weather and boating.

  If you are in doubt about the weather DON'T go out.

  Use the marine weather forecast if you are going boating.

  Watch for changes in the weather when you are out boating.

  Head for home if the weather changes.

Is it safe?

Is it safe to
take a small dingy with outboard motor out for a morning's fishing?

Safe/Not safe (circle one)

Why?

Is it safe to
go kayaking in the sheltered bay with your class?

Safe/Not safe (circle one)

Why?

Is it safe to
take the family's kayak around the local island. This takes you out of the sheltered harbour into the sea?

Safe/Not safe (circle one)

Why?

Is it safe to
take an optimist yacht out for up to two hours in the inner harbour?

Safe/Not safe (circle one)

Why?

Is it safe to
take a rowboat out with your older cousins - not more than 50 metres from the beach?

Safe/Not safe (circle one)

Why?

Your situation...

Safe/Not safe (circle one)

Why?

Section 6 Know your local area and the 'rules of the water'

Teachers' Note

No-one should go boating without some knowledge of the local area and the rules and regulations that apply to being on the water in your area.

It is suggested that you invite a resource person to discuss boating in your local area with your students. This could be directly related to your planned EOTC experience or it could be a more general explanation of tides, wind, currents, land features and rules and regulations about boating in your area.

You may wish to have this discussion at the local beach, lake etc. and it could be the land–based briefing before your EOTC boating experience.

The resource person could bring charts of the local area and explain how to read them. It is expected that students will understand that you need to know about the winds, tides, currents, land features in an area and the 'rules of the water' before you can safely boat in that area.

Learning intention

Students will

- explain what people need to do to make sure they are safe in boats and enjoy their boating experience.

Key Messages

- Don't go out in a boat until you have found out about the local conditions.
- Know the boating rules and regulations.
- Learn how to read charts.
- Understand the effect of tides, winds, currents, land formations, etc.

Activity 14

Know the area you are boating in and the rules of the water

Teacher's Note

This activity has students develop questions for an interview with a local resource person who can describe in simple terms key features of the local area that boat skippers consider every time they go boating.

Careful selection of resource people and some preparation with the class are required to make sure the discussion is at a level that engages the students.

Resources/essential equipment

- local resource person familiar with boating who can discuss local boating conditions like winds, tides, currents, land features in an area and the most important 'rules of the water.'

- Ask the students what they think could be wrong with this scenario.

A family arrive with the boat for a holiday in an area they have never been to before. When they get to the boat ramp there are no other boats launching, but Dad can't wait, so he launches the boat and the family head out towards the bar at the river mouth.

- Discuss with the students why no-one should take a boat out on the water unless they have some local knowledge.

- Ask the students what they think it is important information to know about in the local area before you go boating.

- Tell the students you will have a guest speaker to come and talk to the class about features of boating in the local area and assist the students to prepare some questions to ask the speaker.

Areas to cover could be prevailing winds, offshore and onshore winds, tides, landforms like bays, estuaries, navigation hazards, 'rule of the water' that allow boats to pass each other, speed restrictions etc.

You could organise for this discussion to occur in a local area where many of the features can be demonstrated, for example on the hill overlooking the harbour mouth.

- Have the students return to their selected boating activity and select a place where that activity

takes place in your local area. Have the students do some research to find out about the local conditions that boating in the area consider before they commence their boating activity. This may involve interviews with a local expert.

- Have the students present the information in an interesting visual manner.

- Discuss with the class the idea that, for all people in boats to move about and operate safely, there must be some rules of the water. Have the students determine what areas they would expect there to be marine rule or regulations about. This could include speed of the boat, how to safely pass other boats, how to navigate in narrow areas of water, how to understand navigation aids like buoys, lights etc, showing lights at night, travelling slowly at launch ramps and near other water users e.g. swimmers, staying clear of divers, etc.

- Have the students return to their selected boating activity and select a place where that activity takes place in your local area. Have the students investigate one to three rules or regulations that apply to boating in that area and explain the rule(s) or regulation(s) to the class.

Section 7 Being a safe and responsible skipper and boat crew

Teachers' Note

This section introduces students to the responsibility someone in charge of a boat has to make sure a boating trip is safe and enjoyable for everybody.

