

SHARKS

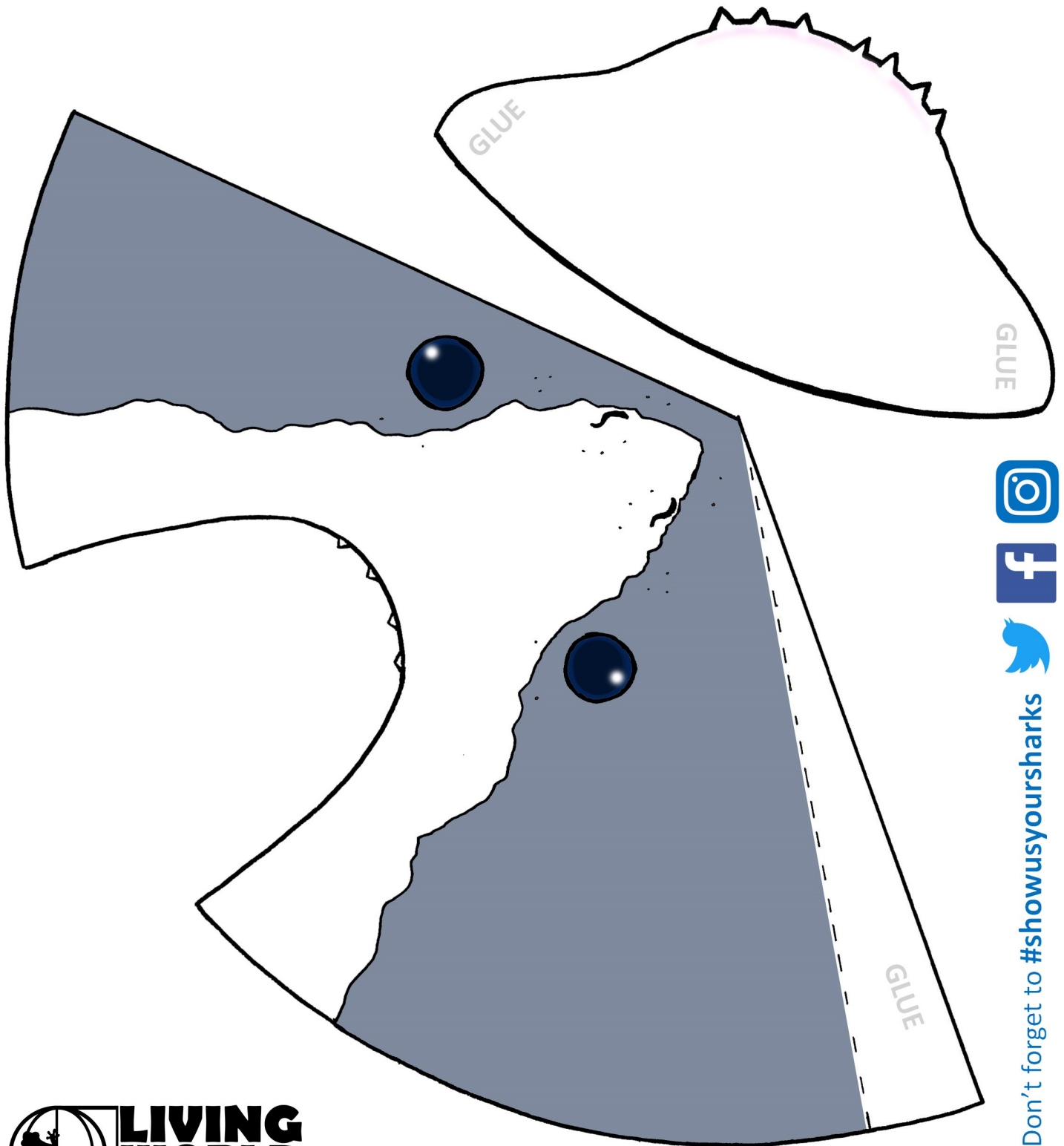
ACTIVITY PACK

23 pages of activities, crafts and learning



GREAT WHITE HEAD

Cut out the parts carefully.
Make a cone shape and glue the tab.
Attach the jaw with by adding glue where indicated.
Put your shark on display!

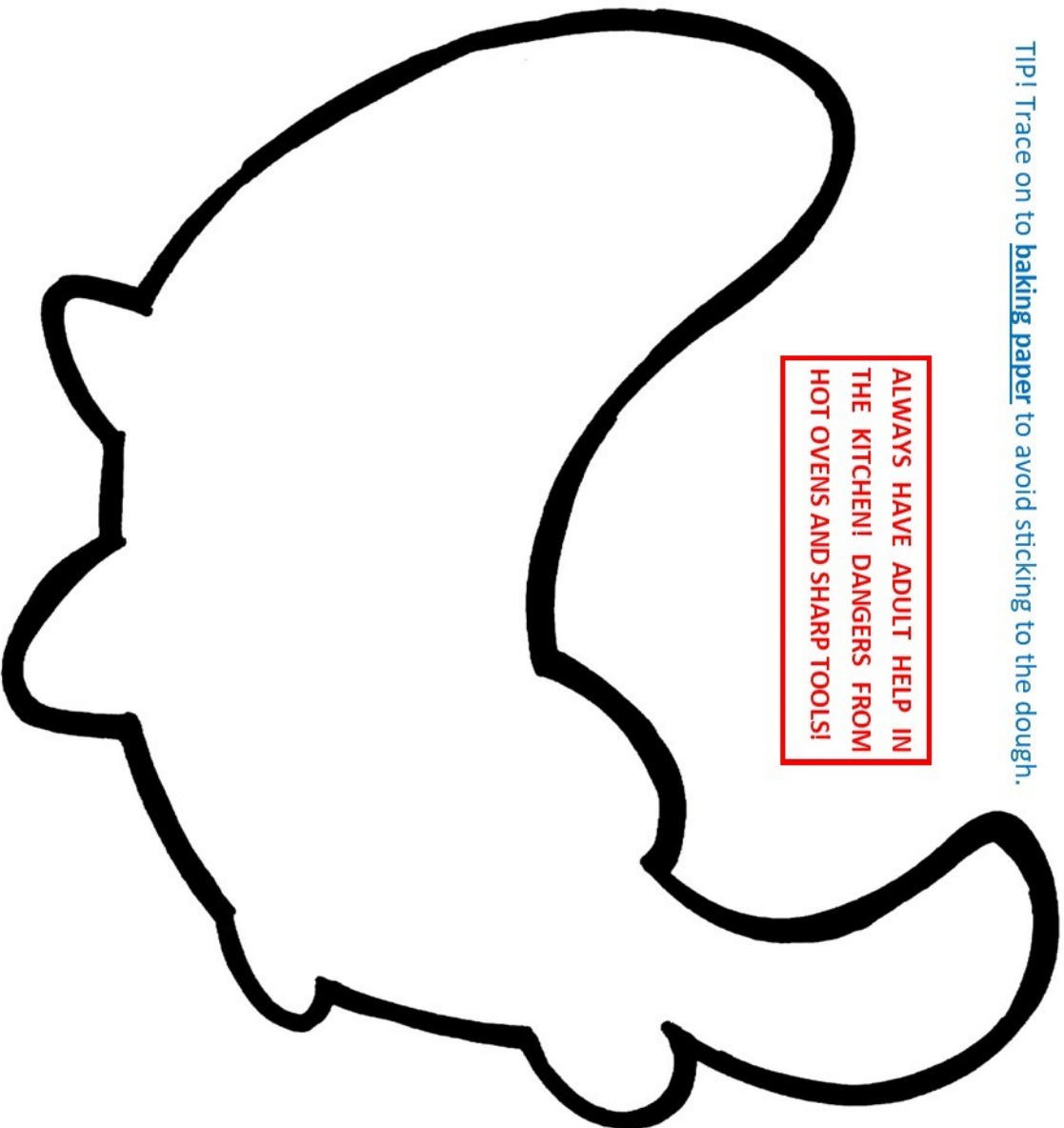


COOKIECUTTER COOKIES

Use the template to create lots of tasty cookiecutter shark cookies!

TIP! Trace on to [baking paper](#) to avoid sticking to the dough.

ALWAYS HAVE ADULT HELP IN THE KITCHEN! DANGERS FROM HOT OVENS AND SHARP TOOLS!



