



Club details:



Poster 1 - Our beach, their backyard

Project 1.1 Community activity — Adopt a beach

- Visit a local beach – Map your beach. Include the natural features ie rocks, headlands, dunes; the wildlife ie plants and animals and the people uses. Sketch, photograph, collage picture/poster or video.
- Find out if there are any local community groups working on the beach eg Dunecare or Coast Action/Coastcare. Invite a member from one of these groups, to come to your AUSMEPA Marine Club meetings and speak about their work. Plan a project together.
- Environment Australia has the coastal atlas at www.ea.gov.au/coasts/atlas



Personal actions

Please do

- use marked tracks to walk on to the beach.
- observe and enjoy animals and plants, but leave them alone.
- take all your rubbish and possessions home.
- avoid disturbing birds and their resting or nesting sites.
- control pets or leave them at home when you visit the beach.



Would you like to try out for a marine club individual action award? The AUSMEPA booklet has information on the school certificate reward program.

Project 1.2 Virtual beach experiences

- Use the internet to find beach cam, wave rider buoys, Surf rider or Dunecare sites. Can you get in touch with the community via these sites to build up a picture and better understanding of that coastal area?
- Beach and wave cam sites
 - www.surfcam.com.au
 - www.env.qld.gov.au/environment/coast/tides
- Check out the AUSMEPA web site for the other web sites at www.ausmepe.edu.au

Project 1.3 A set of marine cards

Together make a set of marine cards. Come prepared with copies of the animals and plants on this poster, marine books, cardboard, scissors and pencils. Cut the cardboard into uniform sized rectangles (playing card size) and using the photocopies and books for ideas, draw aquatic wildlife on the cards. Make two each of every card (ie pairs), coastal and ocean plants and animals, remembering the plankton and microscopic creatures too.

Now use the card set to play many card games, examples below but also think up your own.

Sea chant

Put the sea cards in a circle face down, one for each student. Everyone sits behind a card. Begin an aquatic chant eg diving in the ocean I saw a shark, diving in the ocean I saw a shark and a seasnake etc. The chant moves around the circle as each student turns over their card and adds their plant or animal to the chant. Keep going, think of more of the amazing life in water.



Aquatic poem

With the cards displayed for all to see, create a poem that will bring your aquatic life into action eg crabs hide, eagles glide.

What am I?

Secretly look at your card, then describe the marine wildlife by its features and habitat; can the others guess what it is? 'On my card is an animal that lives in a pool, it is... etc' When someone correctly guesses it, show/mime movement like that sea animal or plant, accentuating its shape, movements and habitat.

Dinner time

Play like snap but instead of snapping for doubles, snap 'dinner time' when the card on top would eat the card below eg fish on a plankton or tortoise on a weed.

Project 1.5 Drains to the sea - a classroom activity

This activity demonstrates a range of different pollutants entering the sea via storm water drains and creates discussion about their source. The students will conclude by coming up with ways and things they can do to reduce this problem.

Materials needed

The following pictures from magazines

- Golf course, factory, house, carwash, dog, storm drain, farm, paint tin and brush, plastic rubbish
- Two plastic clear containers with water (representing two seas)
- Two plastic sea creatures (optional - for effect)
- Small amounts of the following to represent the pollutants
 - Food colouring (paint)
 - Coloured 100's and 1000's (sprinkles, eg to represent fertiliser from golf courses)
 - Brown chocolate sprinkles (dog poo)
 - Sugar (chemicals from a factory)
 - Plastic bag (rubbish from streets)
 - Dirt (runoff from farms)
 - Biodegradable detergent (car wash runoff)

What to do

Part A : Class brainstorm/discussion

- Using the picture clues or signs (golf course, factory, house, car wash, dog, storm drain, farm, paint, rubbish) discuss where and what pollutants might be a problem to marine life and how they get into the sea.
- Make a list of pollutants on the board.

Part B: Demonstration and revisit brainstorming ideas

- Using one of the clear containers with water (and a plastic marine creature in the bottom) add "pollutants" to the sea.
- Discuss the polluted sea as a class and what effects this may have on marine life.