The focus of this section of the resource remains, where possible, on the prevention of a problem. However it does include a section on what to do if things go wrong that includes

- sending a distress signal
- what to do in a person overboard situation
- what to do if the boat capsizes
- identifying hypothermia and what to do to prevent it or help someone who has hypothermia.

The context that has been used to discuss these situations is in a small dinghy or cabin cruiser. If your students are actively engaged in yachting or kayaking you may wish to work with a local expert to develop activities that are more relevant to your students.

It concludes with the students developing a checklist for themselves to make sure they are safe on a boating trip and are able to enjoy the experience.

Learning intention

Students will

- explain what people need to do to make sure they are safe in boats and enjoy their boating experience
- explore their own and other people's attitudes to using safe boating.

Key messages

- The skipper of the boat has responsibility for the safety of the boat and the people in it.
- People in boats need to take responsibility for their own safety and wellbeing.
- Before anybody goes boating they need to tell people ashore where they are going, when they expect to be back and who is with them.
- Boating safety rules have to be obeyed at all times or else accidents can occur.
- Boats need to carry at least two ways of communicating.
- Having a VHF marine radio and knowing how to use it, knowing international distress signals, carrying flares, are important forms of communicating.

- Cell phones can be an additional back up communication method, but there is limited cell phone coverage.
- If a skipper is aware a boat is in trouble they are legally required to assist unless they might endanger their boat or crew when giving assistance.
- People interested in boating should to learn to swim, as well as to join a club or be with a group of experts to learn how to do boating activities well and safely.
- When you get cold and wet your body temperature begins to fall. If your body temperature gets too low you can get hypothermia.
- There are things you can do to make sure you don't get hypothermia when you are boating, like wearing layers of warm clothing (especially hats and gloves), eating and drinking high energy foods and stopping the activity if you are getting cold.
- If you are in the water, keep still and keep as much of your body as possible out of the water e.g. by climbing on an upturned boat as air is warmer than water. If you are on your own use the H.E.L.P. position. If you are in the water in a group use the huddle position.
- People with hypothermia need medical help so they can warm their body safely.

Activity 15

Communicating with others

Teachers' Note

This activity develops students understanding of the need to be able to communicate information about boating trips to others.

It explores

- leaving messages about proposed boating trips with responsible adults using the two minute form
- forms of communication that can be used on the water to attract attention or seek assistance
- constructing messages requesting assistance.

Resources/essential equipment

- copies of the Information sheet **Communicating on the water** for individuals or groups
- equipment like torches, whistles for students to practice making SOS signal.

- Have students work through the **Communicating on the water** Information sheet and complete the two minute form that is part of this.

- Have students practice making SOS signals with sound and light and demonstrate the wave international distress signal.

- Students could conduct research on how the EPIRB works as an extension activity.

Communicating with others Information sheet

- Imagine you are the skipper of a cabin cruiser off for a mornings fishing.

- Brainstorm what information about your proposed trip you would leave with a responsible adult.

Every year Coastguard, the Police, the New Zealand Air Force and Navy, and other volunteer and professional rescue organisations and individuals spend time searching areas of water for boats that are reported missing. Often this task is made difficult because the skippers have not left information about where the boat is going, who is on board and when they expect to return, and there is no accurate description of the boat. The boats do not have VHF radio and cannot be contacted and, while some may be in trouble and require assistance, others return to shore unaware that rescue services have been called out to look for them.