125g butter
300g plain flour
1 tsp bicarb of soda
100g dark sugar
3.5 tbsb syrup
2.5 tsp ground ginger
1tsp ground cinnamon



- Mix the butter (melted), syrup and sugar.
- Add the rest of the ingredients to make a dough.
- In between 2 sheets of baking paper, roll out the dough to the thickness of a pencil (about 5mm)
- Cut out shapes and place on a tray to bake 180°C/350F for around 12 minutes.
- Decorate to add details like eyes and teeth.

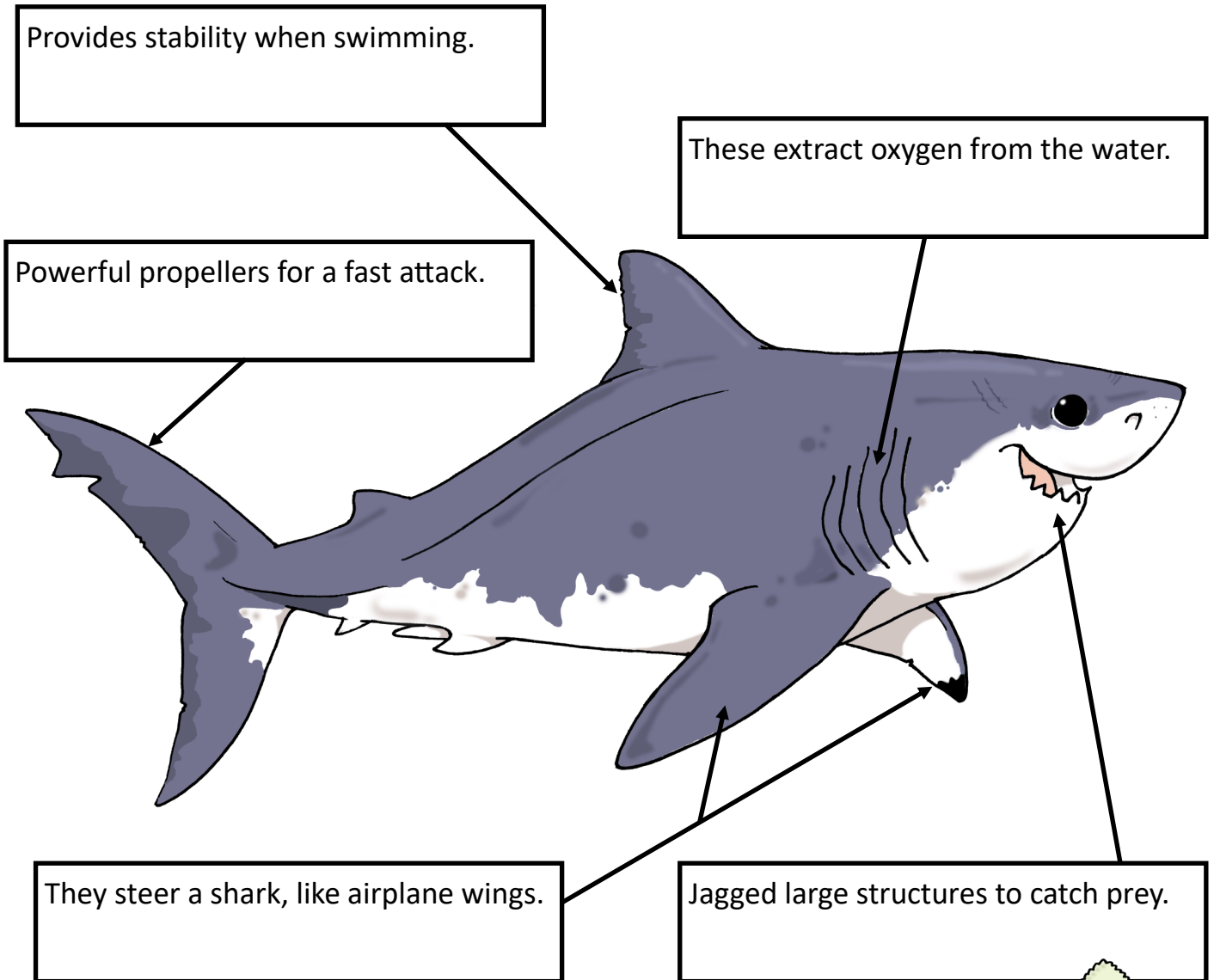
www.livingworldeducation.com for more!

#showyoursharks

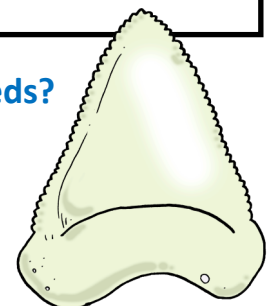


ADAPTATIONS: BODY SHAPE

The great white is an incredibly well adapted hunter, with a powerful, streamlined body. Build for bursts of explosive speed and ambush attacks, adults feed on marine mammals such as seals and sealions. [ADD LABELS FROM THE WORD BANK TO THE DIAGRAM](#)



How does the shape and saw-like edges help the shark get the food it needs?



DORSAL FIN

CAUDAL (TAIL) FINS

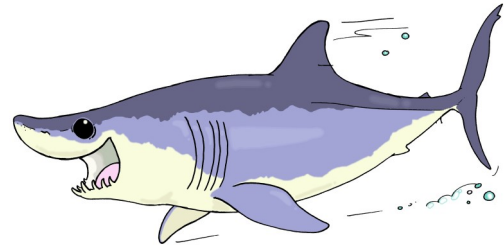
PECTORAL FINS

TEETH

GILLS

BODY AND TAIL SHAPE

By creating your own models, using the templates provided, it is easy to see the great differences between benthic and pelagic shark species...

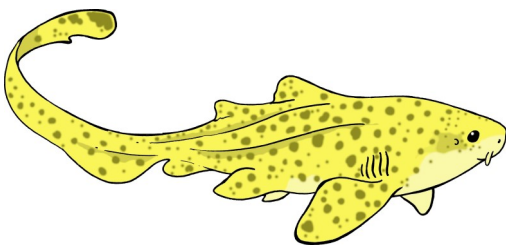


MAKO SHARK *Isurus oxyrinchus*



The body shape is **streamlined** to reduce water resistance (drag). This **torpedo** form ensures water passes around the sharks body and allows it to reach great speeds.

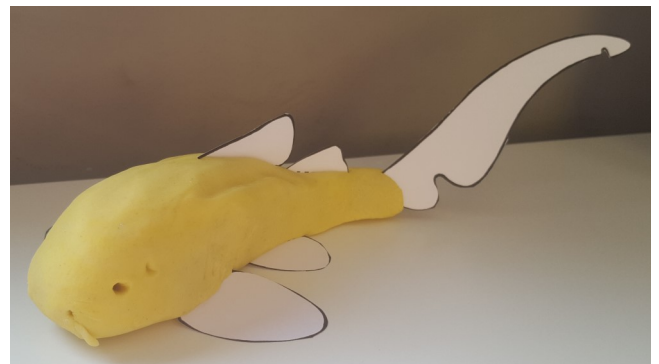
The power behind the speed is due to a thick muscular tail and large, evenly-shaped (homocercal) **caudal fins**.



The body shape is **flattened** so the shark is better hidden on the seabed. These sharks can also have patterns or colouration that further disguises them.

The tails have a large, upper **caudal fin** (an uneven heterocercal tail) which means they swim in a sinuous, snake-like fashion.

ZEBRA SHARK *Stegostoma fasciatum*



Don't forget to [#showusyoursharks](#)



Pelagic sharks = are found between the surface and lower parts of the water e.g. mako

Benthic sharks = these spend most of their lives on or near the sea bed e.g. zebra shark

Print the instructions on to card (or use your page as a template)

The shapes from above/side will help you create the sharks body with modelling clay.

Add eyes and nostrils with a pencil. A small spoon can form the mouth.

Cut all the fins out and place them so that they match the example in the picture on the comparison sheet.