Part C: Conclusion

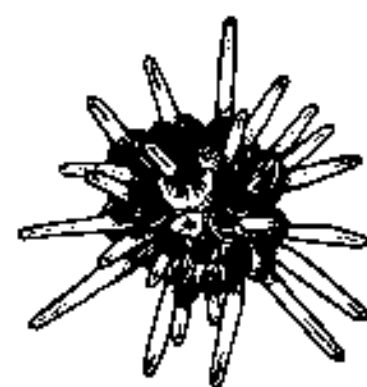
- In small working groups write down all possible ways that you can think of as to how we can help reduce or eliminate these pollutants entering the sea.



Project 1.4 Lunchtime fun

Use the Kids and Water Sea Creatures Poster Set to make a sand seascape or sand sculpture

- Turn your school sandpit into a hive of beach activity.
Create many small or one big sand sculpture.
- Come prepared with spades, buckets of water, collections of playground twigs, flowers etc, recycled empty containers and other bits and pieces to sculpt the sand.
- Take a photograph for the school newsletter and the AUSMEPA web site



2

Club details:



Australian and New
Zealand Sea-Keeping
Education Group



KIDS WATER
It's about safety
and conservation

Poster 2 — Sea creatures at risk

Project 2.1 Butts off beaches

It is widely recognised that land-based marine pollution exceeds pollution from dumping and other maritime activities. Therefore the ‘clean oceans’ theme encourages exploration of the links between the land and sea.

Clean oceans are everybody’s business, and marine education around this theme creates awareness about how our everyday actions and land management practices are affecting the health of the coasts and oceans. By considering the ‘clean oceans’ issues we acknowledge the impact of our actions and the pressures we are putting on marine habitats and their inhabitants. Through this awareness we can gain a better understanding of the importance of conservation and sustainable use of the coast and oceans.

While exploring this theme we are encouraged to consider what is making our oceans dirty, why we must be concerned for their wellbeing and how we can help to keep our seas clean, healthy, alive and living. Issues that arise include:

- Healthy ocean habitats
- Natural cleaning systems
- Litter and marine debris
- Dumping and ballast water
- Pollution and oil spills
- Catchment management
- Government policies and programmes

Aim

- to increase awareness of cigarette butts as a marine pollution issue.
- to take action to reduce butt littering.

