Introduction to 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 Science and English
- a knowledge based classroom programme with one practical lesson wearing life jackets to be conducted in a swimming pool.

Introduction to Safe Boating and Safe Boating

Introduction to Safe Boating and **Safe Boating** are two programmes developed by Coastguard Boating Education for years 5 to 8 that focus on a first boating experience. **Introduction to Safe Boating** is designed for students who have no experience of being in or on water.
Schools where students have familiarity with a local waterway and some boating experience, and where students are competent and confident swimmers, should investigate the programme **Safe Boating**. Activities from both programmes can be combined to build a learning programme specifically suited to students' identified needs.

There are some common core activities in both programmes. It is intended that teachers will select activities from the programmes that meet the needs of their students and that relate to the proposed EOTC boating experience.

Links to an EOTC boating experience

The endpoint of the **Introduction to 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

In holiday and leisure time at least some of your students may go on to the water in small craft. While, ideally, this is with appropriate adult supervision there will be times when students may assume full responsibility for a boating experience.

Introduction to 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.

Introduction to 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

Introduction to 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)

Introduction to 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

Students 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)

Learning Intentions

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

Students will:

- describe or identify different types of boats and features of these boats and describe some situations when and where they can be used safely
- describe the essential equipment that should be carried on a boat
- describe the need for life jackets and describe when and how to use them
- recognise objects on a boat that can be used for floatation in an emergency situation
- 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 using safeboating practices
- participate in, and describe, planning for a class boating experience

Activity Overview

SECTION 1 Introduction to boating

Learning intention

Students will
- describe or identify different types of boats and features of these boats and describe some situations when and where they can be used safely.

Activity	Title Explanation	Type of activity
Activity 1 - Pg 9 What is a boat and what are boats used for?	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?	An introductory diagnostic activity that indicates individual student's experience with boats and boating. The activity explores students' knowledge of boating in your local area.	Individual student survey and then use of class knowledge about boating in the local area. 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 20 Essential equipment for safe boating	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 for a kayak.	The activity is a group activity involving discussion and sorting and then checking responses with supplied information.

SECTION 3 Life jackets and flotation devices

Learning intention

Students will
- describe the need for life jackets and describe when and how to use them
- recognise objects on a boat that can be used for flotation in an emergency situation.
- describe the essential equipment that should be carried on a boat.

Activity	Title Explanation	Type of activity
Activity 4 - Pg 27 What is a life jacket and why do we need it?	Students explore what a life jacket is and why we need it.	Observation of a life jacket and discussion around some provided facts.
Activity 5 - Pg 29 Wearing a life jacket	Practical experience of wearing a correctly fitting life jacket.	Pool based activity where students experience wearing a life jacket in a variety of situations.

SECTION 3 cont | Life jackets and flotation devices

Activity	Title Explanation	Type of activity
Activity 6 - Pg 31 I'll wear a life jacket	Individual or group presentation of knowledge gained about the need to wear life jackets.	An activity that can be an assessment task.
Activity 7 - Pg 33 Why do things float?	An activity that explores the concept of floating.	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.
Activity 8 - Pg 37 If I'm in the water what will help me to float?	An activity that explores other objects that people in the water can use to help them float until they are rescued.	Discussion activity relating back to practical pool activity.

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 9 - Pg 40 What to wear when you are boating	Group research tasks to determine the most suitable clothing for a range of boating experiences.	Group research activity that has different groups • explore properties of fabrics • visit a local sports store and gather information • conduct research • present information to the class.

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.

Activity	Title Explanation	Type of activity
Activity 10 - Pg 42 Finding out about our local weather	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 11 - Pg 43 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 12 - Pg 47 Know the area you are boating in and the rules of the water	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 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 using safe boating practices.

Activity	Title Explanation	Type of activity
Activity 13 - Pg 48 Being a safe and responsible skipper	Students consider the responsibilities boat skippers have when they take a boating trip.	Students conduct a sort and order activity to explore the responsibilities a boat skipper has.
Activity 14 - Pg 52 Responsible boating	Discussion on value of learning to swim competently, joining boating clubs, taking boating education courses and using safe boating practices.	Discussion on what to do to be a safe boatie, leading into establishing basic safety rules for the planned EOTC experience.
Activity 15 - Pg 55 What went wrong?	Assessment activity	Analysis of short newspaper articles relating to unsafe boating practice to provide an assessment of student understanding of the unit of work.

SECTION 8 Planning our boating experience

Learning intention

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

Activity	Title Explanation	Type of activity
Activity 16 - Pg 58 Planning our boating experience	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 each student's boating knowledge and experience.

Activities explore students' 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 related to boating that will be used throughout the unit.

Learning Intention

Students will

- describe or identify different types of boats and features of these boats
- describe some local situations where different types of boat 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 are 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?

