



ASSOCIATION
OF ZOOS &
AQUARIUMS



Shark and Ray Awareness Day - July 14

Join zoos, aquariums, and conservation partners around the world to celebrate Shark and Ray Awareness Day on July 14.

Sharks and rays are amazing, and today, we celebrate the diversity of over 1,200 species of sharks and rays. From the Greenland shark living up to 500 years to the sawfish with its long saw-like nose, these animals have evolved unique physical and behavioral adaptations. As a top predator within their habitat, many species play a critical role in maintaining the balance of marine food webs and ocean health.

However, unsustainable fishing practices have resulted in serious declines in many wild populations around the world. Overfishing and bycatch issues can be addressed by purchasing sustainable seafood and supporting strong, science-based management of shark populations and their habitats.

Through AZA SAFE: Saving Animals From Extinction, AZA-accredited zoos and aquariums are working with conservation partners and stakeholders to save sharks and rays. You can help by supporting your local zoo, aquarium, or science-based conservation organization and spreading the word about sharks and rays. **#SAFESharks**



Contents:

Activities:

Shark Hat.....	3 - 4
Awareness Day Coloring Sheet.....	5
Shark Ambassador Certificate	6
Shark A-Z.....	7
Shark Anatomy Wordsearch.....	8
Basking Shark Colouring Sheet.....	9
How to Draw a Shark.....	10
Name that Fish	11
Toilet Roll Hammerhead	12
How Sharks and Rays Search for Prey	13
Did You Know?	14

Shark Hat

AUDIENCE General Zoo and Aquarium Visitors - all ages

MATERIALS NEEDED

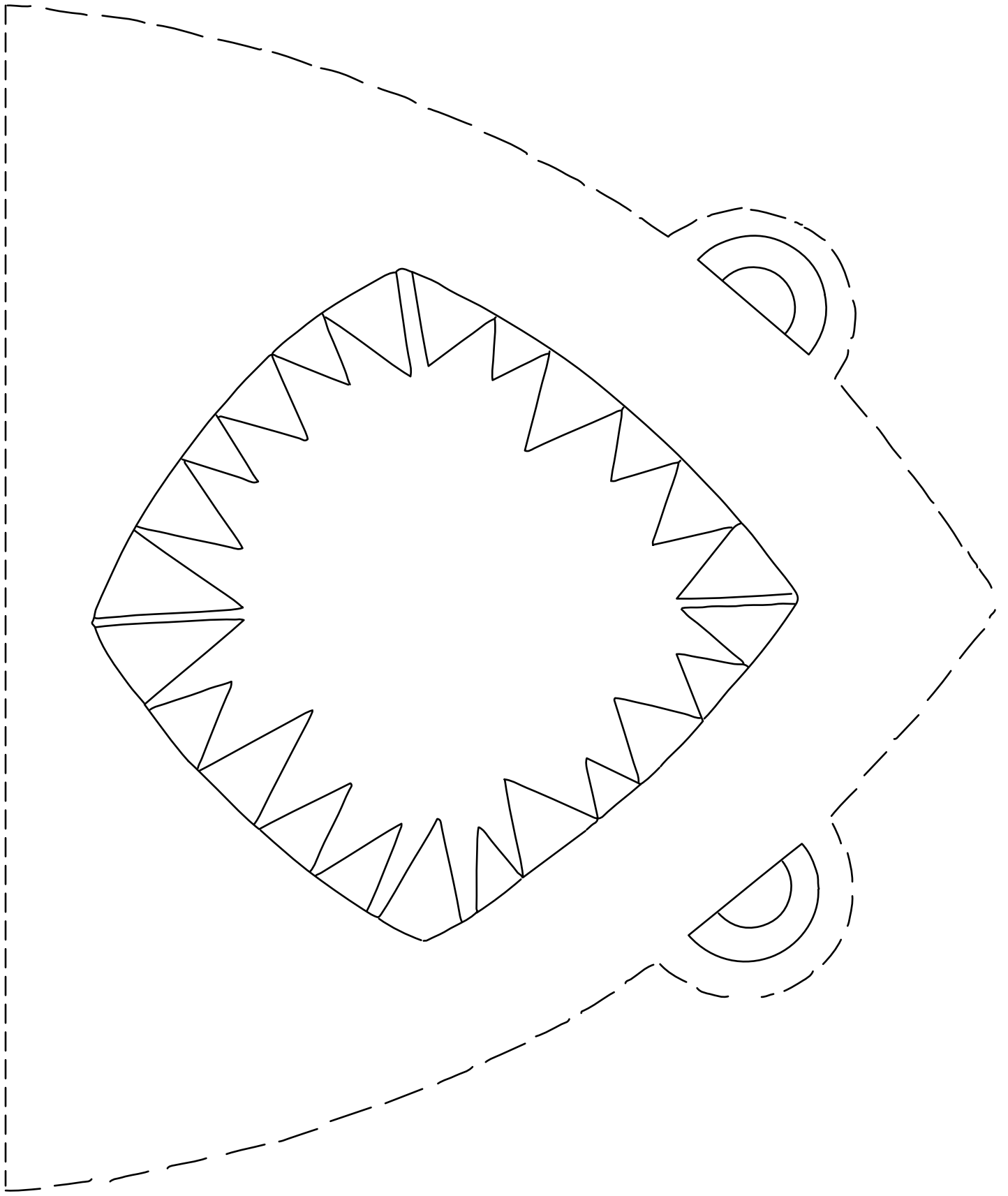
- Crayons
- Scissors
- Attached template
- Staple
- Construction paper