Activity

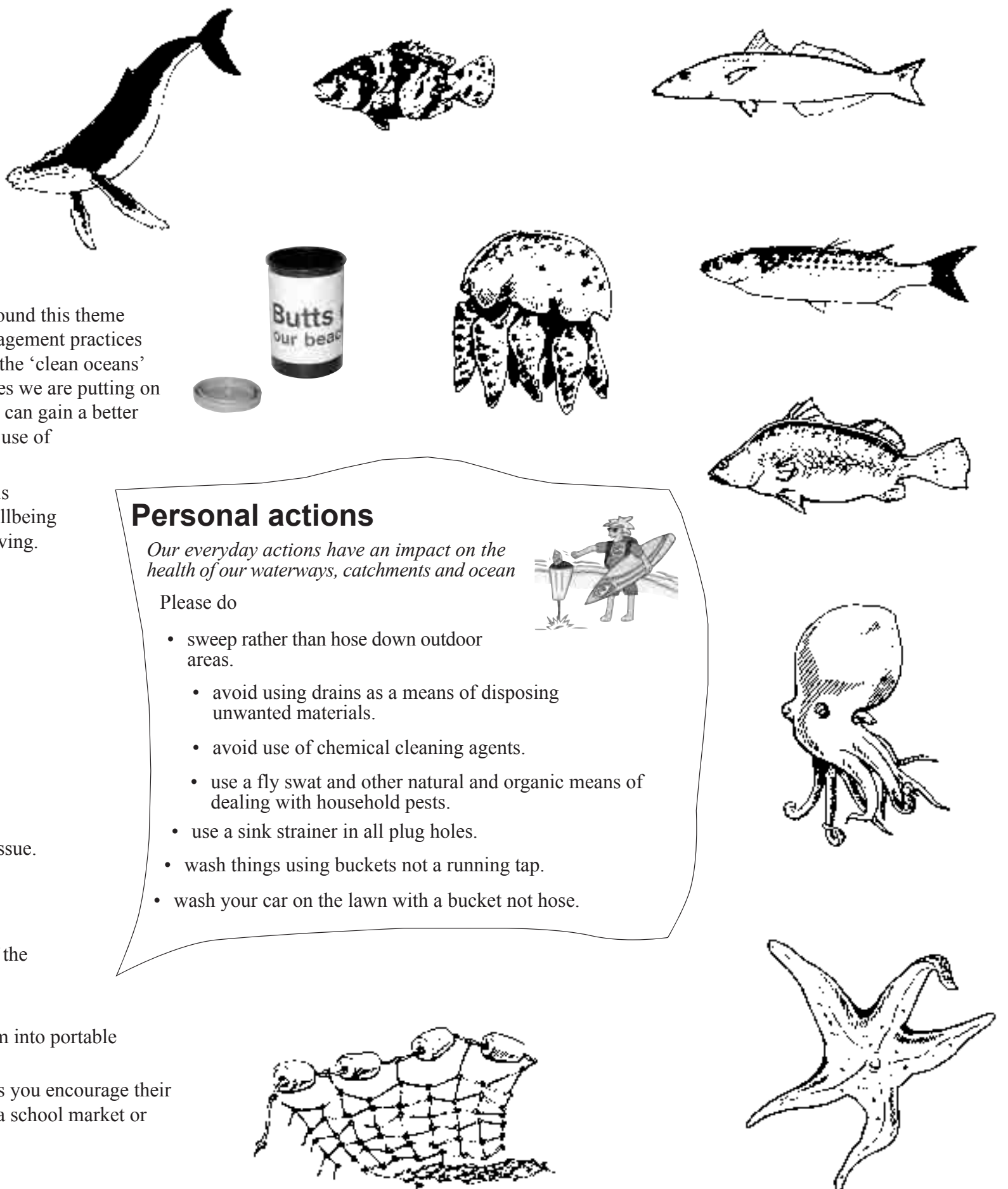
- Do a litter survey and discover if cigarettes are a major part of the rubbish collected. Find out how long they take to break down.
- Collect empty film canisters.
- Design, print and paste a label on to the canisters and turn them into portable ashtrays.
- Plan an awareness/action day and give the butt bottles away, as you encourage their use and promote understanding of the butt rubbish issue eg at a school market or sports day.

Personal actions

Our everyday actions have an impact on the health of our waterways, catchments and ocean

Please do

- sweep rather than hose down outdoor areas.
- avoid using drains as a means of disposing unwanted materials.
- avoid use of chemical cleaning agents.
- use a fly swat and other natural and organic means of dealing with household pests.
- use a sink strainer in all plug holes.
- wash things using buckets not a running tap.
- wash your car on the lawn with a bucket not hose.



Project 2.2 Fatal food relay

This fun relay is best carried out at the beach but can also be done at school. The relay highlights problems associated with rubbish and pollution in the sea that harms the sea creatures.

Materials

Use the illustrations on this page to make the “food cards”.

- 16 brown paper bags (or cloth ones)
- Good food:
 - 8 plastic sea food creatures or cards with names/ drawings of sea creatures
- Fatal food:
 - 8 samples of rubbish eg balloon, plastic bags, foam, six-pack ring etc

Step 1

Set out your relay course and identify a separate area for sick and dying animals.

Step 2:

Place the students into two equal relay teams. Assign each team a sea creature to be and act out as they compete in the relay.

Step 3:

Mark an area in the sand (or use a box if inside) and arrange the brown bags (with the hidden food inside) at the end of the relay course.