Organise the class to work in groups, or as a class and

- brainstorm as many types of boats they can think of
- use magazines, the internet and other sources to gather pictures of a range of boats present and display them.

Have the students either

- identify what features all the boats in the picture have in common and see if they make a definition of a boat using these features or
- use the definition below of a boat and check that all the boats they have displayed fit within the definition.

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

- As a class, have the students brainstorm language about boating and make a class list of the words and meanings that can be displayed and added to throughout the unit.

- 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 cannot be in them, you are on them.

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	

Part C Parts of a boat

Teachers' Note

In this section students become familiar with the names for parts of three types of boat - a yacht, a kayak and a dinghy.

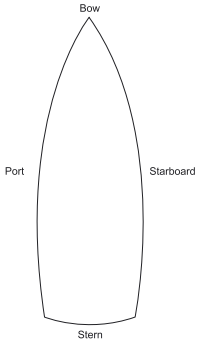
Resources/equipment needed

- 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.
- Ask the students to work in groups and give each group a model and have them assemble it.
- Give each group the **Boating terms and definitions** Factsheet that relates to their model.
- Have the students use their knowledge and information gained off the factsheet to name the parts of the boat. Display a correctly named model of each type of boat.
- Have the students look at the models and discuss each one and compare and contrast the features of flotation, means of moving and ways of steering in the three types of boats.

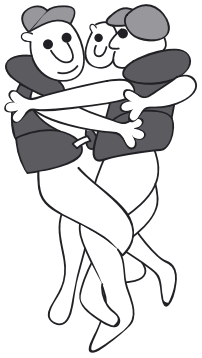
Part D Person overboard

This version of the Person Overboard game is designed to get students familiar with parts of a boat and some terms associated with boating.

- Take the students outside and define or mark out a suitable size space for running or moving about in.
- Identify a boat shape identifying 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.



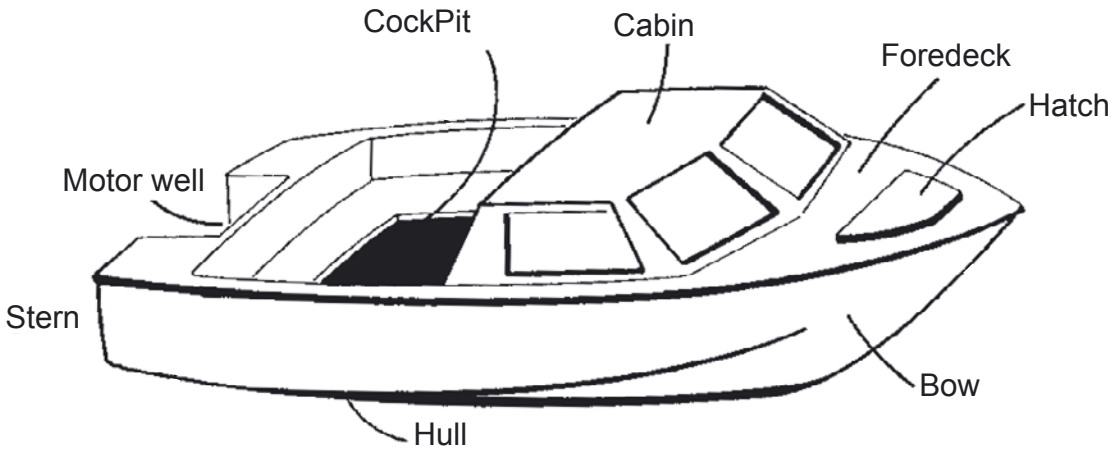
- Play initially using bow, stern, port, starboard and then add variations like
- row a dinghy - sit on the ground and row
- climb the mast - stop and pretend they are climbing up
- paddle the kayak - sit and mime paddling action
- person overboard - stop and mime throwing out a rope or lifebuoy
- all overboard - stop and stand in a group of three or four, facing inwards, arms linked behind the back in the huddle position.