INSTRUCTIONS Color the shark, cut it out, and staple it to a strip of construction paper.



Developed by:



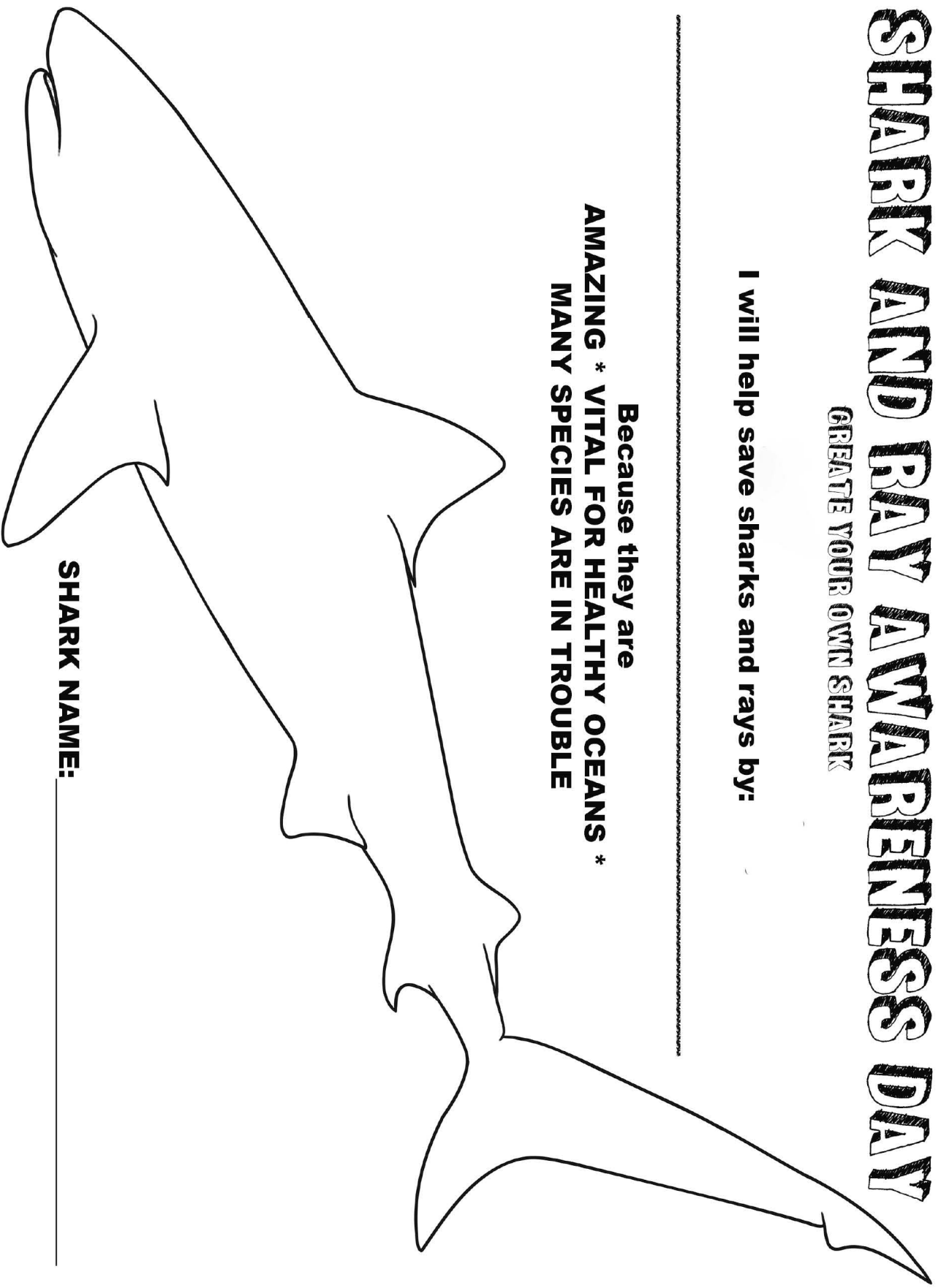


SHARK AND RAY AWARENESS DAY

CREATE YOUR OWN SHARK

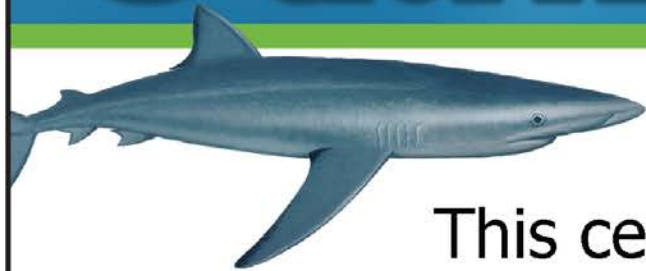
I will help save sharks and rays by:

Because they are
AMAZING * VITAL FOR HEALTHY OCEANS *
MANY SPECIES ARE IN TROUBLE



SHARK NAME: _____

SHARK & RAY AWARENESS DAY



This certificate acknowledges that

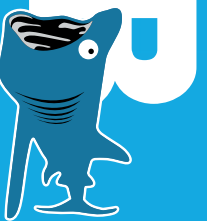
has pledged to be an ambassador to Sharks and Rays through the following action:

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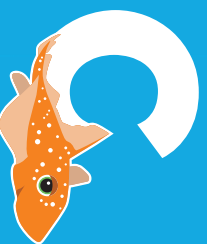
SAFE[™]
SAVING ANIMALS
FROM EXTINCTION



ANGELSHARK
Ambush predator that camouflages well in the sand. Eats fish, crabs, squid & cuttlefish.



BASKING SHARK
The 2nd biggest fish in the world. Feeds on zooplankton. Travels far & wide, visiting the British coastline in summer.



CHIMAERA