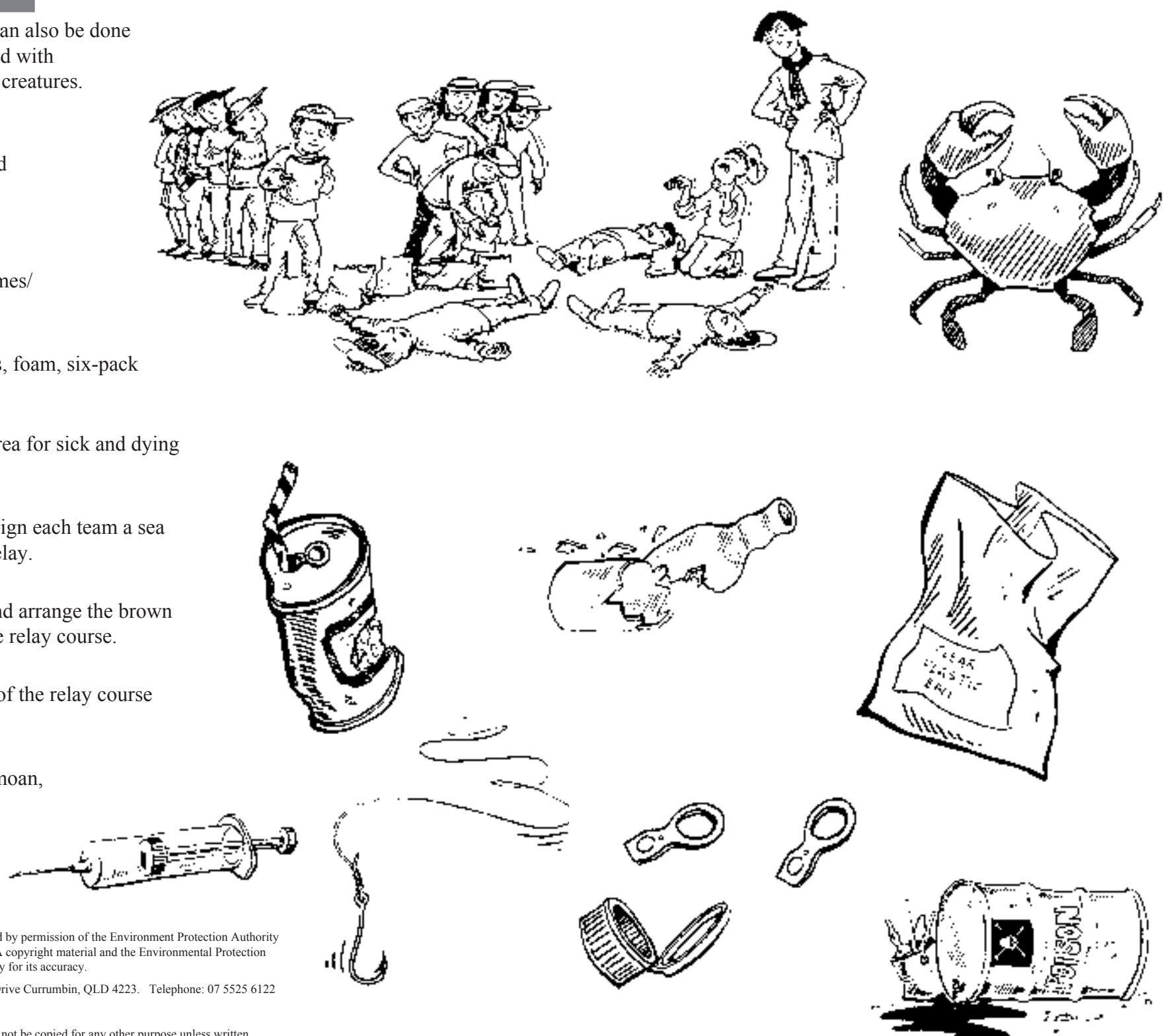
Step 4:

Tell the first student in each line to run to the end of the relay course and select a bag.

Step 5:

If the bag has fatal food in it, the students should moan, groan then go to the sick and dying section.

If the bag has good food in it the student will go back to their relay team.



