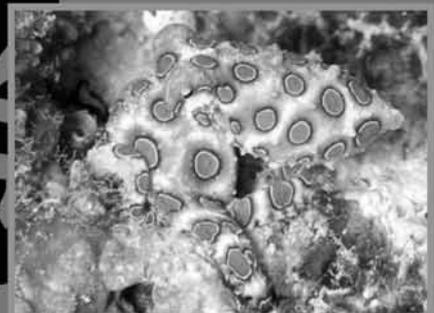


DANGEROUS

Aussie Animals

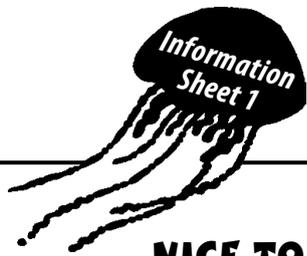
Information
and Activities
Looking at
Deadly Wildlife
and Sea Creatures

By Lindsay
Marsh



Contents

Teacher Notes	4
Curriculum Links	5
Box JellyFish - Information Sheet 1	6
Terrifying Tentacles	7
Design A Sign	8
Boxy Box Jellyfish	9
Interview A Victim	10
Box JellyFish - Information Sheet 2	11
Box Jellyfish Up Close	12
Friends In The Ocean	13
Blue-Ringed Octopus - Information Sheet 1	14
Paralysing Bite 1	15
Paralysing Bite 2	16
I Lived To Tell The Story	17
Blue-Ringed Octopus - Information Sheet 2	18
Amazing Octopus 1	19
Amazing Octopus 2	20
Papier-Mâché Blue-Ringed Octopus	21
Dangerous Pet	22
Stingrays - Information Sheet 1	23
Stabbing Stingrays 1	24
Stabbing Stingrays 2	25
Stingrays - Information Sheet 2	26
Stingray Statistics	27
Studying Stingrays	28
Stingray Search	29
Brown Snakes - Information Sheet 1	30
Snakey Statistics 1	31
Snakey Statistics 2	32
Brown snakes - Information Sheet 2	33
SSSSSSnakes 1	34
SSSSSSnakes 2	35
Design An Enclosure For A Brown Snake	36
Saltwater Crocodiles - Information Sheet 1	37
Saltie Statistics 1	38
Saltie Statistics 2	39
The Saltwater Crocodile - Information Sheet 2	40
Studying Salties 1	41
Studying Salties 2	42
Design A Sign	43
Trading Cards	44
Answers	45-46



BOX JELLYFISH

NICE TO MEET YOU

Australian box jellyfish are renowned for being the most venomous marine animals known to humankind. They have killed more people in Australia than sharks, snakes and saltwater crocs put together! As well as box jellyfish, they also answer to chironex fleckeri, boxfish, sea wasp, fire medusa, or just stinger.

Australian box jellyfish belong to the Cubozoa class of animals.

OUCH!

Ahhhhhhhhhh. When stung by box jellyfish, the pain is said to be excruciating. In fact many people go into shock from the severity of the pain and drown. Of course the degree of pain felt depends on the size of the box jellyfish, how much venom is released, the amount of tentacles involved, the size of the victim (children are more vulnerable) and also on where the victim is stung. A person stung on the chest for example, is likely to suffer greater injuries than a person stung on the ankle.

WHAT MAKES THEM DEADLY?

Box jellyfish are like ghosts in the ocean, as they are made up of 95% water. Their transparent pale blue colour makes them pretty much invisible in their environment, so they are easy to swim into. Not helping matters is the fact that their box-shaped bodies grow up to 30 centimetres in diameter (about the size of a basketball) and their tentacles can grow up to three metres in length. Their size means that many an unsuspecting swimmer has swam into their long tentacles and become entangled. Box jellyfish have around 60 tentacles. They have approximately 15 tentacles on each side of their box-shaped bodies. On each tentacle lies thousands of deadly stinging cells (nematocysts). These stinging cells are activated when they come into contact with certain chemicals which exist on the surface of fish, shellfish and us! So if you are unlucky enough to swim into their arms, you may be stung to death.