Strange & mysterious fish that live deep in the ocean. Very closely related to sharks, skates & rays.



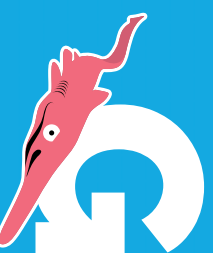
DEVIL RAY
Have horn shaped lobes on their heads. As they swim these are used to funnel plankton & small fish.



EPAULETTE SHARK
Lives on coral reefs & can survive in very shallow water. Use their pectoral fins to walk.



FILLED SHARK
One of the oldest living shark species. Often described as 'living fossils' due to their primitive features.



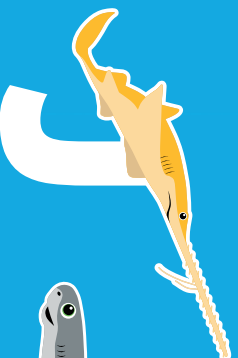
GOBLIN SHARK
Translucent skin gives this shark a pinkish tint as the blood vessels are close to the surface.



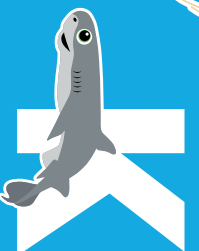
HAMMERHEAD SHARK
Their unmistakable head shape helps increase their electromagnetic senses, which they use when hunting.



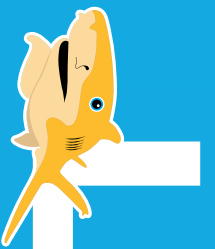
INDIAN SWELL SHARK
Can inflate their stomach if threatened, making it difficult for predators to remove them from crevices.