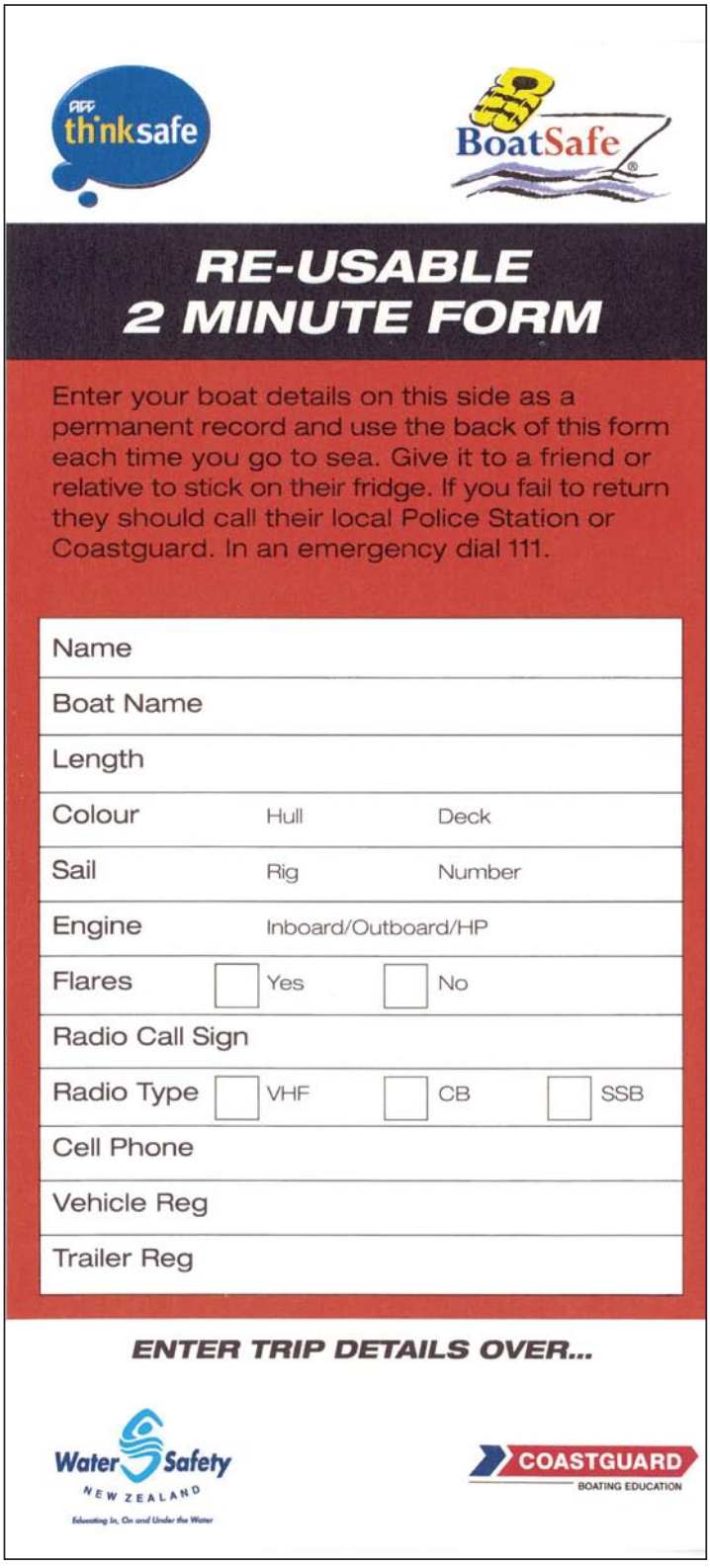
Many skippers are now filling the re-usable two minute form shown here. It has three important 'W's.

1. **W**here are you going?
2. **W**hen are you coming back?
3. **W**ho is going with you?

- Complete the two-minute form using these details and inventing and adding any others required.

You are the skipper of a 5 metre runabout with an 80HP outboard motor, a VHF radio with the call sign ZMV4567 that is carrying flares, a cell phone and two friends. Your car registration is IBOAT, your trailer registration LP 789. You are planning to go for a half-day fishing trip in your local area today and to be back no later than 5pm.

Two minute form



th'nksafe

BoatSafe

RE-USABLE 2 MINUTE FORM

Enter your boat details on this side as a permanent record and use the back of this form each time you go to sea. Give it to a friend or relative to stick on their fridge. If you fail to return they should call their local Police Station or Coastguard. In an emergency dial 111.

Name			
Boat Name			
Length			
Colour	Hull	Deck	
Sail	Rig	Number	
Engine	Inboard/Outboard/HP		
Flares	☐ Yes	☐ No	
Radio Call Sign			
Radio Type	☐ VHF	☐ CB	☐ SSB
Cell Phone			
Vehicle Reg			
Trailer Reg			

ENTER TRIP DETAILS OVER...