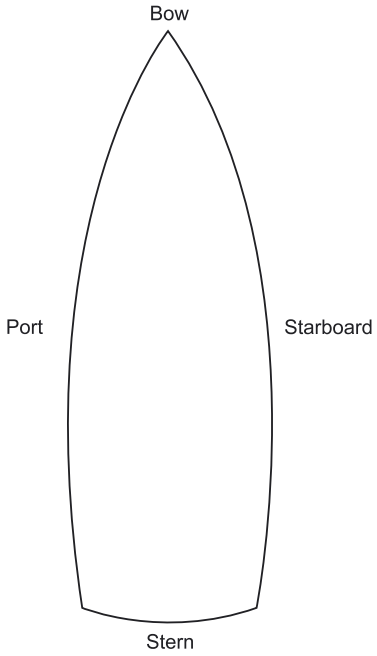


Huddle position

Boating terms and definitions

Small boats

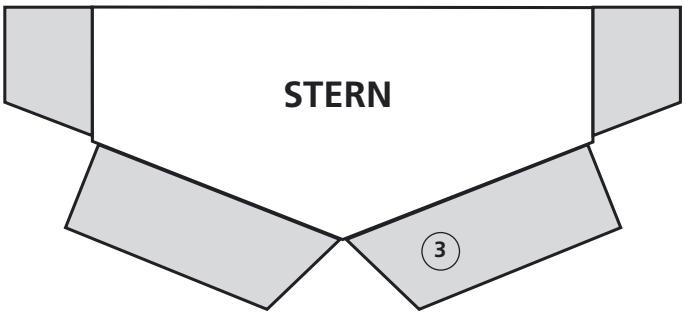


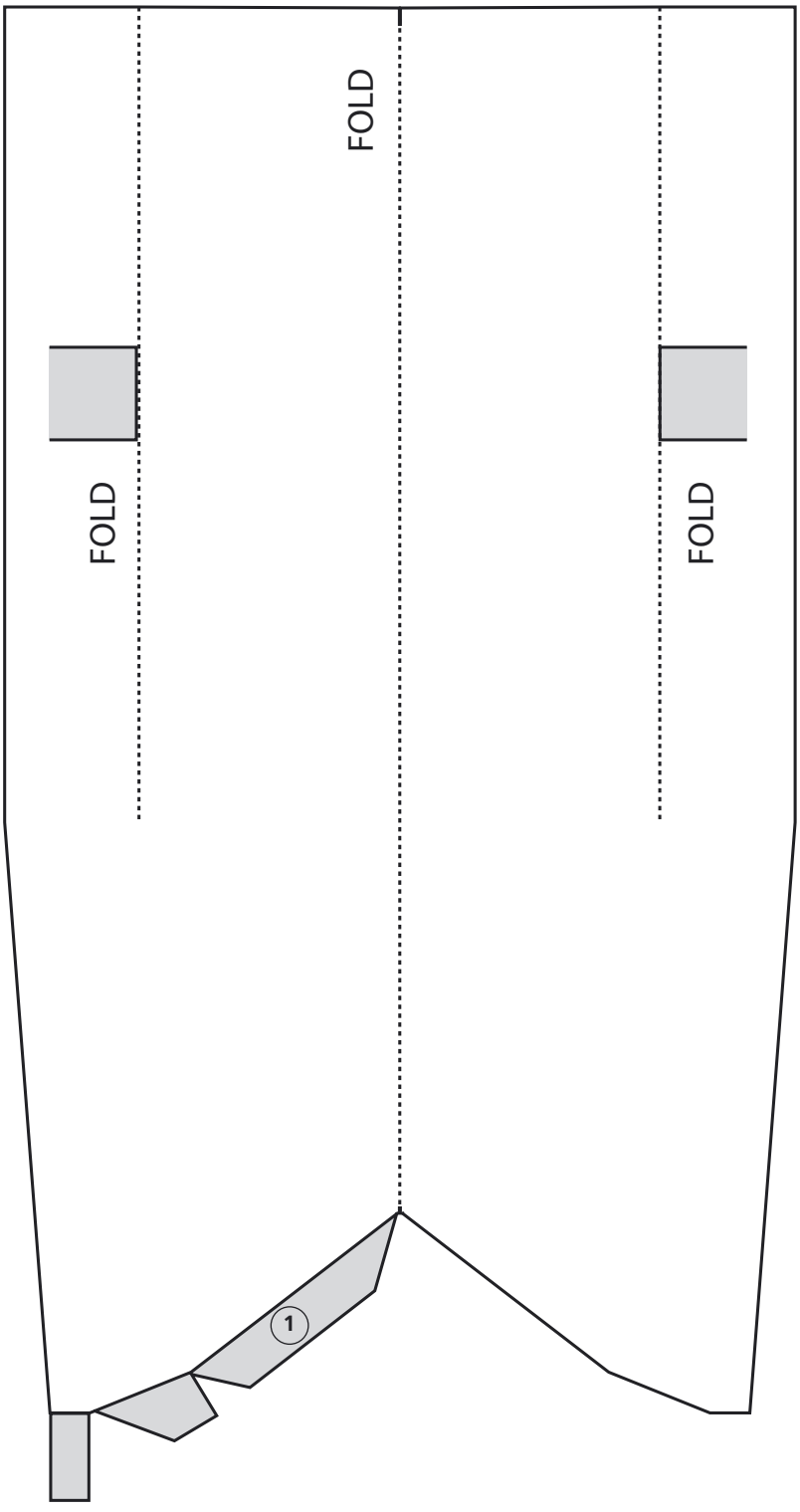


Optimists

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

RUDDER

RUDDER

Insert in slits in Stern

Insert in slits in Stern

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

← Fold rudder around tooth pick here ↓

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.