JAPANESE SAWSHARK
Use their tooth studded rostrum to stun & capture prey. May also use this to defend themselves.



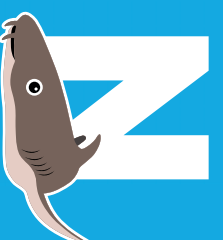
KITEFIN SHARK
Deepwater shark that hovers close to the sea floor. A large oil-filled liver helps them control their buoyancy.



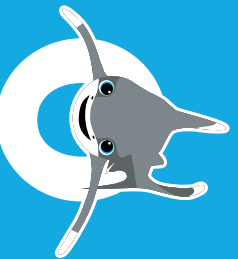
LEMON SHARK
A stocky shark. Named for their yellow-brown skin colour.



MANTA RAY
The largest of the ray species. Like the largest shark species they too are filter feeders.



NURSE SHARK
Nocturnal. Often found resting in groups by day in shallow water. They become active at night.



OCEANIC WHITETIP
Easily recognised by their large, rounded dorsal fin & long paddle-like pectoral fins - all of which have white tips.



PORT JACKSON SHARK
Reproduce by laying coarscrew shaped eggcases. Each eggcase contains one pup which takes up to 9 months to hatch.



QUAGGA CATSHARK
A very small shark, (only 35 cm long). Found in tropical offshore waters in the Indian Ocean.



RAGGEDTOOTH SHARK
Also called Sandtiger or Grey Nurse Shark. Developing embryos are eaten by their larger siblings inside the mother.



SHORTFIN MAKO
Can reach up to 30mph, possibly more! This allows them to catch fast swimming prey such as tuna & swordfish.



TIGER SHARK
The Dustin of the Sea isn't a fussy eater. They eat anything from birds to seals & turtles, & even human rubbish.



UNDULATE RAY
Named for their beautiful pattern of undulating lines & spots. Their empty eggcases can be found on the beach.



VELVET BELLY LANTERNSHARK
Bioluminescent bellies emit light. This provides counter-illumination, camouflaging them from predators below.



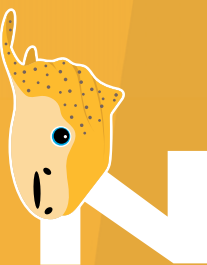
WHITE SHARK
Efficient predators, their bodies are counter-shaded (darker on top with a white belly), making it difficult for their prey to see them coming.



EXTINCT
An increasing number of species are becoming threatened with extinction due to overfishing & habitat loss.



YELLOW GUITARFISH
Evasive guitarfish, found in Japanese waters. They're experts at blending in with their surroundings.



ZEBRA SHARK
Named because young pups have black stripes. As they get older, these stripes become spots so people often call them Leopard Sharks!

A-Z OF SHARKS

Find out more about the shark characters in this poster by becoming a Pup's Club Member. You can also discover more fun facts at www.sharktrust.org/pups





SHARK ANATOMY

Find out what makes sharks one of the greatest predators on our planet?

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

AMPULLAE OF LORENZINI

GILL RAKERS

SPIRACLES

CARTILAGE

JAWS

TAPETUM

CAUDAL FIN

LATERAL LINE

TEETH

DENTICLES

LIVER

WHITE MUSCLE

DORSAL

NOSTRILS

ELECTRO-RECEPTION

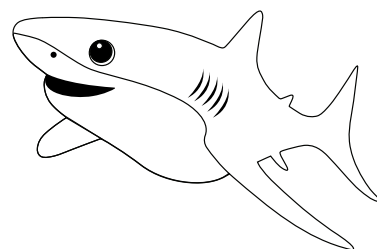
PECTORAL FINS

EYES

PELVIC FINS

GILLS

RED MUSCLE

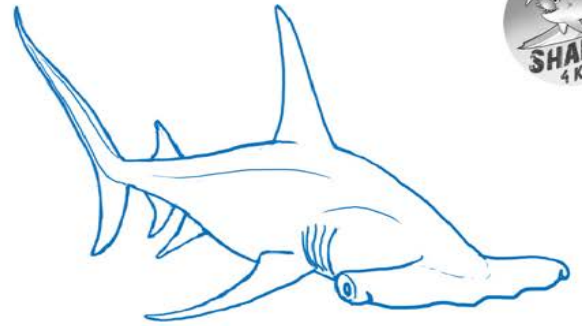


How to draw a great hammerhead shark (*Sphyrna mokarran*)