Water Safety NEW ZEALAND

Educating In, On and Under the Water

COASTGUARD BOATING EDUCATION

th'nksafe

BoatSafe

TRIP DETAILS

Use this side to tell someone where you are going. Use a water based pen and wipe clean after each trip.

Date
Leaving Time
Leaving From
Going To
Return Time
No Later Than
Number Of People

IMPORTANT

HAVE YOU:

- ☐ Checked the marine weather report?
- ☐ Sufficient fuel and reserve fuel?
- ☐ Told someone where you are going?
- ☐ Taken life jackets for everyone?

It only takes 2 minutes to keep everyone safe!

For more pleasure boating safety information visit

www.boatsafe.org.nz

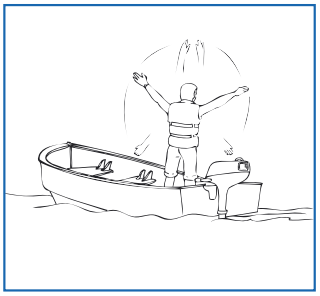
- Brainstorm all the ways a boat skipper and crew could communicate that they were in trouble and then compare your ideas with this list.

Ways to communicate in an emergency situation

- Slowly and repeatedly raising and lowering arms as in the picture. This is internationally recognised as a distress signal saying “I’m in trouble - I need help”.

- Use a VHF or marine radio. Give a MAYDAY or radio distress call over the VHF channel 16.

A boat is given a call sign and can communicate on given channels with other boats and shore radio stations. People with VHF radios can attend a six hour Coastguard course on how to use them.



Signal

- Use a cell phone if there is suitable cell phone coverage. A cell phone is not a reliable way of communicating on the water as boats often move beyond cell phone reception range, but they can be carried as a back-up communication device. Cell phones need to be stored in a water-proof bag so they don’t get wet.

- Use some of these internationally recognised distress signals. If you are out boating and see or hear these signals then you must go to the assistance of the boat that is in trouble. The only time you have an acceptable reason for not offering assistance is if by offering assistance you would put your self, your boat or people with you in danger.

  - Fire off an orange or red parachute flare. Flares do not last forever. They have a use by date on them.

  - Make a continuous noise with a horn, whistle or anything else that makes a noise.

  - Make an SOS visual or sound message.

  - SOS ... – – – ... can be made on a horn, whistle or other sounding device, or flashed with a torch or mirror or any other light.

  - Activate your EPIRB. Emergency position indicating radio beacons (EPIRBs) alert rescue authorities and indicate your location. The system sends radio waves that are relayed by orbiting satellite to the rescue receiving station in Wellington.

- Consider this situation.

The boat **Thunderbird** has a fire on board and is starting to sink. There are three people on board with lifejackets. The weather is rough and the boat is 2miles south of Moot Point.

The skipper knows this is an emergency situation and he needs to send a Mayday message. He begins the message

'Mayday Mayday Mayday. This is Thunderbird ZMV1234, Thunderbird ZMV1234, Thunderbird ZMV1234. Mayday.'

- Write down what other information he needs to include in his radio message.

- Check your answer with the information below.

The rescuers will want to know the boat name and call sign. They will want to know the boat's position as accurately as possible. This may be an accurate position determined by GPS, compass, charts etc or it may be a stated distance from a well known geographical feature or '2 miles south of Moot Point.'

They will want to know the nature of the problem on the boat and what assistance is required.

They will want to know how many people are on board and if anyone is injured or ill.

"Mayday. Mayday. Mayday.

This is Thunderbird - ZMV1234, Thunderbird - ZMV1234, Thunderbird - ZMV1234.

Mayday Thunderbird - ZMV1234 - we are two nautical miles South of Moot Point
- sinking after a fire on board.
Require immediate assistance. 3 people on board. All uninjured and preparing to abandon ship. Sea rough.

Over."