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ZEBRA SHARK

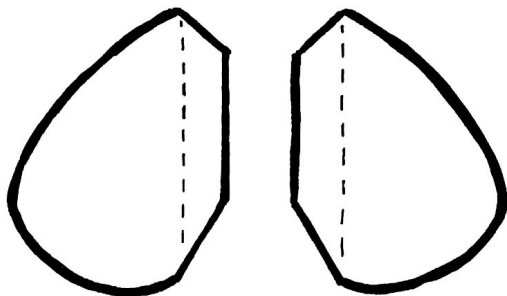
Stegostoma fasciatum



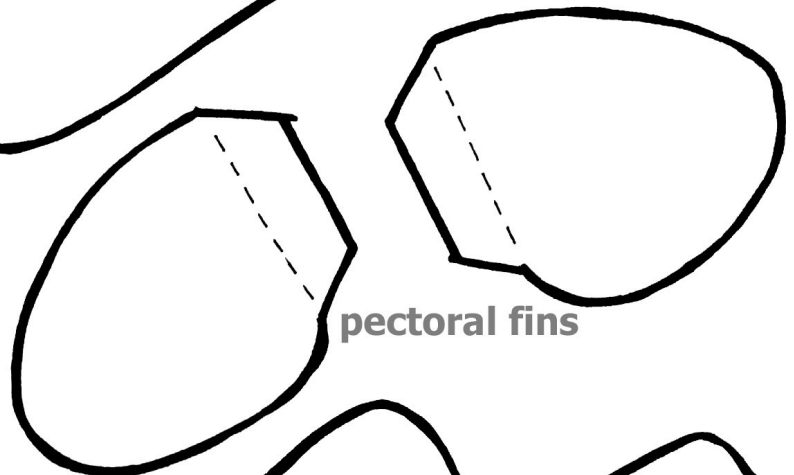
shape from above



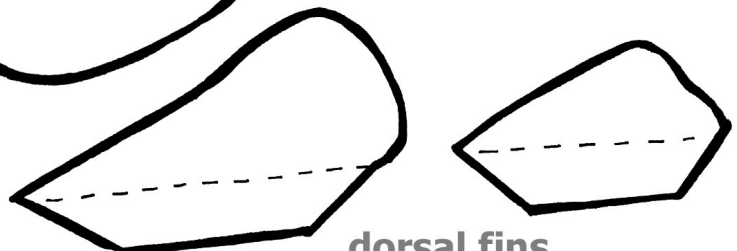
caudal fins



pelvic fins



pectoral fins



dorsal fins



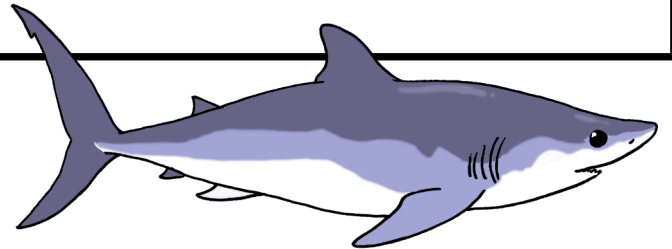
shape from side

Print the instructions on to card (or use your page as a template)

The shapes from above/side will help you create the sharks body with modelling clay.

Add eyes and nostrils with a pencil. A small spoon can form the mouth.

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MAKO SHARK *Isurus oxyrinchus*



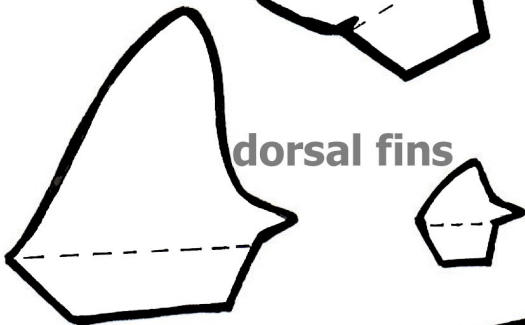
shape from above



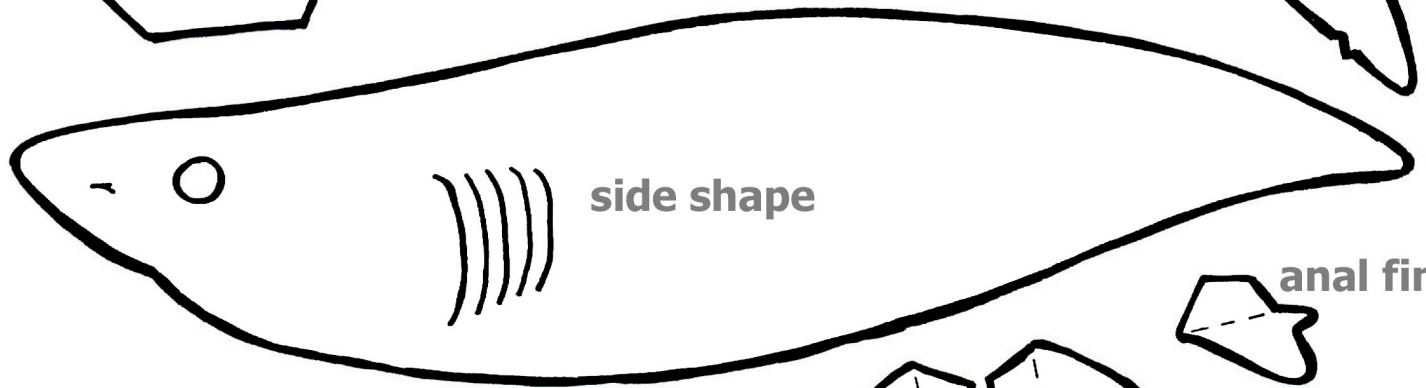
pectoral fins



caudal (tail) fins

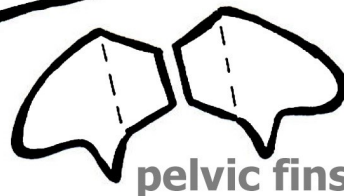


dorsal fins



side shape

anal fin



pelvic fins

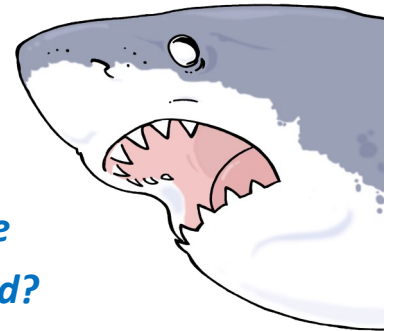


ADAPTATIONS: EXCELLENT EYESIGHT

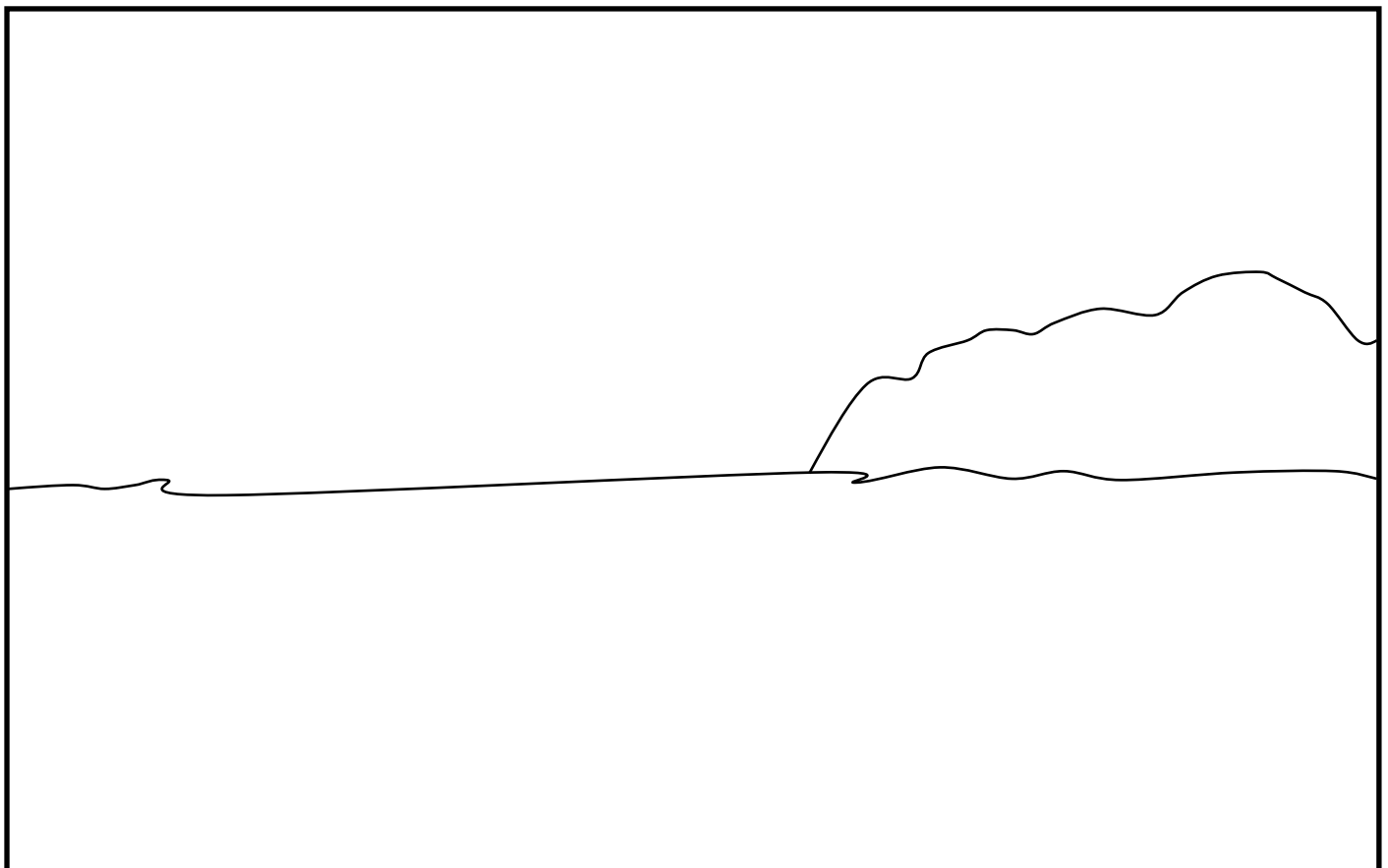
A great white must lock-on to a target in order to accurately strike at its prey. This means that vision is a vital sense for this animal...