by Julius Csotonyi

Red steps: Pencil

Blue steps: Pen



© Julius T. Csotonyi

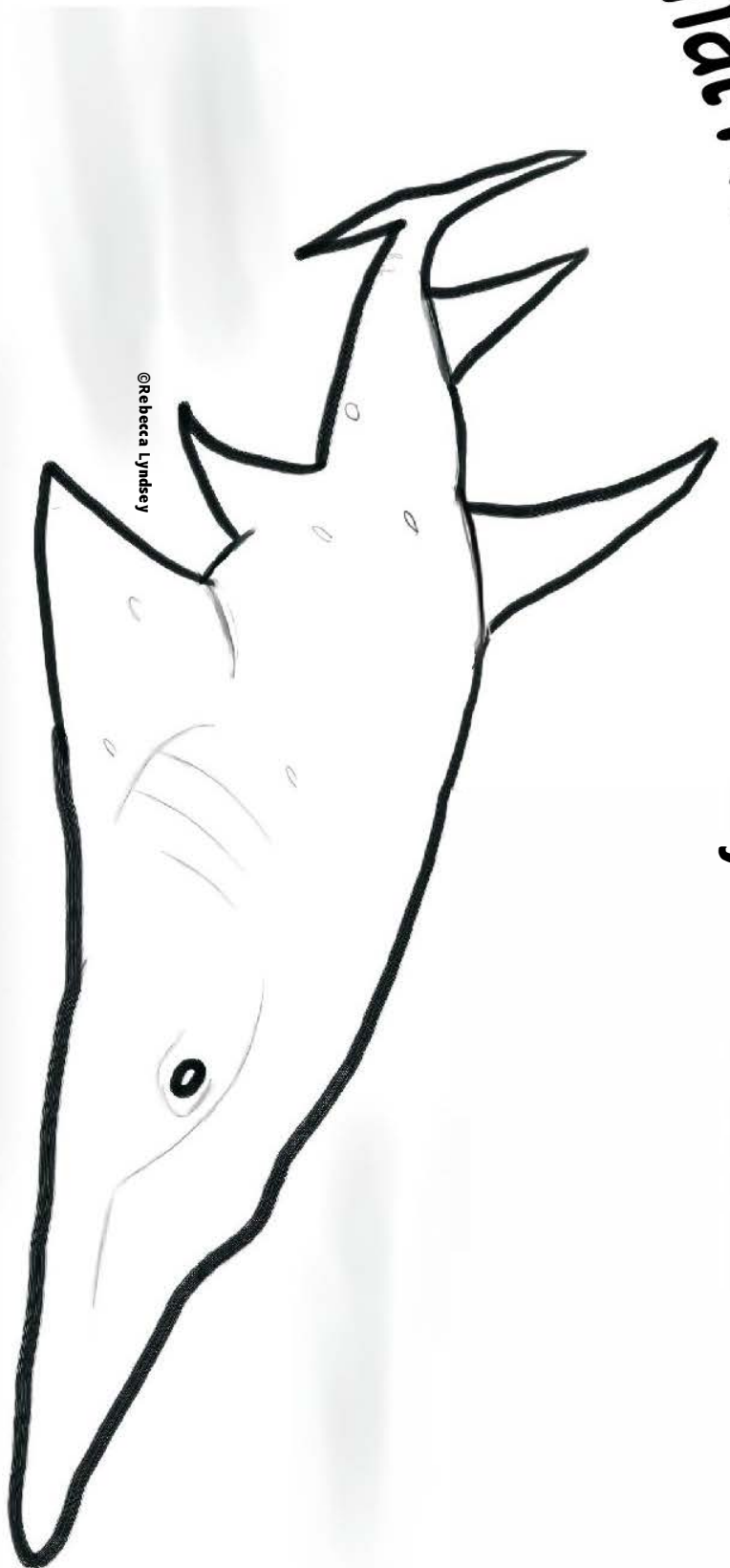
1	2	3	4
5	6	7	8
9	10	11 Half erase pencil	12
13	14	15	16 Erase all pencil



Let's Play

Name that Fish!

Directions: To discover the name of this species, use the letter/number key to crack the code.