Activity 16

Being a safe and responsible skipper

Teachers' Note

In this activity students consider the responsibility of being a skipper. The activity is based on a 15 minute video **Do or Die - Lost at Sea.** This is a scenario from a TV documentary that is a re-enactment of an incident where three young men go fishing in a dinghy and two drown when it capsizes and they decide to swim for shore. They have no life jackets. The video is obtainable from info@cbes.org.nz or phone 0800 40 80 90.

Resources/essential equipment

- a copy of the video **Do or Die - Lost at Sea**
- copies of the **Responsible Skipper Rules** and the newspaper article **Drunk boaties oblivious to danger** for individuals or groups.

- Discuss these skipper responsibilities with the class.

If you are the skipper of the boat you have some legal responsibilities.

- You are responsible for the safety of the boat and the people in the boat.
- You must obey Maritime rules and regulations about recreational boating.
- You must make sure there is a correctly fitting life jacket for everyone on board and, if they do not wear the life jacket at all times, you must make sure that they wear the life jacket in risky situations.

- Discuss this scenario with the students.

Late one evening Dad's mate Steve says, 'Come around tomorrow sometime in the morning and we'll just throw the boat in the water and do a spot of fishing.'

- Do you think Steve will be a responsible skipper? Would you go fishing with him?
- You are not sure about this trip but you go along. At the boat ramp what are five things Steve needs to do that
  - would make you think that the fishing trip is well planned and should be safe
  - would make you think the trip is not safe and you should not go out with him.

- Have the students work in groups and decide on some rules a responsible skipper should follow.
- Have them compare their rules with the **Responsible Skipper Rules** provided here.
- Have the class watch the video clip **Do or Die – Lost At Sea** and make a flowchart of the sequence of events that happened for Michael and his friends. On the flowchart indicate what the friends did wrong and what they could have done at that time to keep themselves safe or reduce the risk of drowning.

Note that this incident is a real life drowning and has an emotional impact.

- Discuss the impact the accident has had on Michael.

- Have the students
  - read the following newspaper article
  - make a list of things the skipper and his friends did wrong
  - decide if they think the skipper should have been prosecuted.

Drunk boaties oblivious to danger

Five drunken friends were lucky to be alive after they beached a small yacht on a beach in the dark. The men set sail in the yacht but when the weather became rough they beached the yacht. The 18-foot yacht was in poor condition, with no life jackets, no marine radio or navigation lights. The sails were in poor condition, and the flares were well past their use-by date. All five were drunk and the skipper was the worst affected. Although his father owned the yacht he had only been out in it a few times.

The local Coastguard said they were lucky to beach the yacht as there were lots of rocks near the beach, and a big swell and pretty rough conditions. The group were cold and one had mild hypothermia when the Police arrived at the beach. The group had not realised that the friend with hypothermia was in trouble. The skipper has been charged with dangerous navigation of a vessel. It was only when the group sobered up that they realised how dangerous their situation had been.

For use if you are assembling a safe boating display or as a language extension.

- Have the class make an illustrated and/or humorous presentation of ten 'Responsible Skipper' rules.

Responsible Skipper Rules

Check the marine forecast and the tides and local conditions before you go out. If in doubt - Don't go out.

Make sure everyone on board is wearing a suitably sized life jacket.

Check your boat, engine, fuel and safety equipment before going out and make sure they are all working properly.

Tell someone where you are going, when you expect to be back and who is with you or use a two-minute form.

Understand the features of your boat and don't overload it or use it unsafely.

Know the navigation rules and local rules and use them when you are on the water.

Watch for signs that the weather is changing and be prepared to head back to shore.

Avoid alcohol when boating.

Take at least two means of communication with you (VHF radio, flares, torch, and cell-phone).

Make sure everyone knows how to stay safe on the boat.

Make sure people on the boat know what to do in an emergency like someone falling overboard.

Activity 17

What do we do when things go wrong?

Teachers' note

This activity has students

- identify what they could use to help them float if they were in a boating accident and ended up in the water
- identify what they can do to rescue someone who has fallen from a boat
- identify what not to do to rescue someone in the water
- identify what to do if the boat they are in capsizes.

Resources/essential equipment

- a copy of **What do we do if things go wrong?** Information sheet for individuals or groups
- materials for a visual presentation.

- Read the **What do we do if things go wrong?** Information sheet with the students and discuss it.