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 step ②. 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 ④ and fit together. ④ slides into ③. 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

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

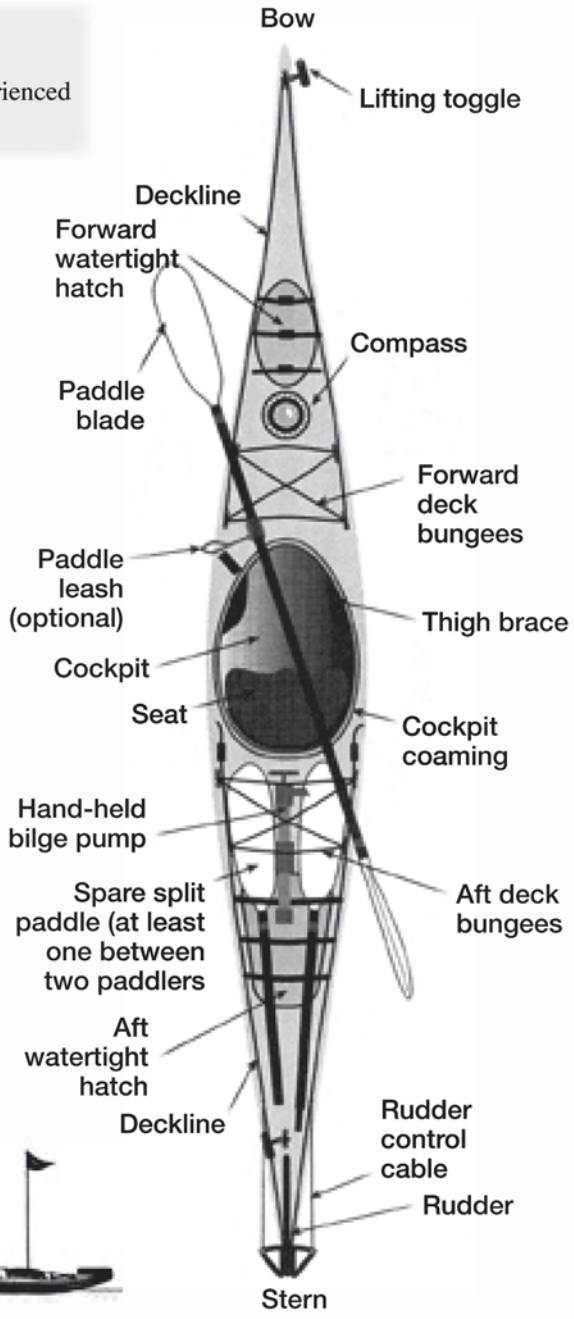
ON DECK

- 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

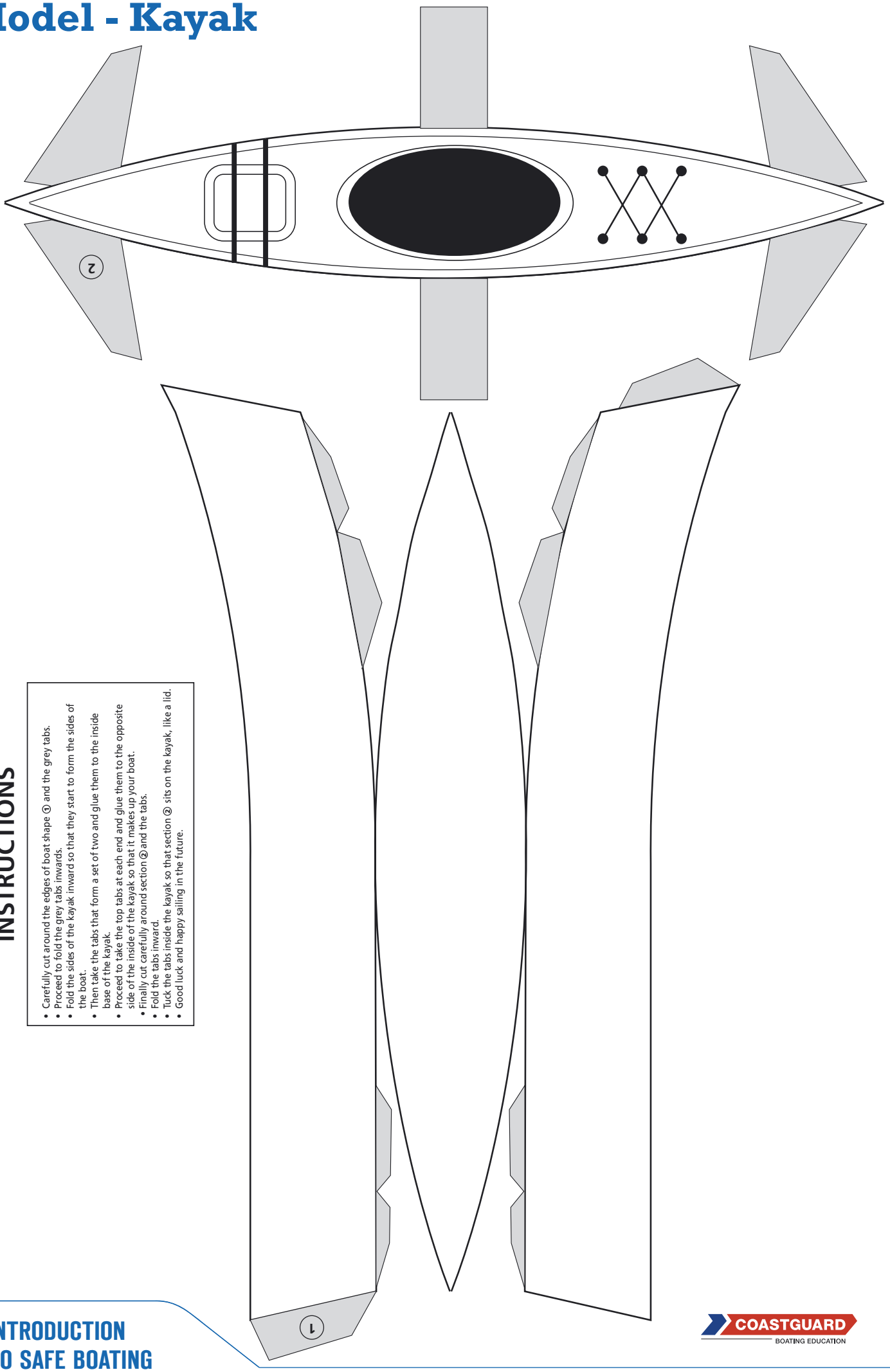
SIGNALLING DEVICES

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?

Part A The boating experience of our class

- Give students this fact. **In New Zealand one in three people goes boating each year.**

- Have each student look at the displayed illustrations from Activity 1 and make a chart that indicates types of boats they have been on and whether they have been on them only once, a few times or a lot (regularly). Students could include the reason they were on the boat.

- Use this information to judge how familiar individual students are with a variety of boats and boating experiences.

- 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 words 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.

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 gear 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 is provided 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 and boat 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.

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 and six and only introduces the 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 but not in a position where the wearer's head is out of water. If your planned EOTC experience uses a PFD you will need to explain the difference to your students.

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: WaterSafe Auckland - In at the Deep End, Year 7 - 8 programme or www.watersafe.org.nz and Swim Start (Swim Safe www.swimmingnewzealand.org.nz)