©Rebecca Lyndsey

A	■	C	◆	E	F	G	H	I	J	K	L	M	N	●	■	◆	●	R	S	T	U	V	W	X	Y	Z
17	1	11	26	16	8	6	15	13	25	9	18	24	12	7	2	22	19	20	5	10	21	4	23	14	3	

I

13 17 24 17 4 15 13 5 16 20 2 7 5 5 16 26 4 16 26 6 16 8 13 20 15

I

F I



Toilet roll Hammerhead

Materials:

- Toilet roll tube
- Card
- Scissors
- Paint - Grey & White
- Black permanent pen



1. Draw out on separate card, one large dorsal fin, two pectoral fins, one large **Caudal fin** (tail) and a **Cephalofoil** (the hammer shape). You can use the end of the roll as a guide to how wide the tail fin and head need to be.



2. Cut two slits horizontally for the head, two slits vertically for the tail fin, a slit either side for the pectoral fins and one on top for the dorsal fin.

*Take care with the scissors when making the top and middle slits.

3. Paint the toilet roll, fins and head. Grey and white paint creates the **countershading** used for camouflage.

4. When the paint is dry, slot in all the pieces and use the permanent marker to give your little friend 5 gill slits, eyes and a mouth.

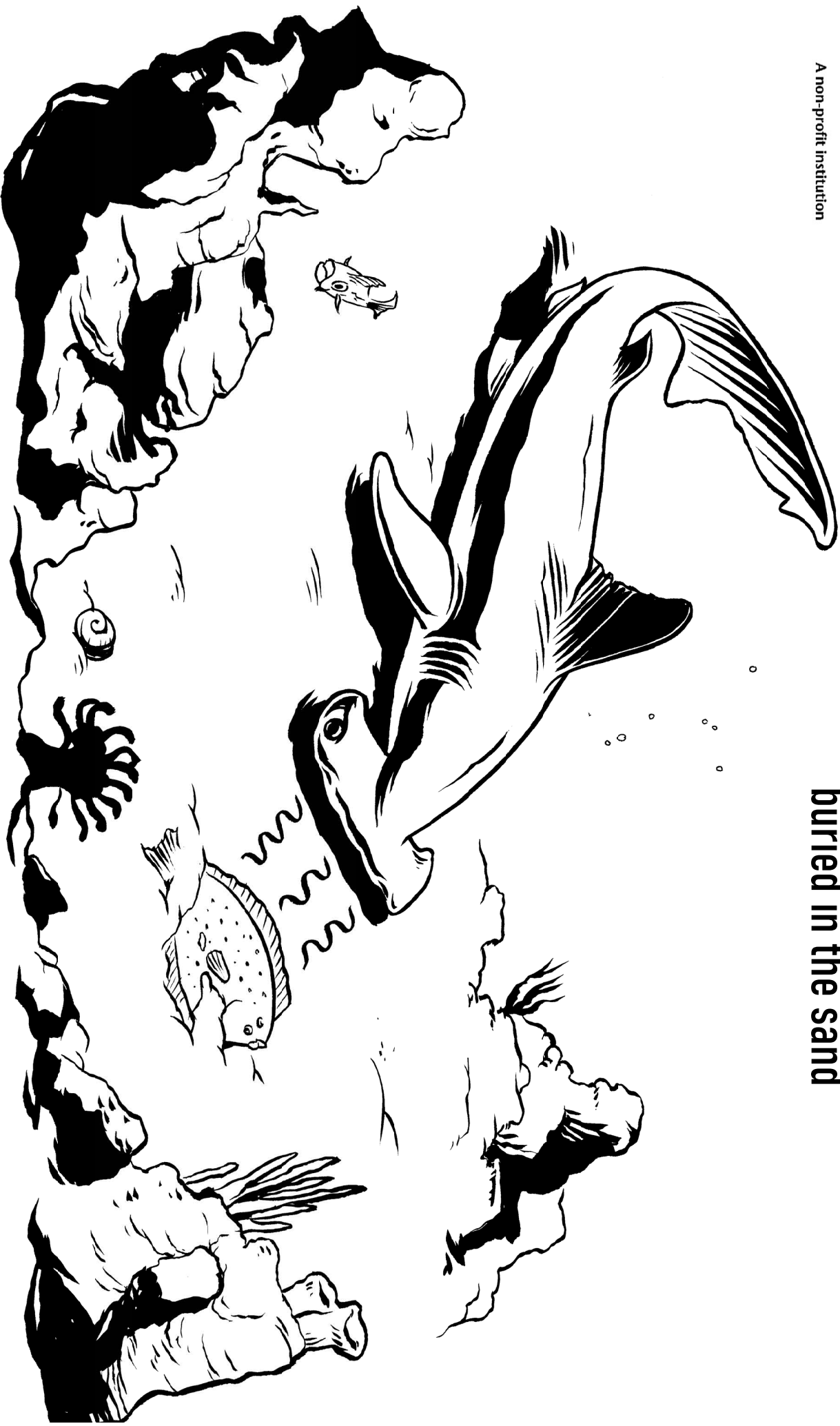
Why not add some **Ampullae of Lorenzini** (electroreceptors) for your new buddy to hunt down those sneaky sting ray. You could create a whole underwater scene!