- Revisit the video **Do or Die - Lost at Sea** and look at the procedures that were shown for a person overboard situation and for a boat capsize.

- Discuss how it could be very hard not to dive into the water of a boat to rescue someone.

- Have groups of students make an illustrated poster of what to do in the following situations.
  - If a boat with five people on board, including someone your age, has overturned and the boat is floating upside down.
  - If a boat with five people on board, including someone your age, has overturned and the boat has sunk.
  - If a person on the boat has fallen overboard.

Part B Rescue services

- Students could gather newspaper or TV radio reports of any local or national marine or water based search and rescue activity.

- Students could conduct research into local and national marine search and rescue operations.

Coastguard is recognised as an essential maritime Search and Rescue service for coastal and inland recreational boating in New Zealand. Each year, 800 Coastguard volunteers from 63 units and 10 air patrols provide 240,000 hours of their time. They answer over 300,000 calls, assisting over 5,500 people and 106 million dollars worth of vessels every year.

What do we do when things go wrong? Information sheet

What if you are out in a boat like a dinghy or cabin cruiser and someone falls overboard, what should you do?

The person who sees someone fall overboard should

- shout to attract the attention of others on the boat.
- watch the person in the water. Use their arm to keep pointing at the person.
- not take their eyes off the person in the water until the skipper has located the person in the water and brought the boat into a rescue position.

Someone else should throw the life buoy, or anything else that floats like

- a boat fender
- squabs
- a chilly bin or chilly bin lid
- a bucket.

Throwing rope and bucket out to person

If the person is wearing a life jacket they will float, but they will use up less energy and stay warmer if they can hold onto something else that is floating.

If the person was taking a risk by not wearing a life jacket any object that floats would help them float, without using lots of energy, until they were rescued.

Objects floating in the water will also help to identify the area where the person is in the water and make it easier for the boat to return to rescue them.

The skipper of the boat will manoeuvre the boat so the person can be rescued safely and make a distress call for assistance if required.

What if I fall overboard?

Try to stay calm.

Remember you will float in your life jacket.

If possible make sure people on the boat know you are in the water, yell, and wave, draw attention to yourself, If your life jacket has a whistle on it. blow it.

Should someone from the boat dive in to rescue me?

It is never recommended that anyone enter the water to rescue someone else unless they have specialised rescue equipment and are trained in rescue techniques. Surf life guards on patrolled beaches do enter water to rescue swimmers in distress or people who have got into difficulty on boogie boards or in small inflatables. However they are strong swimmers, have specialised equipment and are trained in rescue techniques.

Almost every year someone drowns trying to rescue someone else.

What do we do when things go wrong? Information sheet 2

What if the boat is overturned and you and everyone else are in the water?

Many boats are designed to float when they are overturned or upside down.
You and all the people in the water should swim to the upturned boat and hold onto it until you are rescued. You will all be together and be able to be seen by their rescuers.

Try and keep as much of your body out of the water as possible by lifting your body onto the capsized vessel or other floating objects. This will keep you warmer as you lose less body heat in the air than in the water.

Should we try to swim to shore?

You should NOT try to swim to shore but all stay together, floating and holding onto the upturned boat.

Sometimes people do swim to shore when the boat is very close to shore and the swimmer is a very strong swimmer and wearing a life jacket and suitable clothing. However it is often hard to swim to shore against currents or tides and the swimmer can get exhausted, take in water and drown. Their mates who hold onto the boat hull and look after each other are more likely to stay safe until they are rescued.

What if the boat has sunk?

If the boat has sunk the people in the water should get together in the huddle position that you practiced in the pool. This way the group is all together and can take care of each other. The group can make sure no one person is using lots of energy to stay floating. If a person uses lots of energy their body will get colder quicker and they risk getting hypothermia.

Huddle position

A rescue boat or helicopter will find it easier to locate a group of people wearing life jackets than individual people. Being in the water unexpectedly after an accident is very frightening and being in a group means that everyone can take care of each other.

Activity 18

What is hypothermia and why do people who go boating need to know about it?