Activity 4

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 jackets** - **Fact** 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 5

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.

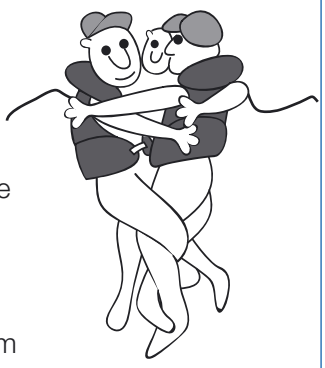
- If the students try to put the life jacket on while they are standing in water.
- If the students imagine they cannot reach the bottom, and try to put the life jacket on while they are floating in the water. (Open up the life jacket, float on the front panel of the life jacket and place one arm through 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 lifejackets 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 6

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.

- 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 do not choose to take the safety measure of wearing a life jacket?

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

- 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.’

‘Damm, we’ve left the life jackets behind. I’ll try to remember them next time.’

‘We’ve had them for years - never had to use them, I’ll check them when we get to the island.’

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

Activity 7

Why does it 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 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 parted 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.

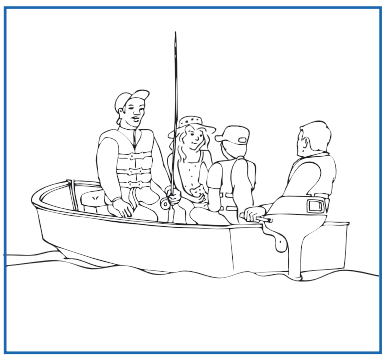
Always have three points of contact with the boat

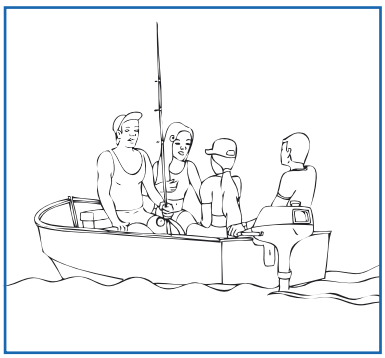
The rules will include not riding on the bow of a small boat as this is dangerous. If a big wave breaks over the boat you could be washed off. Riding on the bow also affects the way the boat moves and floats in the water.