EYE ROLLING

At the very last moment of an attack, great whites roll their eyes back to protect these delicate sense organs. The eyes look white.



TASK: Look online for a video clip of *great white shark eye roll*. What would happen if the sharks eyes were damaged?



SPY-HOPPING A very sneaky tactic of great whites is to look for signs of prey above the surface.

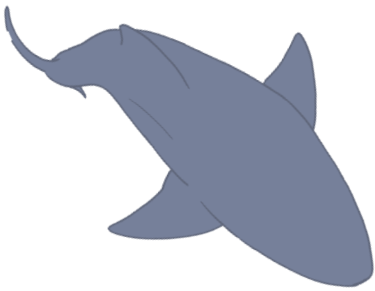
TASK: Colour the scene and add some sealions to the rocks.

NEED HELP? Search for pictures of sealions online or in books.

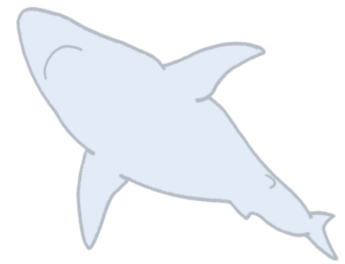
ADAPTATIONS: THE AMBUSH ATTACK

With prey that are fast moving and agile, great whites need to strike quickly and ensure they are not spotted. Often, the shark bursts beyond the surface in a type of attack called a **BREACH**.

Unless they are successful on the first attack, it is unlikely they will go on to complete the hunt, so the great white has evolved a clever colouration to assist them. It is called **COUNTERSHADING**.



Seen from above, the topside of the shark **blends into the dark depths below**. This means they are nearly invisible to prey swimming above.



Equally, the white underside merges the shape of the shark against the bright surface waters.

Explain why a sea lion may not see a shark beneath it?

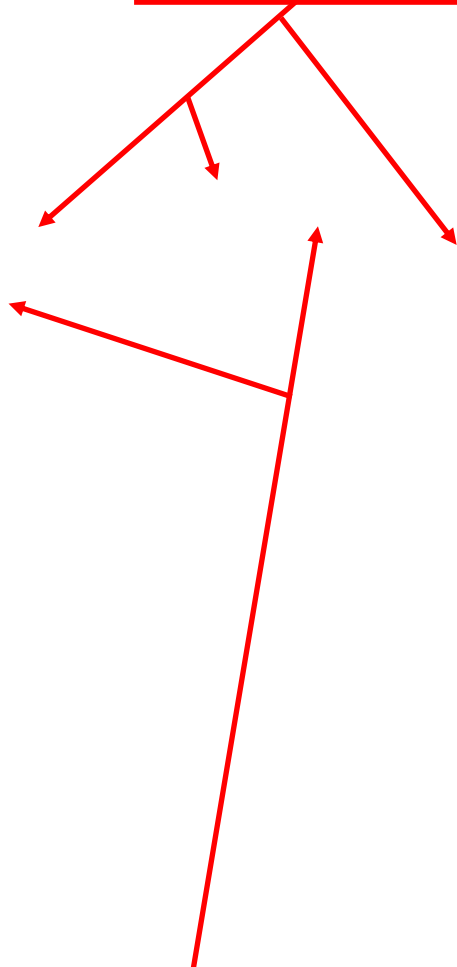
What is a “breach”?

Sea lions are agile. What does agile mean?

ADAPTATIONS: SUPER SENSES

TASK: Use ICT skills to find out facts for some of these important shark senses. Add your information to the sheet.

ELECTROSENSITIVE AMPULLAE OF LORENZINI



NOSTRILS / SENSE OF SMELL

FACT FINDING: RESEARCH SKILLS

TASK: Use books or a safe internet search for answers to the following questions...

How big can great white sharks grow?

What other names are their for great white sharks?

Do any animals hunt great whites?

How many young to white sharks have?

Where on Earth are great whites found?

How many teeth do white sharks have?

Are great white sharks endangered?

EXTENSION TASK:

**Search for a range of images and facts
to create an illustrated presentation
that you could show somebody else**

PREHISTORIC PREDATOR: MEGALODON

The enormous **megalodon** is now extinct, but we can prove it existed because of the large **fossil teeth** it has left behind. Whilst its teeth looked similar in shape to a great white, experts think they may have been very different animals.

TASK: Search for pictures of other **prehistoric marine creatures** and use your creative skills to draw them in an **amazing underwater scene** with the megalodon!



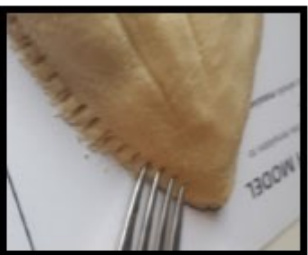
MEGALODON TOOTH MODEL

Use the recipe to create salt dough and the templates to form your own fossil megalodon tooth.