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Sharks and rays use ampullae of Lorenzini to search for prey buried in the sand

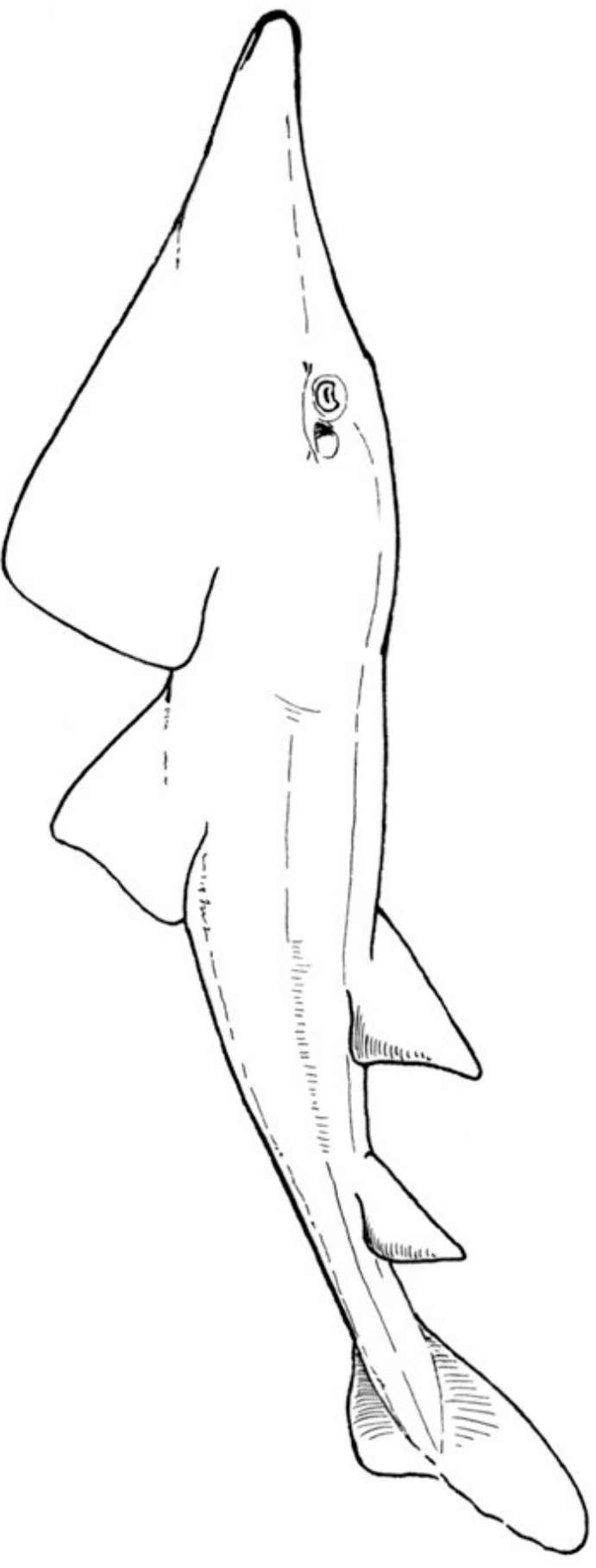




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Did you know?

**15 of the 16 species of Rhino Rays
are critically endangered**



Choose sustainable seafood and support science-based conservation organizations to save these shark-like rays.