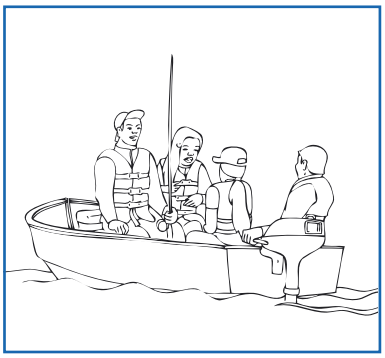
If everybody sat in the stern of the boat, the bow would be high in the water and the stern very low. A wave could come into the boat over the stern of the boat and capsize it. People sit throughout the boat to balance the weight over the boat and make it move through the water easily and safely.

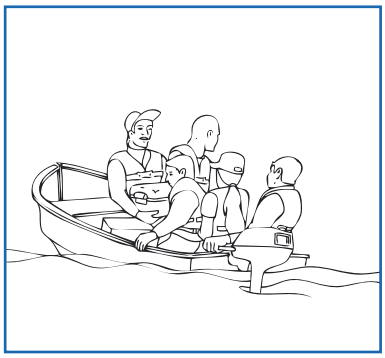
We float more easily when we are in salt water than when we are in fresh water. It is easier for us and other objects to float in the sea than it is in a river, lake or dam.

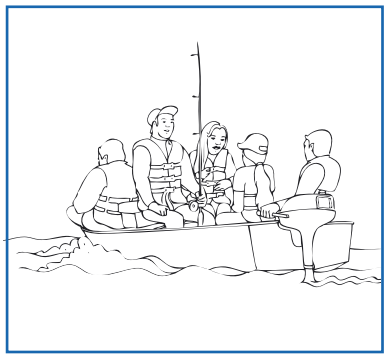
- Look at each of these pictures and decide if the boat is safe or unsafe and give a reason for your answers.











Activity 8

If I'm in the water what will help me float?

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.

- Give the students the following scenario.

You are out in a boat, like the model boat and someone falls overboard. What could you do to help that person stay afloat until you can rescue them?

If they are 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.
The boat has a lifebuoy that can be thrown out to the person in the water.

You could also throw anything else that floats like

- a boat fender
- a chilly bin or chilly bin lid
- boat squabs or seat covers
- a bucket
- the bailer.

Throwing rope and bucket out to person

If the person was taking a risk by not wearing a life jacket then the thrown object 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 the person who has fallen overboard.

- Add this information to the scenario.

The boat has overturned and everyone is in the water. What should the people in the water do?

Many boats are designed to float when they are overturned or upside down.
The people in the water should swim to the upturned boat and hold onto it until they are rescued.
They will all be together and be able to be seen by their rescuers.
They should not try to swim to shore but stay together, floating and holding onto the upturned boat.
Some people may be able to climb out of the water onto the upturned hull.
It is NOT recommended that people leave the upturned boat and try to swim to shore.
Sometimes people do manage to swim to shore when the boat is close to shore and the swimmer is

a 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.

If the boat has sunk the people in the water should get together in the huddle position that you practiced in Person Overboard and 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.

A rescue boat or helicopter will find it easier to locate a group of people wearing life jackets than individual people.

Huddle position

Being in the water unexpectedly after an accident can be frightening and being in a group means that everyone can take care of each other.

- Have the students make an illustrated list of flotation devices for use in an emergency (including life jackets) and display it.

- Have the students make an illustrated poster of what to do if a dinghy with four people on board, including someone your age, has overturned and
  - the boat is floating upside down
  - the boat has sunk.

Section 4 Clothing to wear when you are boating

Teachers' Note

This section has one activity that has been set up as a series of research activities where students carry out an investigation and report back to the class. This allows the class to develop a collective understanding of suitable clothing to wear boating.

There is a focus on

- safety, wearing a life jacket or other safety personal flotation device (PFD)
- wearing clothing that offers protection from the sun
- wearing clothing that offers 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.
- 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 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 9

What to wear when you are boating

Teachers' note

This is a group research task that involves different groups

- experimenting with provided fabrics
- visiting a local sports store and finding out what to wear in specific boating situations
- conducting internet research on
  - hypothermia
  - being SunSmart when boating
  - wearing specialised clothing for some boating activities.

Sites for the internet research are provided and the information could be downloaded and used as a paper reference sources for group work.

Knowledge gained by the class could be summarised in a variety of ways but some suggestions are provided.

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 access to a local sports store
- copies of the pamphlet Hypothermia obtainable free from Water Safety New Zealand or downloaded from www.watersafety.org.nz Go to good advice/hypothermia.