Teachers' note

In this activity students research hypothermia from material provided in a pamphlet that can be obtained in class sets from Water Safety New Zealand or can be accessed and downloaded from their website at www.watersafety.org.nz go to Good Advice/Hypothermia.

Resources/essential equipment

- copies of the pamphlet Hypothermia or access to it online.

- Have the students work as individuals or in groups to investigate hypothermia.

Students can

- describe what hypothermia is
- describe how hypothermia happens
- explain why hypothermia is an issue for people who are in boats or in the water
- explain what kayakers, canoeists and boaties can do to reduce the risk of hypothermia
- explain what someone who is in the water in a 'person overboard' situation can do to reduce the risk of hypothermia
- explain how you could recognise that someone may be suffering from the first stages of hypothermia
- explain what you would do if you realised someone was beginning to get hypothermia
- explain why you need to get medical help for someone who has more than mild hypothermia.

Activity 19

Keep it safe and enjoy it too

Teachers' note

This activity looks at the responsibility of students or anyone who goes out in a boat.
Part of the activity is designed to develop your students' understanding of the need for safety rules, the need for safety rules to be obeyed immediately and without question, and the consequences of not following the rules. The consequences could be

- removal from the activity for safety reasons
- accidentally falling into the water and needing rescue
- as a worst case scenario, drowning.

When your students are being briefed before their EOTC boating experience the person taking the activity will provide the specific set of instructions and rules for that activity.
However, introducing this classroom discussion on some general and/or specific rules assists students who may not be able to 'take in and process' all the safety rules when they are excited about doing the activity. Prior discussion with your EOTC leader or having them conduct this discussion will make this learning relevant and avoid 'message confusion'. When the students develop their own list of safety rules and discuss these with the EOTC event leader at the briefing they feel they have some ownership of the safety rules and are more 'tuned into' following the rules.

Resources/essential equipment

- none required, a discussion activity

- Have a discussion with the class about what someone their age needs to be and do to be a safe person when they are boating. You could discuss these points.

- People in boats should be competent swimmers and have (or be developing) some confidence in being in a boat on the water. Students may not have this level of skill and confidence now, but if they develop a liking for boating they may want to learn to swim competently and confidently (swim 200 metres in the sea or where there are waves or some current - not flat warm pool water). They will want to learn water survival skills like the H.E.L.P and huddle positions, what to do if someone falls overboard and how to communicate in an emergency. Students who like boating and are not strong and confident swimmers might want to learn how to become better swimmers.

- Students who enjoy boating will want to do more of it, and gain better knowledge and skills. They may want to join a local club to learn and participate in safe boating activities. You could talk about local boating clubs that have activities for young people.

- Coastguard Boating Education runs a range of recreational boating courses.
  For more information go to www.cbes.org.nz

- Introduce a discussion on the ideas that there are some things we will have to learn to be safe on boats. If we don't we can get into trouble. If we are lucky we will get rescued, if not we can drown.

The rules set are safety rules, they need to be obeyed every time - without question or discussion and not forgotten.

- Explain the EOTC scenario your class will be experiencing and have the students discuss the type of rules they would expect to have in place. Students could develop a checklist of rules that will be in place for your boating experience could be developed and given to all students or displayed on the wall.

The checklist is likely to include messages like these.
- Never go boating on your own, never move away from the group, and stay in the marked area.
- Always do what the instructor says.
- Don't play the fool, or get carried away having fun because you could just end up in the water and either need to be rescued or you could drown.
- Never take your life jacket off - it's there to keep you safe if you are in the water.

Activity 20

What have we learnt about safe boating?

Teachers' note

This is an assessment activity that has students' review their own learning throughout the unit of work.

Students are encouraged to reflect on their learning by playing the game *Anchors and Flares* that can be downloaded from hyperlink to game pdf.

- Have groups of students
  - revisit their work in Activity 1 and revise it or add to it if they have gained new knowledge
  - review all the material they have prepared during this unit and write down 5 to 10 key messages that they think someone new to boating should understand. Have each student read a message to the class until all the messages have been shared.

- play the game **Anchors and Flares** that can be downloaded from (hyperlink) adding the cards on page 72 and 73 to those provided with the game.

- Make a class drama about a safe boating experience that illustrates learning from **Safe Boating**.