DEADLY FACT
One jellyfish tentacles enough to kill 6 people!

FIRST AID

When stinging away, the tentacles of box jellyfish stick to their victims' skin. Attempting to remove the tentacles can mean that more toxic venom is released and lead to greater injuries. Pouring vinegar over the tentacles will take the sting out of them. Most Australian beaches where box jellyfish are known to lurk, will have vinegar in their first aid kits. Once victims are free of the tentacles, mild stings can be treated with ice, painkillers and antihistamines. If a victim is having difficulty breathing, swallowing, has extensive skin damage or has gone into cardiac arrest, an antivenin must be given, usually within minutes. While waiting for antivenin to arrive, a pressure immobilisation bandage can help. CPR may also need to be performed.

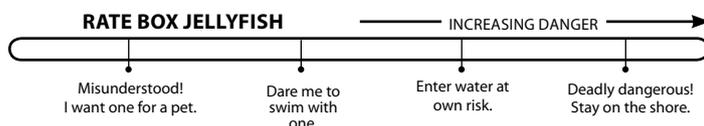
Did You Know?

Australia is one of the few countries to display signs on beaches which warn swimmers about box jellyfish. Countries such as Thailand think that signs will affect tourism and they have been known to cover up deaths caused by box jellyfish as drug overdoses! There are estimated to be between one and two hundred deaths annually caused by box jellyfish in the South East Asian region.



How dangerous do you think box jellyfish are?

Colour in the danger rating just for fun.





TERRIFYING TENTACLES

Read about **box jellyfish** on page 6 to help you complete the following.

Questions

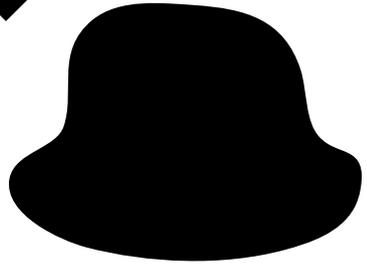
1. What feature of a box jellyfish makes it hard to see in the water? _____
2. What is a nematocyst? _____
3. When is a nematocyst activated? _____

4. Is a box jellyfish's sting painful? _____

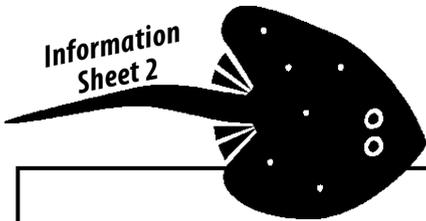
Draw and label the items needed in a doctor's first aid box that is designed to deal with a box jellyfish's sting.

Create a scale

Draw some tentacles on the box jellyfish below and draw a scale to show the length of a real life tentacle. E.g. One metre = three centimetres. Include and label its nematocysts.



Scale



STINGRAYS

STINGRAY HANGOUT

Stingrays live in shallow sandy salt water where it is warm. They usually stay on the bottom of the ocean bed and partially bury themselves in the sand. Sliding your feet through the sand when entering the ocean will help you to avoid stepping on stingrays and becoming their next victim, as the rays will detect this movement and swim away. Stamping hard on the bottom of the ocean bed as you tread through murky water will also cause stingrays to swim away. Stingrays are generally thought to be docile creatures which only attack others in self-defence. Many reports claim that Steve Irwin was killed because he accidentally boxed the stingray in and it felt cornered and threatened. At the time of the attack, Irwin was swimming alongside and slightly above the stingray. A cameraman was filming the animal at the time.