- Conduct a discussion with the class 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 each of these conditions.
- Give one group a range of fabric samples. Have them rinse the fabric samples in cold water and hang one example of each fabric in a shady cold area to dry, and hang another example in a sunny area to dry. Have them monitor and record how long it takes each fabric to dry in each situation.
- Have the groups do some research about what sort of clothing is made out of each fabric then draw some conclusions about which fabrics it would be good to be wearing if you got wet boating.

- Have several volunteers from the class take a range of fabric samples, wet them and drape them over their bare arm for, say, ten minute. After that time have students share how their skin is feeling with each sample. Is their skin cold and wet or are some fabrics able to keep body temperature warm even when they are wet? You could use a fan to add the idea of clothing drying in windy conditions.

- Have the students make a report for the class about what they discovered by wearing the different fabric samples, what sort of clothes are made out of each fabric and which ones would be good to wear if you accidentally got wet boating.

- If appropriate, arrange for another group to visit a local shop where sportswear is sold. Have them find out about features to look for when choosing gear to wear when out boating and select three different boating activities and sketch themselves in appropriate gear for this activity.

- Set up some individuals to do some internet research about being SunSmart when boating and have them present their information in a visual and/or interesting way.

- Set up another group to investigate hypothermia and describe what it is, how you get it and what clothing you can wear when you are boating to reduce the likelihood of getting hypothermia. Extend this to look at what to do to reduce the risk of hypothermia if you are in the water in a person overboard situation. Students can access information about hypothermia from the internet at watersafety.org.nz (Go to good advice/hypothermia) or use the pamphlet Hypothermia provided free by Water Safety New Zealand.

- Have all the groups present their information about what to wear when you are boating and write some illustrated guidelines for someone who is going out for the first time on a day-long fishing trip in a small dinghy.

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 11) and (in Section 6) about the local area and some 'rules of the water' (Activity 12). 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 10

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 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 a 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 11

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.

- Ask the students to make a, drama, story, poem, rap, PowerPoint presentation or poster about 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.

Activity 12

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 is 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 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.

Section 7 Being a safe and responsible skipper and crew

Teachers' Note

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

It concludes with the students developing their understanding that they have to be responsible and understand and obey safety rules on a boating trip.

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.

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.
- People interested in boating should 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 13

Being a safe and responsible skipper

Teachers' Note

This is a group sort and order activity. It introduces some new ideas you may want to highlight with your students especially always leaving information with someone on shore about where you are going, who is with you and when you will be back.

Resources/essential equipment

- copies of the **Being a Responsible Skipper** Activity sheet for each group.

- Have the students work in groups and complete the **Being a Safe and Responsible Skipper** Activity sheet.

Being a Safe and Responsible Skipper

Imagine you are Ben, the skipper of a small cabin cruiser, and you are planning to take your friends including two children out for a morning's fishing. As the skipper of the boat you are responsible for everyone's safety.

There are a number of things you have to do to make sure you and your passengers are safe and enjoy being on the boat.

- Cut up the 20 things Ben should do to keep everyone safe and make sure they enjoy being out in a boat.
- Place the heading cards where you can see them.
- Read one of the 20 things Ben should do and discuss it and decide when in the boat trip he should do it.
- Place the action under correct heading card the three headings cards.
- Look at the actions under each heading card and put them in a good order (e.g .most important to least important).
- Display your work and share it with another group. Discuss with them anything that is very different between your two groups.

The day before

Before you leave home

Find out if everybody can swim and how much boating they have done before.

Check the marine forecast for the next 24 hours.

Check that the life jackets are in good condition and fit everyone properly.

Check that the engine is working well, the boat is not leaking, and that there are oars on board.

Check that the boat has all the essential gear, (life jackets, an anchor and chain, a bailer like a bucket, oars, cell phone, flares and a fire extinguisher) and other gear you think is important. Plan what useful gear you want to take and organise it.

Look at the tides, the weather, and charts of your local area and plan where you are going to fish.

Check the boat is not overloaded, and the gear is stowed away properly.

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

Put life jackets on everybody.

Buy fuel for the outboard and check there is spare fuel in the emergency can.

Plan when you will need to return so there is an incoming tide and it is easier to reach the boat ramp.

Leave a message with someone on shore that says where you are going, who is with you and when you will be back.

Check that everyone is SunSmart and has warm clothing with them.

Make sure the children know how to stay safe in the boat.

Know the marine rules and regulations so you can, for example, pass other boats safely.

Prepare food and water.

Put the cell phone in a water proof bag and take it with you.

Check that the boat is not overcrowded, that there is a seat for everyone.

Make sure everyone is warm and comfortable and is enjoying the boat trip.

