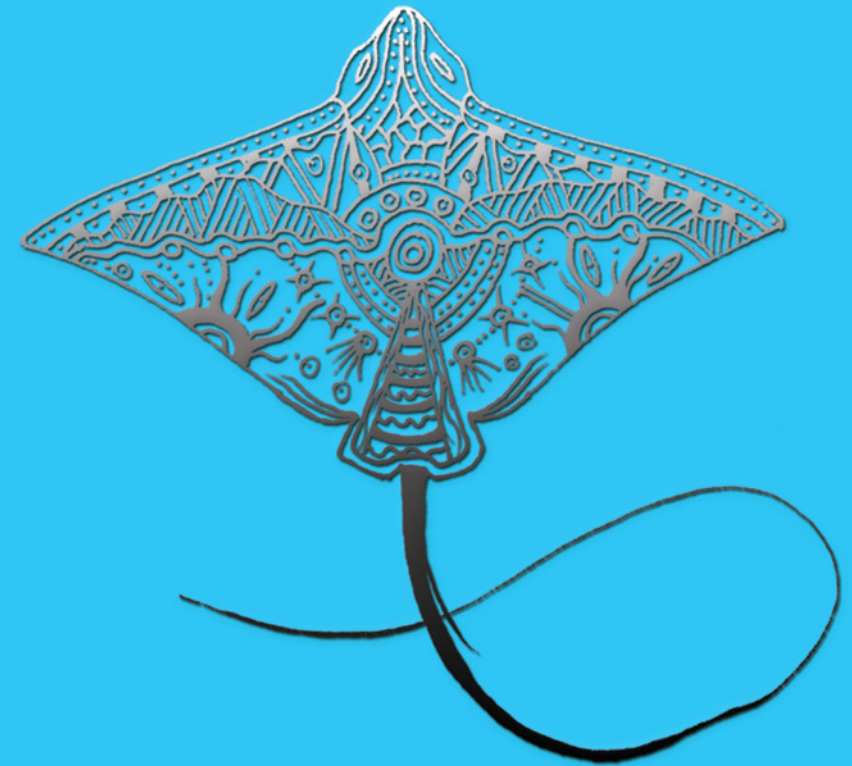


MARINE ESTATE AGENTS



PASSPORT



MARINE ESTATE AGENTS

Stick your photo
here

Agent name: _____

Birthdate: _____

School: _____

Favourite marine animal: _____

Draw your marine animal

MARINE ESTATE AGENTS PASSPORT

Welcome to your Marine Estate Agents Passport. This passport will be used to assist you in a journey of discovering what is in your blue backyard, the Cape Byron Marine Park. There are 16 fun and fascinating tasks for you to complete. Once these tasks are completed you will become a fully fledged Marine Estate Agent who helps to protect and conserve our marine environment!



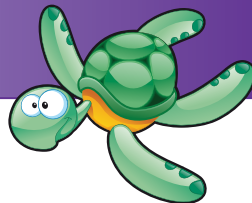
CATEGORIES

4 categories x 4 tasks to complete

- 1 MARINE MOTIVATION
- 2 HELPING HABITAT
- 3 COMMUNITY CONSCIENCE
- 4 CAPE BYRON CRUSADER



Marine Motivation



TASK-1

Fill in the blanks-

The Cape Byron Marine Park (CBMP) is over 22,000 hectares in size and stretches from Lennox Head in the south to the Brunswick River in the north. The CBMP is home to over _____ species of reef fish, _____ species of coral and over _____ species of mollusc. The mixing of warm tropical waters from the north with cooler nutrient rich temperate waters from the _____ creates an area where tropical, _____ and temperate species co-exist.

subtropical

104

500

south

30

Name three things you like about the CBMP.

1. _____
2. _____
3. _____

DID YOU KNOW

The reserve is a highly significant dreaming place to Bundjalung people. Nguthungulli – Father of the World, this is the name for Julian Rocks.

It is estimated there are over 300 resident dolphins in CBMP.

Estuaries in CBMP are important habitat for resident and migratory shorebirds (e.g. curlews, plovers, terns and pied oystercatchers).