SAVE OUR SEAS

3



Club details:



Australian and New
Zealand Safe Boating
Education Group





Poster 3 - Club certificates

Aim

To write a letter home to parents or guardians to make an ocean pledge, have it verified by parents or guardians and then receive a certificate and prize from the reward pack supplied to your club. Certificates can be found in your club kit. Additional certificates are available from Wet Paper at (07) 5525 6122.

Project 3.1 Boating safety certificate

The certificate could be done in conjunction with a power boat or sailing club, a local marine rescue association, State Department of Transport or Marine Safety.

What to do

- Step 1 Agree on the method of allocating prizes in class.
- Step 2 Use the internet to look up the boating safety web page www.anzsbeg.org.au
- Step 3 Write a letter home telling parents or guardians about the pledge and what it involves. Use the list of pledge ideas on the back of the certificate.
- Step 4 Carry out the pledge and have parents or guardians sign that the pledge has been completed.
- Step 5 Read pledge to class and discuss.
Collect reward and certificate to take home.
- Step 6 Have parents sign certificate and put on wall.

Timing

- in conjunction with National Water Safety Week (Term 4).
- as an extension to an existing school water safety program.

Before beginning certificate activities ... *some suggestions*

- Discuss who has been boating before. What type of boat was it? What happened? Was it fun? Ask students to bring any photos of their experiences to school.
- Arrange for a parent to bring a boat to school.
- Watch a television boating or fishing program.
- Discuss the use of the language in the certificate.
- Use the index of the reader - *Better Boating Behaviour* to define and understand the use of new terminology.
- Relate to the students' experiences of boating.
- Check out the website with relevant activities at www.anzsbeg.org.au
- Take the class for a sailing or boating lesson or invite a sailor to speak at school.
- Use the reader "*Better Boating Behaviour*" as a template to write the students' own story about their boating lesson or experience.

Years 1&2 activities ... *some ideas*

- make a boat safety alphabet - A is for anchor, B is for Boat, C is for Captain, etc.
- find 30+ sunscreen in cupboard, show to parents/guardians
- bring a sun smart wet shirt in class and explain correct use
- explain to parents/guardians how walking tracks protect dune vegetation on way to boat
- bring a boat safety brochure to class
- explain to parents/guardians what a flare does
- tell a boating safety story learned in class to parents/guardians
- practise a call for help from the water with parents/guardians
- make a boating safety picture

Year 3 activities ... *some ideas*

- visit the Kids and Boats web site and print out the safety rules to show to class
- write a boating poem
- tell class of adventures on a boating trip
- enrol in a swimming class
- copy 6 safety rules from a boating safety brochure
- write a note for friends when going boating and say where to leave it
- check the weather forecast for a day and explain if safe to go boating
- write a story about going boating safely
- make up a class poster of different boats



Year 4 activities ... *some ideas*

- make a drawing of when and where to swim safely on a boating trip
- go to a boating shop and find a pfd correct for your size
- write a boating safety slogan
- explain to parents/guardians a weather map and daily forecast
- show to class how to tie a knot used on a boat
- find a navigation chart and explain to class
- make a boating safety list for a small boat
- make a model boat with safety lights
- make some model navigation buoys
- make a boat safety chart involving telling someone where you are going and when you will return, obtaining the latest weather forecast, carrying sufficient fuel (including reserve) for a boating trip, carrying all the safety equipment required by law, showing passengers how to use anchors, radios, bucket and bailers, oars, pfd's, flares and other signalling equipment



Year 5 activities ... *some ideas*

- explain to parents/guardians why bow riding is dangerous
- find a marine park map and explain rules
- help clean boat for friend and describe how to take care of boating gear
- find out where you can learn to sail a boat
- explain the boating safety rules for local area to class
- find out where to get a boat registration sticker and how much it costs
- invite a boating rescue group to school
- arrange for a flare demonstration in school
- calculate the correct fuel for a friend's boating trip and explain to class how this was done
- work out the correct loading for a friend's boat and describe how gear should be stowed
- work out when high and low tides are for a day and explain to class
- check the weather forecast for a day and explain if safe to go boating
- describe to class a boating show safety story from television
- find a marine section in the newspaper and cut out an item or article to show to class