On the water

When you are fishing

Before you leave the boat ramp

Activity 14

Responsible boating

Teachers' note

This activity looks at the responsibilities of the skipper and anyone who goes out in a boat. The activity can be used to introduce students to the rules that will be in place for their EOTC boating experience.

Resources/essential equipment

- None required discussion activity.

- Have the students consider the following

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

Do they think Steve will be a responsible skipper? Would they want to go fishing with Steve and Dad? Why, why not?

Add this information.
You are not sure about this trip but you go along.

At the boat ramp what are five things Steve could 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.

- Ask the students how they think people become good and responsible skippers of boats and tell them that Coastguard Boating Education runs courses that people can take to become responsible skippers. People can join boating clubs and share their knowledge, skills and experience.

- 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 the following ideas.

- 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 rang of recreational boating courses.
  For more information go to www.cbes.org.nz

Part B Rules we need to keep us safe when boating

Teachers' note

This 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 or,
- 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'.

- 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 secenario 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 while you having fun and forget safety because you could just end up in the water and 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 15

What went wrong?

Teachers' note

This activity can be used as a group or individual assessment activity. Note that the newspaper articles provided vary in complexity.

Resources/essential equipment

- Copies of the newspaper articles for individuals or groups.

- Have the students work as individuals or groups and read one or more newspaper articles and write down
  - what when wrong
  - why it went wrong
  - (if the article describes something the people in the boat were doing right) what they did right
  - what the skipper or the people on the boat could have done to prevent the incident happening and the people needing to be rescued.

- Have the students work in groups and write down or discuss what they have learnt from doing the safe boating work.

- Have each group agree on the FIVE most important things they have learnt. Have each group present these and as a class discuss similarities and differences between the information presented by the groups.

Another rescue on our bar

Three people were rescued by the Coastguard after their boat tipped over on the bar. The Coastguard rescuers commented 'The bar can be a tricky part of the harbour to negotiate and boaties must check conditions. Today there's a lot of rough white water out there. If the bar is breaking do not go out. They were breaking the law, they were not wearing life jackets, and they were lucky we were already in the area and got to them very quickly. Another ten minutes and there could have been multiple drownings.'

Another breakdown, another rescue

A man in his dinghy had to be rescued after he went out from shore and his motor broke down. The man had a long wait in a calm sea, as he had to wait until another boat passed within waving distance. He had no flares, cell phone or radio. This was one of many summer rescues of boats that had broken down or had run out of fuel.

Family lucky to be alive

Locals described a visiting family as very stupid and very lucky to be alive. The family of five, all wearing life jackets, was rescued by the Coastguard when their boat capsized after hitting a swell. 'The group were not locals and had been heading out to sea to fish', a local resident said. 'The waves were absolutely rolling in. They should never have gone out. The locals would never have tried it. It was pretty difficult conditions for the rescue boat, they are a very, very lucky family.'

Rescued after heading out to sea in a small inflatable

Two adults in an inflatable boat had to be rescued by Coastguard after the boat was caught by an offshore breeze and drifted out to sea. They were not wearing life jackets and had lost the boat paddle.

Kayakers rescued

Two kayakers are safe after being rescued from rocks at Cornwallis Beach.

Police say the men were kayaking off rocks at Puponga Point when they were caught by the strength of the outgoing tide and were unable to return to shore.

Freak waves catch experienced boaties

Two men were left clinging to the upturned hull of their pleasure boat for 30 minutes after freak waves capsized it on the bar yesterday.

The pair were well equipped boaties with life jackets. They were heading out fishing, but the sea was rough with breaking waves of up to 2 metres. A set of freak waves hit the boat as it crossed the bar and it capsized. The coastguard crew rescued the men. Although locals, they both said they would treat the bar with more respect in the future.

An over-confident kayaker at first refuses help

Over-confidence nearly cost a young kayaker his life. He was rescued floating on an underwater object that turned out to be a swamped kayak. The young kayaker at first turned down offers of help but began to panic as he was swept towards breaking surf.

The young man was not wearing the life jacket he was given when he hired his kayak. He thought he was not in danger, and had lots of experience, but he clearly did not know what he was doing and had to be rescued. He was fined $200 for not wearing a life jacket.

Drunk boaties oblivious to danger

Five drunken friends were lucky to be alive after they beached a small yacht on a beach. 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 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 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.

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 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 16

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.

THE GAME Anchors & Flares

Teachers' Note

- This game allows students to reflect on and reinforce their understanding of the key learning in **Introduction to Safe Boating** programme.

Resources/essential equipment

- gameboard, game instruction sheet, cards, dice and counters for groups of students.

Please note these are provided as a seperate download.

- Have the students play *Anchors and Flares* to test their understanding of the ideas covered in the Introduction to Safe Boating programme.

- Additional cards are provided for students to develop their own life jacket and True/False questions and boat opinion scenarios.