STINGRAY HIT LIST

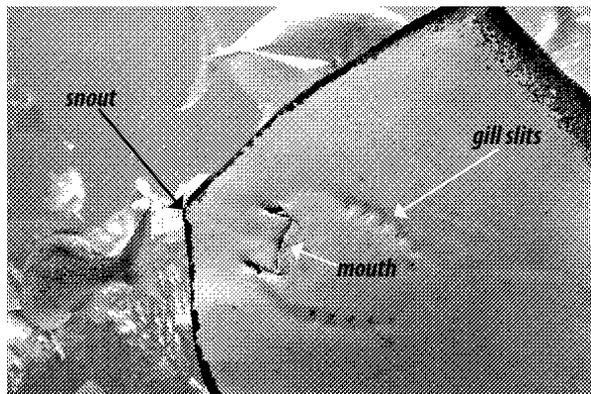
Like sharks, stingrays possess electrical sensors around their mouths (on the ventral side) which detect the natural electrical charges of potential prey. As well as their electrical sensors, they also use their excellent sense of touch and smell to catch their food. Stingrays' noses are referred to as snouts and are at the tip of their diamond shaped bodies. They eat clams, oysters, mussels, worms, shrimps, crabs, snails and occasionally fish. They have sharp teeth which crush the outer shells of their prey and they force streams of water out of their mouths and flap their fins over the sand to entice their prey to crawl out of their burrows in the sand. Stingrays' eyes are on the dorsal side of their bodies and allow them to see prey above them.

DEADLY FACT
Stingrays will slash open a victim's flesh with their tails. They fins are sharp and can be used as a threat or defence.

Stingrays are preyed on by sharks and larger rays. They try to escape being eaten up by camouflaging themselves. Their flat bodies and the colour of their skin (usually brown, grey or black) help them to hide beneath the sand. Stingrays breathe by drawing in water through their mouths and expelling it through gill slits which are on the dorsal and ventral sides of their bodies.

CUTE BABY STINGRAYS

Baby stingrays are known as pups and are born in groups of five to ten. Female stingrays lay eggs inside their bodies and after a period of four to eleven months the eggs hatch within the mothers' bodies. The pups measure 20 to 34 centimetres at birth and weigh 282 to 1,128 grams. The pups have long, slender tails and broad wing-like pectoral fins at birth. When male stingrays reach 51 centimetres and females reach 75 to 80 centimetres, they are considered mature.



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Did You Know?

In some parts of the world, stingray is commonly served as a dish and the skin of stingrays is used to make exotic shoes, boots, belts, wallets, jackets and mobile phone cases.