Years 6 or 7 activities ... *some ideas*

- find the wet and safe web site and explain to class
- explain to parents/guardians why all rubbish should be taken home after boating trip
- take photographs of beach/waterway pollution
- explain to class legal fishing or bag limits for local fish
- draw up a chart to show parents/guardians how to reduce, re-use or recycle
- visit a friend's boat, find flares, make a record of expiry dates
- find emergency calling frequency on friends marine radio, make notes and explain to class
- find a boating safety brochure and explain it to class
- answer all the questions in the *Better Boating Behaviour* book correctly
- invite a friend to bring a boat to school and show class all the safety equipment
- find out how to mix two stroke fuel and what safety precautions to take with fuel on a boat
- learn how to rescue someone from the pool
- enrol in a bronze start program
- explain to friend with boat, the slogan — *stow it don't throw it*
- create a checklist for going boating. eg
 - tell someone where you are going and when you will return
 - obtain the latest weather forecast
 - carry sufficient fuel (including reserve) for your trip
 - carry all the safety equipment required by law
 - show your passengers how to use safety equipment.



Project 3.2 Environment certificate

Years 1 & 2

- tell people at home why recycling is a good idea ie reduce what we throw away.
- show people at home the sticker on your wheelie bin
- tell people at home what you shouldn't put into your recycling bin, eg crockery

Year 3

- tell people at home about having a worm farm or a compost bin and how it helps reduce what we throw away
- explain how to do the 3 R's at home
- make a list of things you should recycle at home (put it on the fridge)
- explain why we shouldn't put meat and citrus fruits in our compost or worm farm
- make sure everyone at home reads the sticker on the wheelie bin

Year 4

- investigate / start a compost bin/worm farm
- help parents or guardians with lawn mulching
- start / help with a vegetable garden
- use old newspapers as garden mulch
- explain all about mulching to parents / neighbours / friends

Year 5

- measure the height of the garbage bin
- find out the price of string bags or shopping baskets
- take a box to the supermarket to use instead of plastic bags
- refuse plastic bags while shopping or return used plastic bags to supermarket recycling bins
- choose products with minimal packaging
- reduce quantity of groceries
- bring a reusable drink bottle to school
- use some waxed paper to wrap lunch
- reuse cans or jars in the kitchen or work room
- explain the different recycling categories to parents or guardians
- explain ways to reduce waste to parents or guardians

Year 6/7

- volunteer to be a recycling monitor at home and create recycling bins for the kitchen
- organise a tin for cooking oil in the kitchen
- start a recycling bin for junk mail at home
- find out the location of the local recycling depot
- help to start a recycling program at school
- explain the different recycling categories to parents / guardians
- explain to parents / guardians why we don't recycle crockery
- use the council recycling bins correctly
- find out about the local recycling system
- join a local environment group or organisation
- start a recycling system at home or school



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Club details:

Poster 4 - Working at sea

Project 4.1 Imagine you are a ship

Shipping companies are trying to reduce the amount of rubbish produced by the crew when they are on board the ships. In this project students do a rubbish collection during lunch time at school to asses how they could live more “lightly” on their “ship”.

Once the rubbish has been collected students will tally the results and produce graphs (eg bar graph, percentage graph) showing the type and amount of rubbish produced by their “crew” eg, glass, paper, plastic metal, other. Back in class they discuss how much rubbish there would be if they were at sea for 5, 10 and 30 days.

Project 4.2 How small ships protect the environment

This project aims to find out more about the practices, methods and measures that boat operators use to reduce ocean pollution and help protect the marine environment.

Write a survey, send it to a boat operator and then make the answers up into a poster headed “How ship/boats protect the environment”. Display it in the school or send it back to the boat operator.

Possible small ship/boat operators

Fishing boat, ferry, tug, dive boat, yacht, riverboat, speedboat etc.