Marine Motivation

TASK-2

Draw an aerial view (from above) of Tallow Creek (or another local estuary) as it looks today. If the population in Byron Bay increases by approximately 1000 people per year for 25 years, calculate how many extra people will live here, near your creek _____

Marine Motivation

TASK-2 (continued)

Now draw the same aerial view of the same creek 25 years into the future, which has not been protected, and draw how you think it may be impacted by the large increase in the population.

Marine Motivation

TASK-3

Below is a list of threatened species found in the CBMP.
Can you find all of them?

A good
Marine Estate
Agent protects
and promotes a clean, safe
environment through their
own actions—
making our planet a place where
future generations can
enjoy our diverse
marine life!



B	E	A	C	H	S	T	O	N	E	C	U	R	L	E	W	N
L	A	S	D	F	G	H	J	B	K	L	O	P	U	I	T	H
A	Q	G	R	E	E	N	T	U	R	T	L	E	Y	J	K	A
C	Z	M	X	C	B	C	V	G	T	O	E	P	R	G	E	W
K	A	G	R	E	Y	N	U	R	S	E	S	H	A	R	K	K
R	Q	C	L	I	T	T	L	E	T	E	R	N	R	Q	P	S
O	S	L	D	F	K	D	G	C	H	U	R	N	J	X	O	B
C	Z	A	S	C	O	E	T	H	U	Y	B	I	O	R	L	I
K	X	M	C	V	S	F	R	T	E	T	R	Y	U	T	O	L
C	O	A	E	Y	P	N	B	G	C	S	O	B	U	Y	K	L
O	A	Z	A	W	R	E	U	R	M	T	L	Y	I	Y	U	T
D	G	T	R	F	E	B	U	W	M	O	G	L	P	T	F	U
P	I	E	D	O	Y	S	T	E	R	C	A	T	C	H	E	R
O	N	B	S	E	R	Y	H	E	I	P	O	Y	T	R	W	T
H	U	M	P	B	A	C	K	W	H	A	L	E	R	E	W	L
L	O	N	P	Y	N	T	B	R	X	A	Q	W	C	E	T	E

GREEN TURTLE

HUMPBACK WHALE

PIED OYSTERCATCHER

BROLGA

BLACK ROCK COD

GREY NURSE SHARK

OSPREY

HAWKBILL TURTLE

LITTLE TERN

BEACH STONE CURLEW

Marine Motivation

TASK-3 (continued)

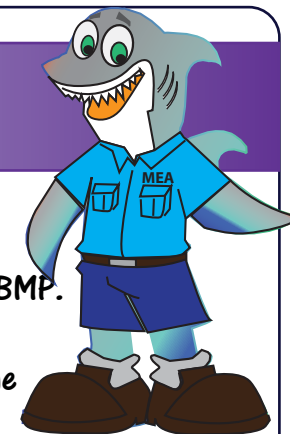
Draw a picture of a threatened species found in the CBMP.

Marine Motivation

TASK-4

List three of your favourite activities undertaken in the CBMP.

Ask three friends or family members what their three favourite activities are, write them in the table and add the results to the graph by shading in blocks.



	Favourite activity -1.	Favourite activity -2.	Favourite activity -3.
Me			
F 1.			
F 2.			
F 3.			

Shade in the blocks to make a graph.

What is the most popular activity?

	swim	surf	fish	walk	explore rocks	walk dog	play beach		
8									
7									
6									
5									
4									
3									
2									
1									

Helping Habitat

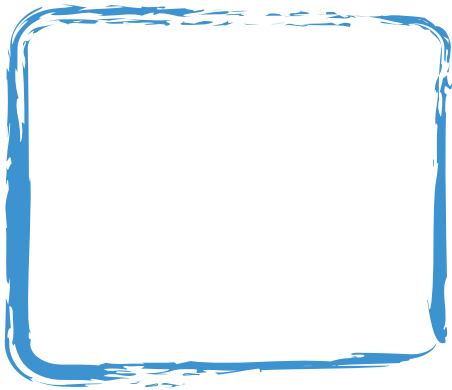
TASK-1

Visit a local estuary (or view one on Google Earth) and study physical characteristics eg pneumatophores, nearby creeks, plants and animals.

Name of estuary:

Discuss how the plants and animals either withstand or take advantage of their estuarine habitat.