1. SHAPE



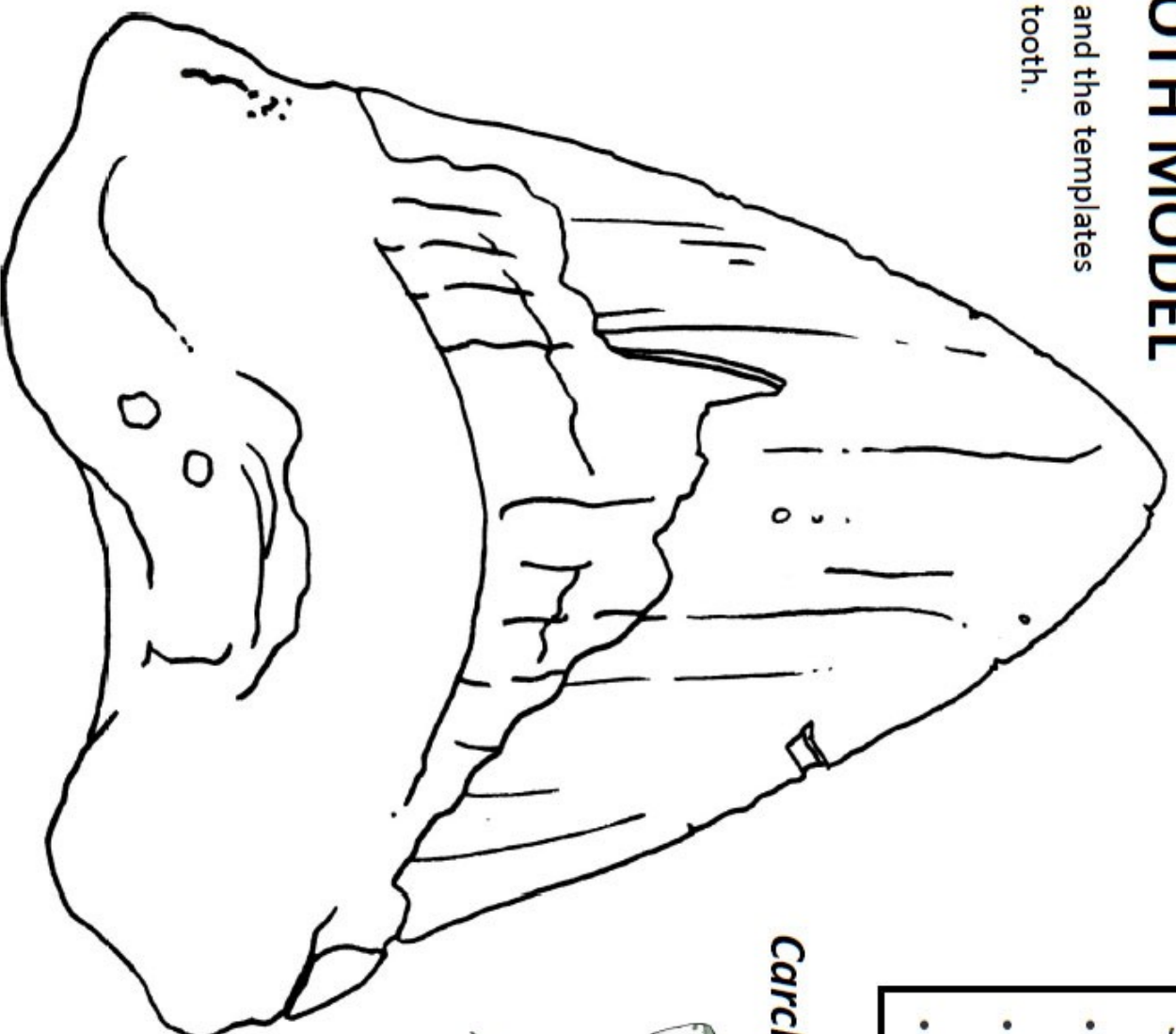
2. ADD DETAILS



3. DRY OUT



4. PAINT



SALT DOUGH = 1 TOOTH

- 1 cup of plain flour
- half a cup of salt
- half a cup of water

Carcharodon megalodon

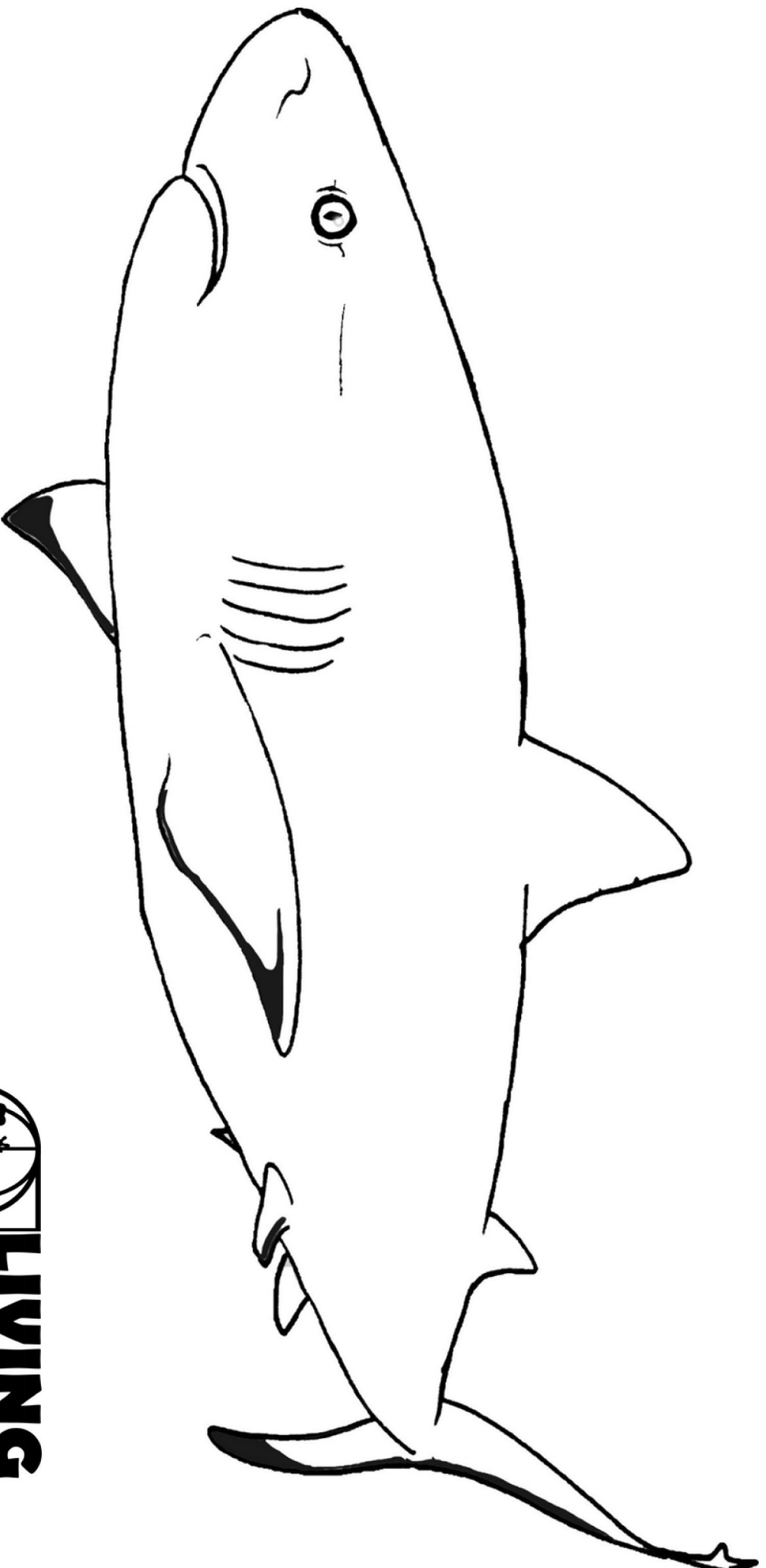


Join up with friends to make a whole massive mouth full of fossil teeth!

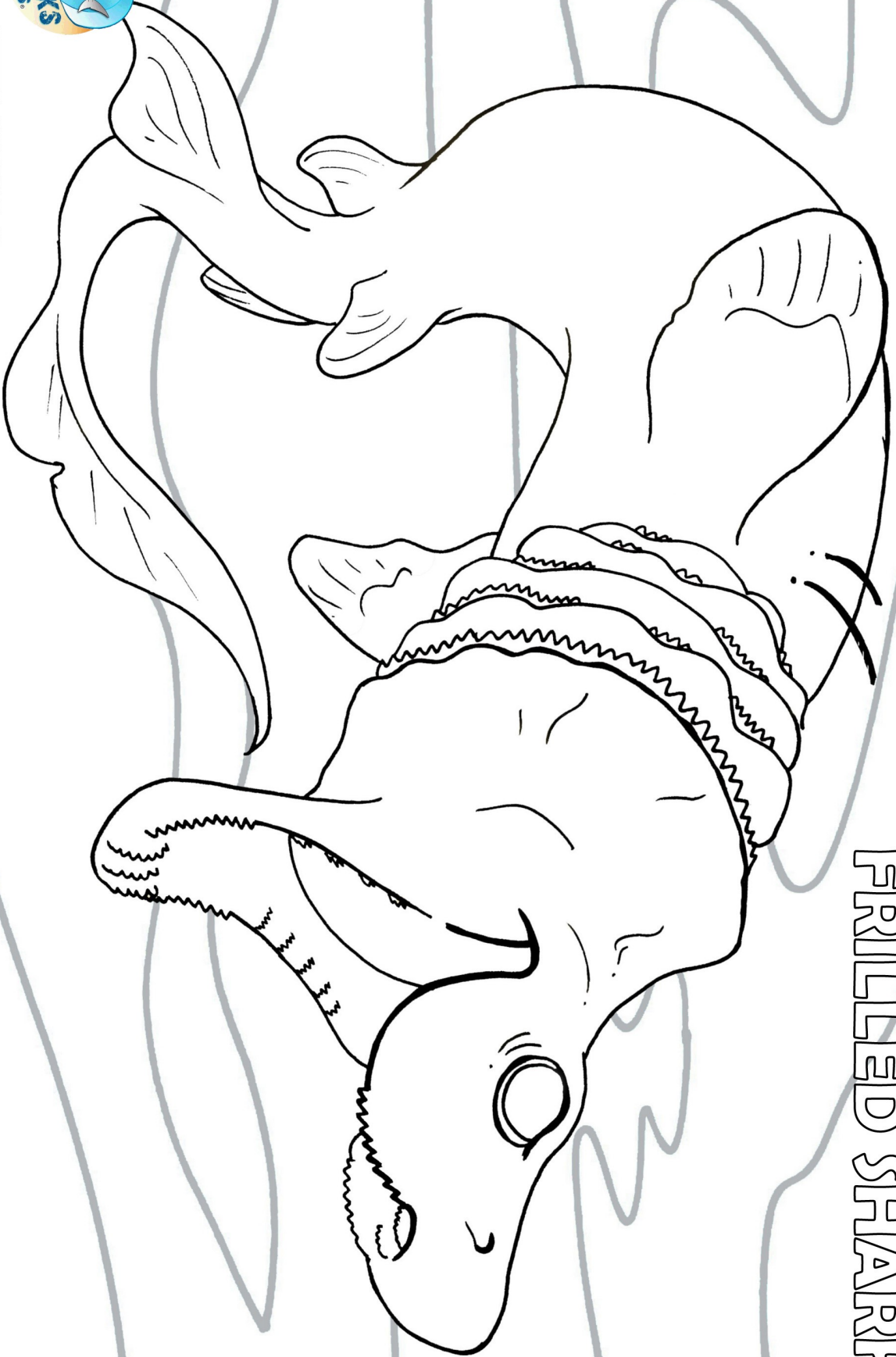
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CARRIBEAN REEF SHARK