Possible survey question headings

- Fuel - eg refuelling?
- Waste disposal - eg rubbish, wastewater, sewage, port facilities
- Loading and unloading - eg spillage
- Cleaning - eg deck scrubbing, bitges, equipment
- Maintenance - eg anti-fouling, painting, oil changes
- Storage - eg stowing equipment on board
- Construction - eg boat design and materials
- Duty of care - eg why it is important for ships/boats to protect the marine environment?
- Best of all, visit the local port or invite the boat operator to come and answer the questions at your Marine Club meeting.

Project 4.3 Boats afloat!

Make boats from rubbish/recycled materials eg containers, corks, plastic bottles, bits of wood, sticks, material scraps. Bring strong glue, tape, scissors and marker pens.

- First look at all the materials, what is it, where does it come from, what was it used for?
- How do you dispose of it, do any of these things end up in the ocean?
- Now make a boat. Have a water trough, sink or large container nearby filled with water. Test out your boat, fix or amend until you are sure it will float.

Display all boats, compare, discuss and have fun.



Illustration courtesy the Gould League

Project 4.4 What knot?

Knowing how to tie a special knot can be very helpful in many situations!

A half hitch- can be used for tying many things including tying a boat up to a jetty

A bowline – used when a line is required to be secured through or around something, eg tying equipment in a boat or making a loop for a mooring

A half hitch

To make a half hitch you will need to practise on a pole or similar object

1. Wrap the end of the rope around the pole
2. Bring one of the ends through
3. Repeat this process
4. Pull the knot tight

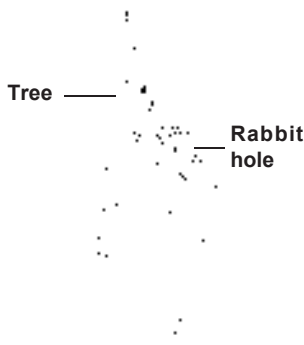


The bowline

Imagine the knot as tree, a rabbit and a rabbit hole. The loop you make could be called the rabbit hole and the end of the rope as indicated in the figure below, the tree, around which the rabbit runs.

Tying the knot

1. Make a loop in the rope end (sometimes called *a rabbit hole*),
2. Pass the free end up through the loop (sometimes called *up the rabbit hole*).
3. Then pass the free end around the rope end (or *around the tree*)
4. Bring the rope back through the loop (*back through the rabbit hole*).
5. Pull the knot tight.



Project 4.5 Master of a ship

Imagine you are the Master of a Ship.

- What skills do you need?
 - need to navigate an area (plot a course)
 - safety
 - ensure you don't pollute
- What types of ships are there to be master of?
- What other type of jobs are there?
 - engineer
 - cook

Make a wall chart to summarise your ideas.

Project 4.6 Who uses this equipment anyway?

Use the equipment illustrations in the border to the right to match the following people who work at sea - Ship's master, fisher, diver, engineer, naval officer, scientist. Draw up a table and paste in the illustrations.

Project 4.7 What job?

Background

The Maritime Industry involves a great variety of jobs using a multitude of different skills. People are employed on boats at sea and in land-based operations.

There are a lot more jobs on land than at sea but you always need an understanding of the marine environment, its care and conservation and marine safety. Some sectors of the marine industry are tourism, fishing, armed services, boat building, resource management, marine science, education, harbour and port authorities and retail and manufacturing.

Discussion

1. Name as many types of boats as you can eg tankers and bulk carriers, tugs, yachts, sailing ships, speedboats, cruise ships, surf skis, kayaks, rescue boats and ferries.
2. Name as many types of jobs in the marine industry as you can eg engineer, fisher, water police, scientist, diver instructor, ships master, aquarium worker, navy officer and marine teacher.
3. What different sorts of equipment would the people need for their job?
4. What marine industry is there in your region?
5. Which kinds of boat would you like to work on, why?

Personal actions

Please

- fix leaks, more oil ends up in the sea from urban run-off than from tanker spills.
- be a caring fisher, collecting only the bait that you will need, keeping only the fish you will eat and returning undersized fish to the water.
- stow it don't throw it, on fishing or boating trips ensure rubbish bins have lids and are emptied when you return home.
- learn about your local fish and habitat ie endemic and endangered species.