LIST three of the plants or animals you observed and their adaptations.



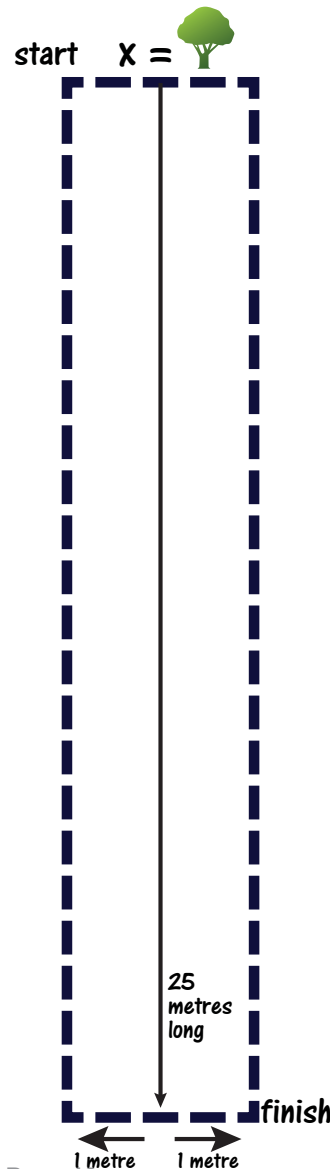
DID YOU KNOW

An adaptation is a physical or behavioral trait that helps a plant or animal survive in its habitat.

Helping Habitat

TASK-2

Belt transect



Ocean and trees have a lot in common, they are both 'carbon sinks'.

Conduct a study of some trees you have in your school grounds using a 'belt transect', as guided by your teacher.



How many trees are in transect?

List some animals you observed within your transect.

Helping Habitat

TASK-3

Colour in the different creatures you find on the rocky shore.