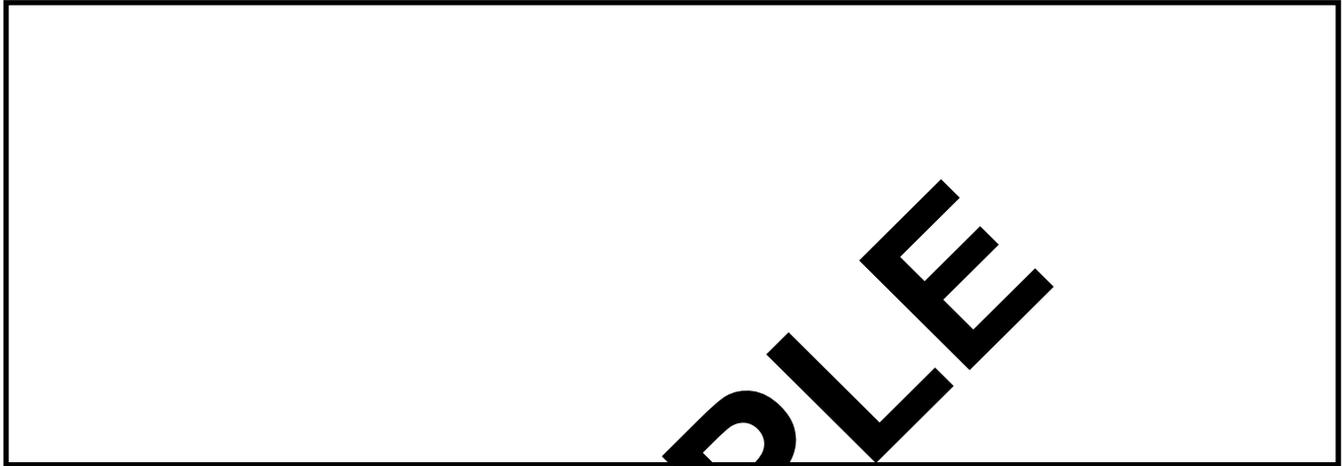


STUDYING STINGRAYS

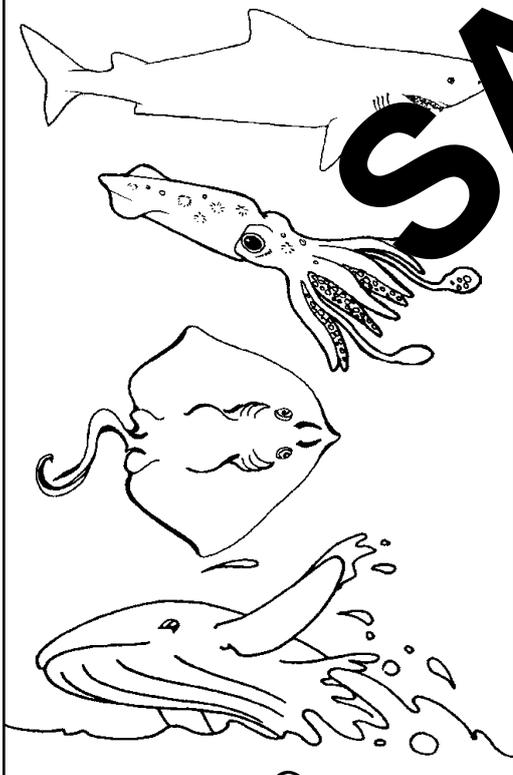
Read about **stingrays** on page 26 to help you complete the following.

What do you call a baby stingray?

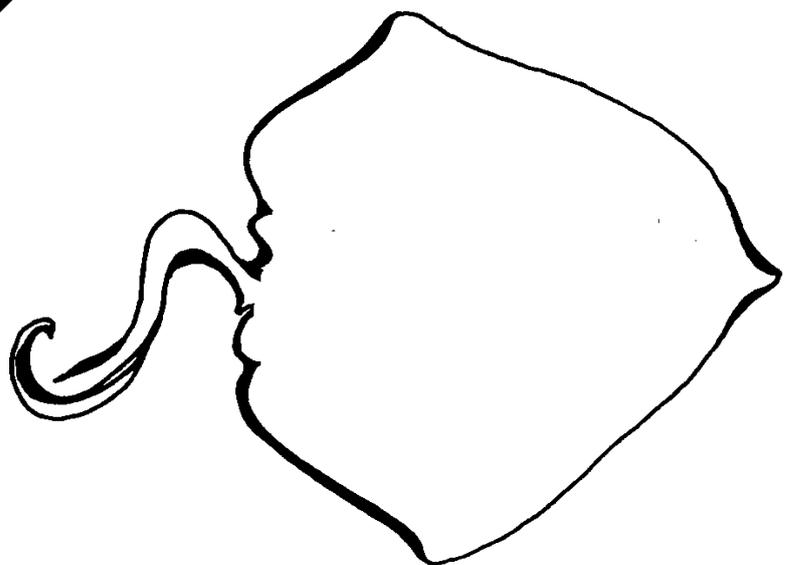
Imagine that you have been asked to look after a baby stingray, just until it is old enough to hide from predators. Draw some water in the tank below and label some features that make it just right for your new pet.



Colour the animals below which prey on stingrays.



To find out about sea creatures, scientists observe their behavior by electronically tagging them, filming them and sometimes by dissecting dead sea creatures washed up on the shore. Recently scientists cut open a deceased stingray to find out what it hunts and eats. What do you think they found? Make a list inside the stingray's body below.



Go to: www.ehow.com/how_2172915_stingray-hand-puppet.html for instructions on how to make a stingray puppet.