Section 8 Preparation for our boating experience

Teachers' note

The activity in this section invites you to involve students in planning and risk assessment for their EOTC boating experience. If the experience it to be taken by an outside provider you will want to develop this activity with them.

Features of successful EOTC experiences are

- selection of appropriate activities for group knowledge, experience and skills
- appropriate leadership
- adequate supervision by appropriately qualified and trained individuals who perform clearly defined roles
- students who take appropriate responsibility for their own safety and enjoyment.

Students who

- are involved in the planning of the EOTC experience and have considered potential risks and ways to manage risks
- are well briefed prior to the activity
- have been taught appropriate skills and when to use them
- know and respect those supervising them are more prepared to take appropriate responsibility for their own enjoyment and safety than those who have not been involved in preparation for the experience.

Every school has individualised an EOTC planning process. This activity invites you to consider how you can involve your students in this planning process and fully prepare them for the EOTC experience so they can get maximum enjoyment, skill acquisition and self confidence from the experience.

There is material available to assist schools as they plan EOTC experiences including

- teacher reference websites
  www.tki.org.nz/r/eotc/links/index_e.php.
  www.sparc.org.nz/education/outdoor-activities-guidelines-for-leaders
  This resource has been developed to complement Safety and EOTC with specific guidelines**.**
- the publication **Safety and EOTC - A good practice guide for New Zealand schools**, provided to all schools by the Ministry of Education in 2002.

Learning Intention

Students will

- participate in, and describe, planning for a class boating experience.

Key messages

- Schools need to develop their own EOTC planning processes.
- Students who participate in the planning of an EOTC experience are better prepared to take appropriate responsibility of their safety and learning during the experience.
- People interested in boating should to learn to swim, as well as to join a club or be with a group of experts to learn how to do boating activities well and safely.

Activity 21

Preparing for our EOTC Boating experience

Teachers' Note

- This activity has teachers develop their own process to involve students in planning their EOTC boating experience.

Resources/essential equipment

- none provided

- Work with your students to develop a process that
- involves them in the planning for your EOTC boating experience
- prepares them for the actual experience
- has them set some personal or class goals for the experience
- prepares them for accepting a required level of supervision and direction before and during the experience
- identifies risks and how they will be managed
- allows students to reflect on the experience and what they learnt from the experience.

A personal planner used by one school is provided here as an example of the process developed in a written format.

Planned Boating Experience

Where
When
What we will be doing?
What gear we need to bring?
What gear will be provided?
Who will be leading and supervising us?
What preparation will we do?
What risks have we identified?
How will we manage those risks?
Things we need to remember
What I want to learn from this experience?
How I will do this?
What are my responsibilities to myself and others?
Anything about the experience that I want further explained or that is worrying me

Please note there are many other ways of engaging students in the process of planning an EOTC experience. Your EOTC provider or teacher/leader will have a process that involves students and produces the type of planning (including risk assessment and management and the development of students' individual and collective responsibility) that is suited to your planned EOTC experience and your provider/leader's style of working.

Boat Squares Cards

QUESTION

A person has fallen overboard from the boat and you are the only person who has seen them. What should you do so they can be rescued safely?

QUESTION

Your boat has capsized and four of you are in the water. The boat is floating, hull up, in the water. What should you do so you can all be rescued safely?

QUESTION

Your skipper says there is no need to tell anyone where you are going as you are just going on a short fishing trip. What should you do?

QUESTION

You are fishing and see a flare above a boat near you. The people on that boat are waving their arms up and down. What should you do?

True or False Cards

TRUE OR FALSE

If you are swept overboard off a boat you should always swim for shore.

TRUE OR FALSE

You should always tell someone where you are planning to go boating, who you are going with and when you expect to return.

TRUE OR FALSE

If you see a boat in distress you don't need to help them if you need to get somewhere in a hurry.

TRUE OR FALSE

You must help a boat in distress, even if it is dangerous for your boat and crew.

TRUE OR FALSE

You don't need to learn navigation rules and local bylaws as they are just commonsense anyway.

TRUE OR FALSE

A radio or TV weather forecast gives you enough information to plan a safe boating trip.