Sooty oyster catcher - Give a **red** beak

Blue grey periwinkle - **blue**

Mulberry oyster borer - **purple**

Barnacle - **pink**

White tube worms - leave **white**

Neptunes necklace - **light green**

Anemones - **red**

Sea Squirt (cunjevoi) - **brown**

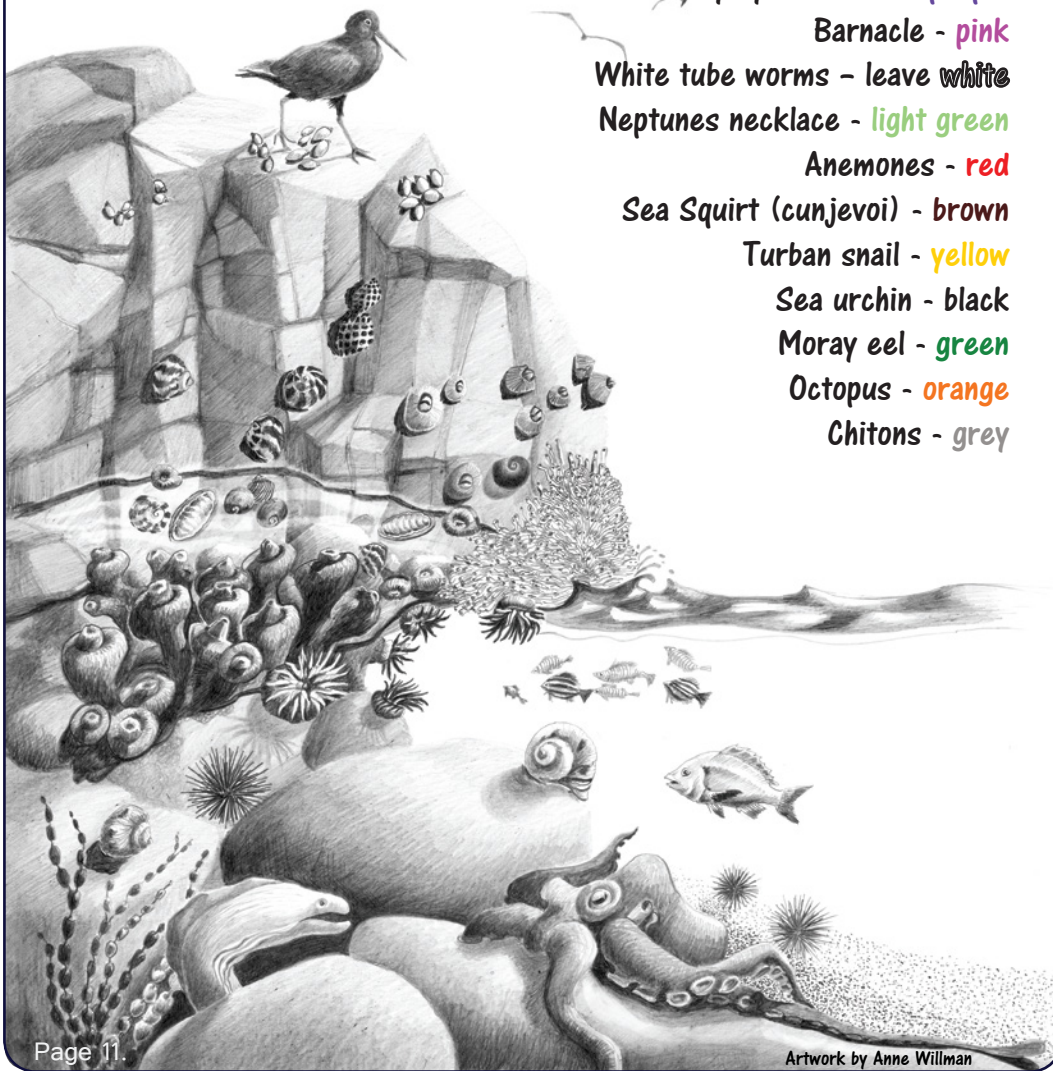
Turban snail - **yellow**

Sea urchin - **black**

Moray eel - **green**

Octopus - **orange**

Chitons - **grey**



Helping Habitat

TASK-4

Adopt a local micro-ecosystem that is easy to access - that you can monitor.

My ecosystem is

START DATE: --/--/----



[paste photo]

At the start of the Marine Estate Agents Passport our ecosystem looked like this.

[paste photo]

When we finished our Marine Estate Agents Passport our ecosystem looked like this.



The changes we observed during the program were



Community Conscience

TASK-1

Create a poster on A3 paper showcasing the CBMP.

DRAFT

Community Conscience

TASK-2

Write a letter to the editor of your local newspaper about a local marine creature you like and why you think we need to protect it.

Prepare a draft below.



DRAFT

Community Conscience

TASK-3

Estimate how much rubbish (pieces) your class puts into landfill in a year _____

For one week record what types and how much rubbish goes into your classroom bin. Keep a tally in the table below.

	MON	TUE	WED	THUR	FRI
Plastic wrap (eg. glad wrap)					
Juice box					
Packets (eg. chips, bars)					
Food scraps					
Bottle or can					
Other rubbish					
TOTAL:					

Weekly number of items in the bin (add Mon to Friday) = _____

Calculate one year's worth (weekly total x 40 school weeks) = _____

Discuss how you can prevent, reduce, reuse and recycle the rubbish in your lunch box.

 **Organise a litter free lunch day** at your school each Friday (if not more often) and promote Litter Free Friday. Think of how much rubbish you saved from entering landfill in one day!



Community Conscience

TASK-4

Get the community involved in a clean up. Each year Clean Up Australia Day (schools) occurs late February. In 2016 it is Friday 4th March, but any day is a good day for a clean up!



FRIDAY 4TH MARCH



Organise to clean up your school grounds or a local beach.

CLEAN-UP SITE NAME:

Record how much rubbish you collected.

How many pieces of rubbish did your class collect? _____

Name an interesting piece of rubbish collected _____

How can some of this rubbish enter our waterways? _____

What impact could this have on a marine creature? _____

Cape Byron Crusader

TASK-1

It is a sad fact but a lot of the rubbish that enters our oceans is from land based sources and our marine animals such as birds, fish and mammals often mistake plastic for their food or get tangled up in it.