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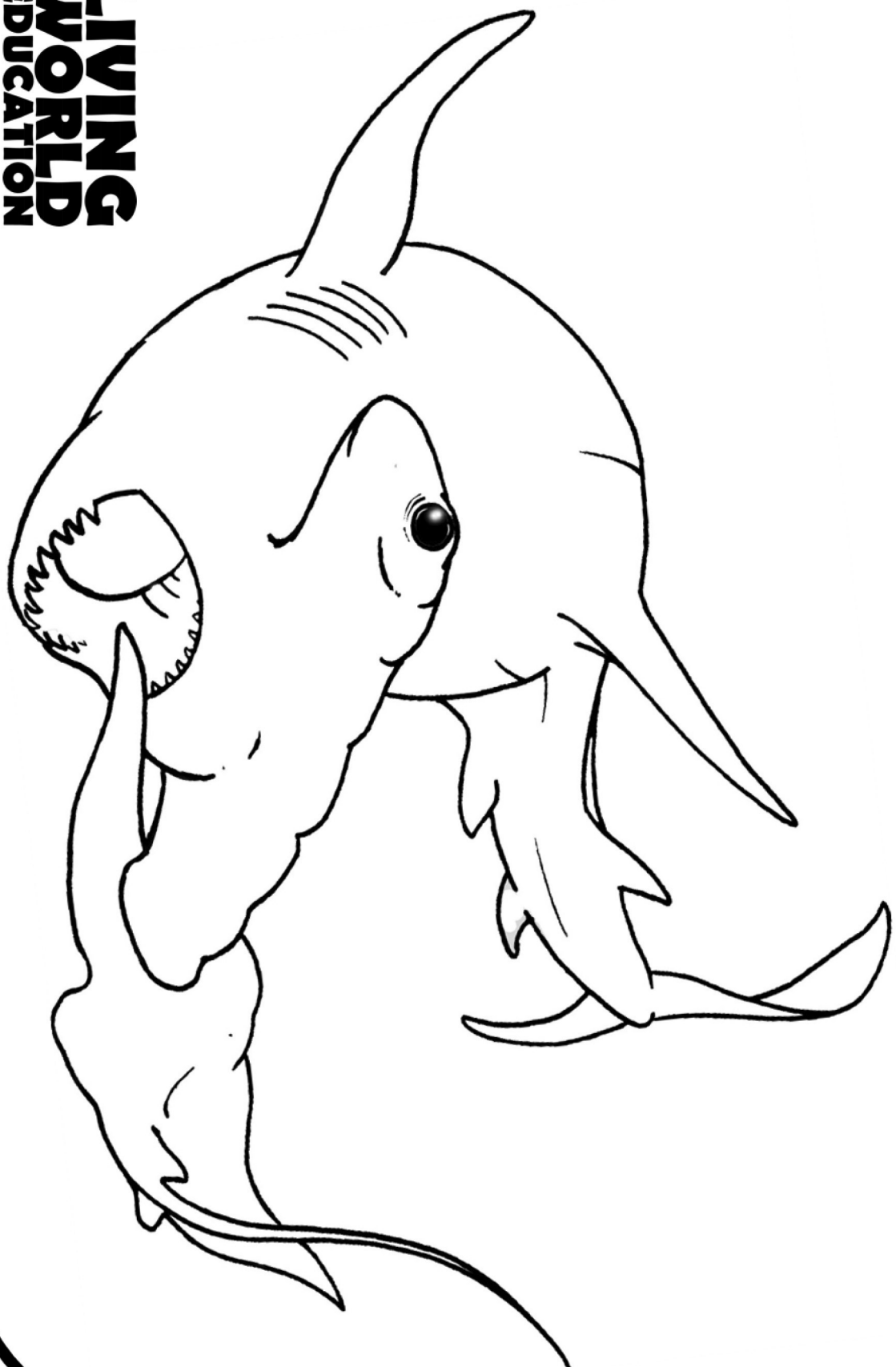
FRILLED SHARK

GREAT WHITE SHARK





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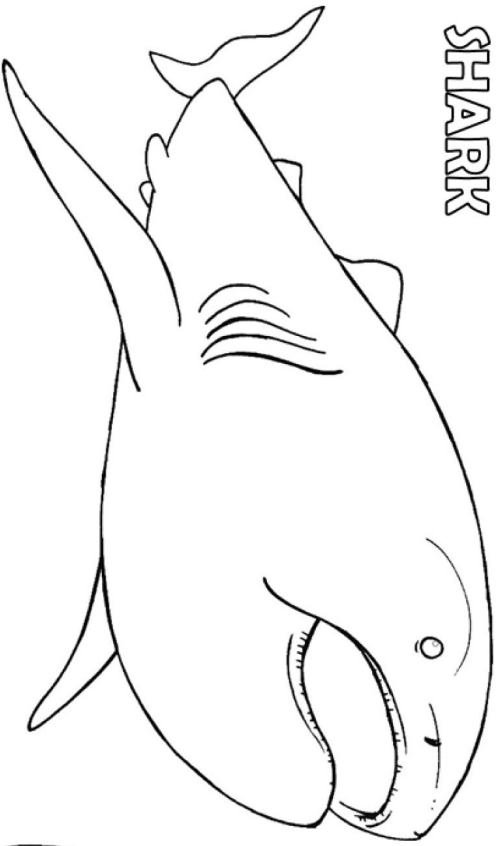
GREAT HAMMERHEAD SHARK