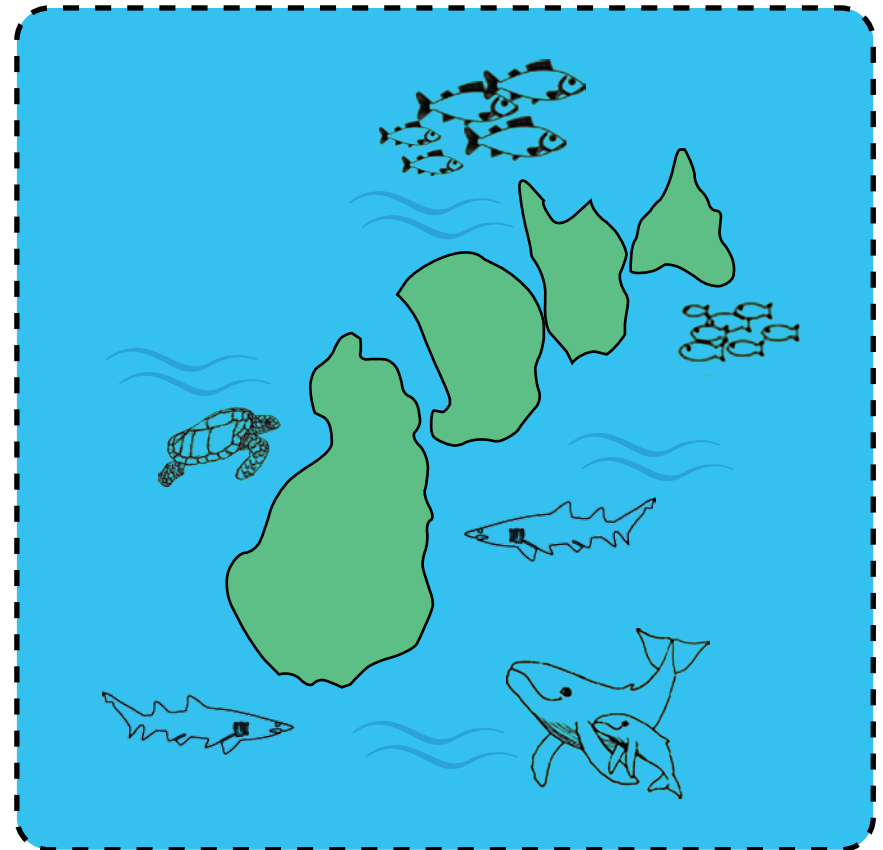
Follow the plastic bag as it moves from the playground to the bin.
Circle the marine animals that will mistake the plastic bag for food if it ends up in the ocean instead.



Cape Byron Crusader

TASK-2

Draw around a part of Julian Rocks where you would put a Sanctuary Zone.

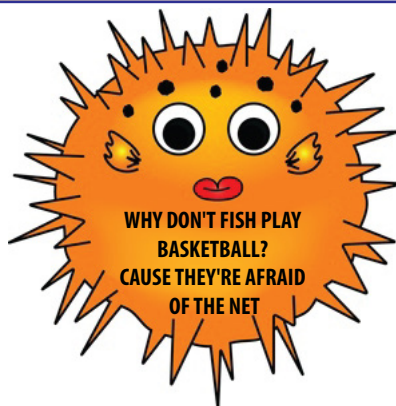


DID YOU KNOW Sanctuary Zones provide the highest level of protection to habitat, animals and plants.

Cape Byron Crusader

TASK-3

Write an acrostic poem using MARINE.



M _____

A _____

R _____

I _____

N _____

E _____

Cape Byron Crusader

TASK-4



Throughout your Marine Estate Agents Passport journey, you have learnt why the Cape Byron Marine Park is so special. Now it's time to put your knowledge to the test. Use the words below to fill in the blanks -

The _____ Marine Park (CBMP) is a park for the community. Marine Parks help to _____ and _____ our marine life for future generations to enjoy. As a Marine Estate Agent I have discovered ways that I can _____ the marine park and the marine _____ that call it home. At school our teachers helped us learn more about CBMP. We then used this knowledge to _____ other people in our community about CBMP. It is important to tell others what I have _____ about CBMP so my knowledge is shared. I hope that other people will follow my example and do things to benefit our marine park as it is the _____!

Byron

species

best

educate

help

Cape

conserve

learnt

protect

CONGRATULATIONS

ON BECOMING

A MARINE ESTATE AGENT





Department of
Primary Industries