WINGHEAD SHARK

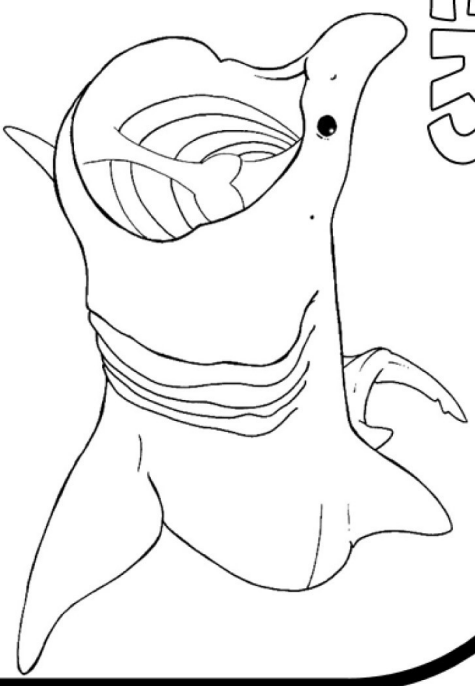


FILTER FEEDERS

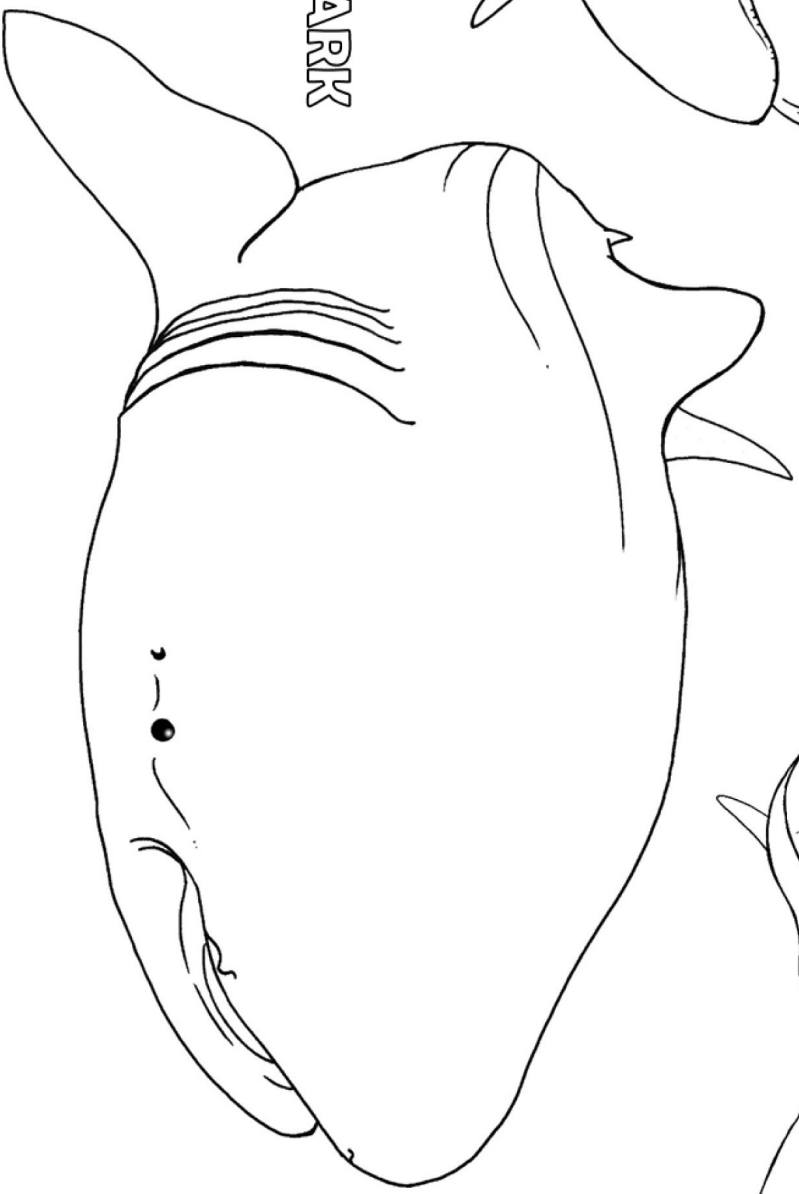
MEGAMOUTH
SHARK

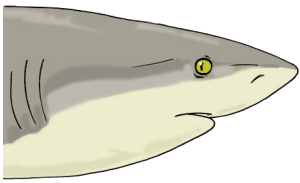


BASKING
SHARK



WHALE
SHARK





SHARK SEARCH

FIND THE 20 TYPES OF SHARK HIDDEN IN THE PUZZLE...

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

ANGEL

BASKING

BLUE

BULL

DWARF LANTERN

FRILLED

GREY REEF

GREAT WHITE

HAMMERHEAD

LEMON

MAKO

MEGAMOUTH

NURSE

OCEANIC WHITETIP

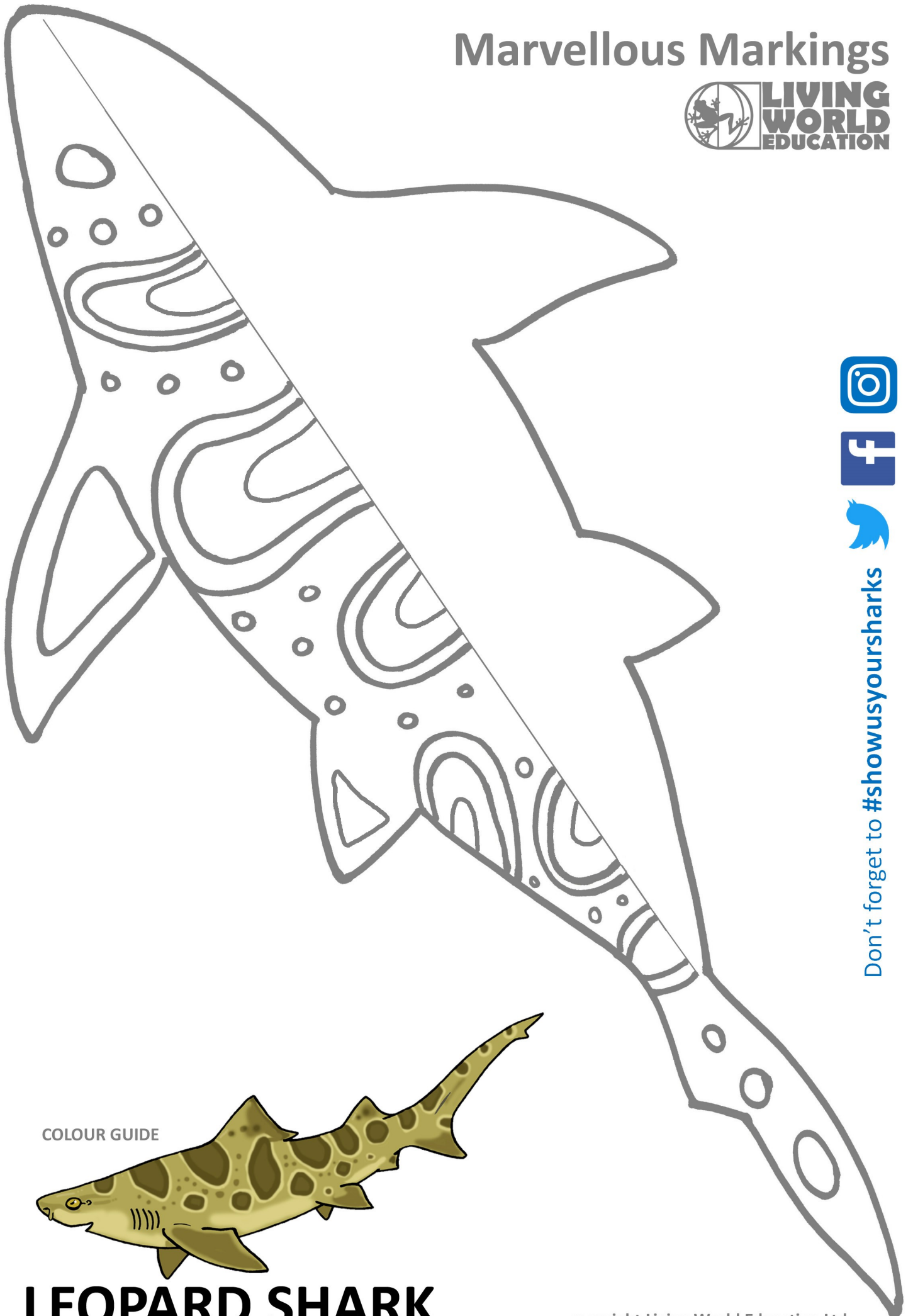
SWELL

TIGER

WHALE

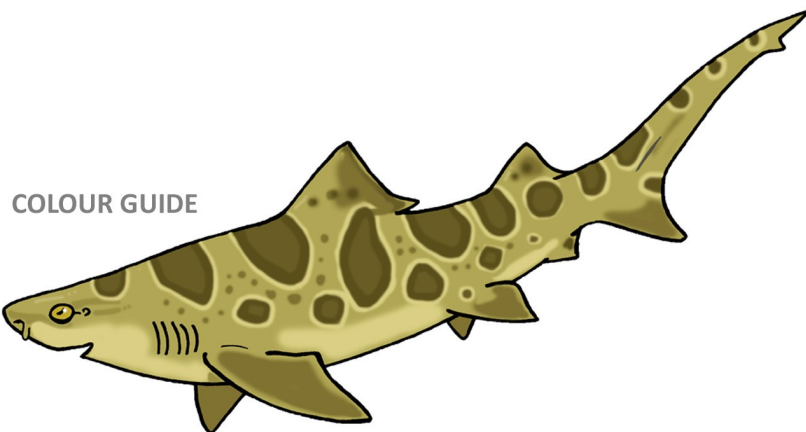
WOBBEGONG

Marvellous Markings



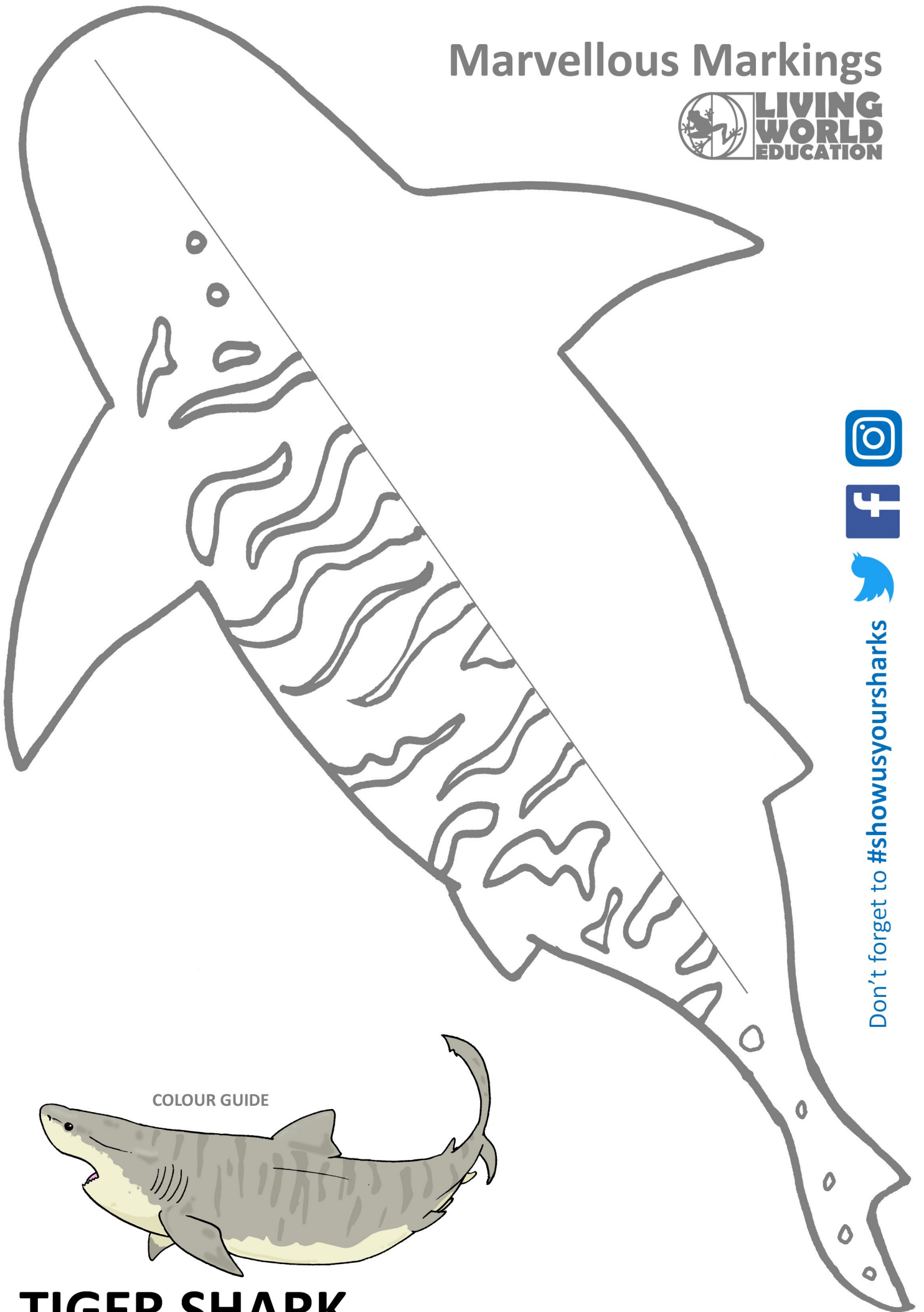
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COLOUR GUIDE



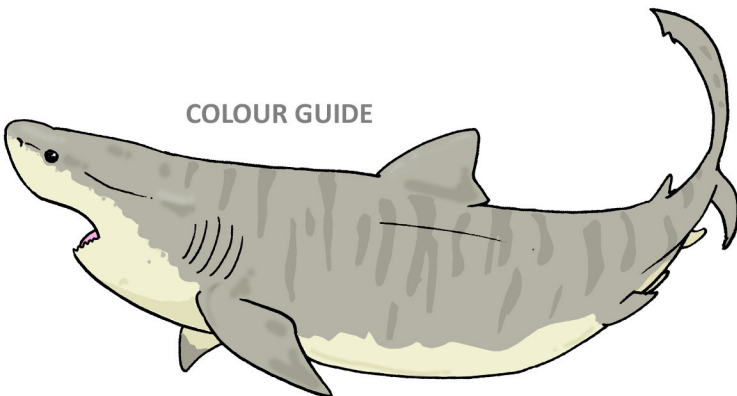
LEOPARD SHARK

Marvellous Markings



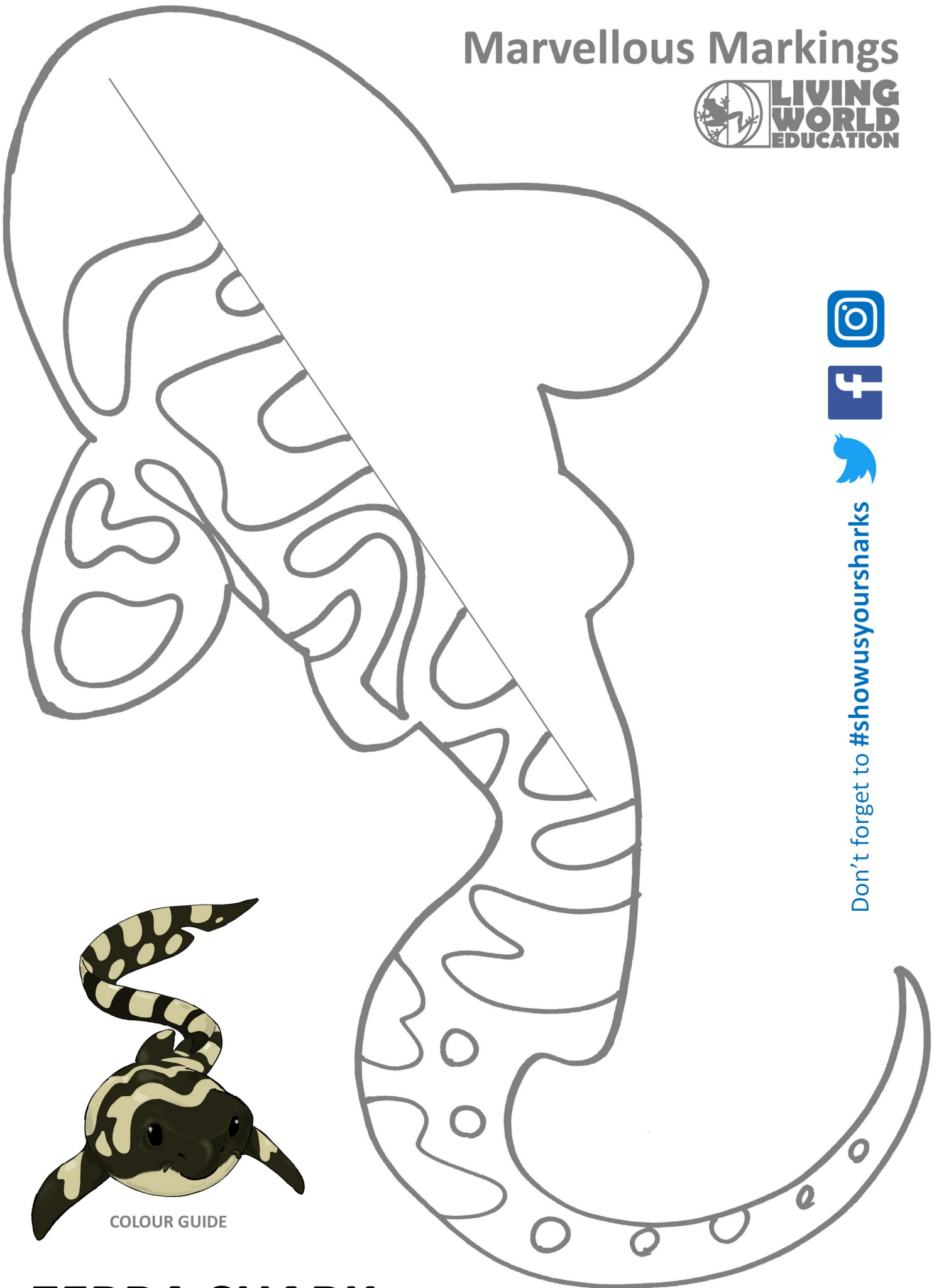
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COLOUR GUIDE



TIGER SHARK

Marvellous Markings



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COLOUR GUIDE

ZEBRA SHARK