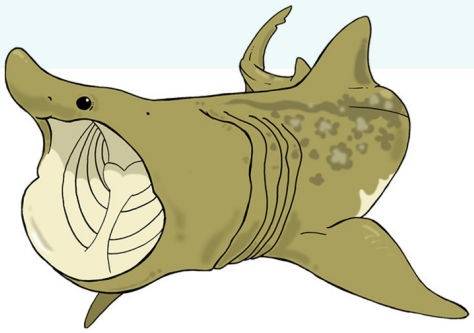
Adaptations: Trapping Food

name

Read about how the animals below trap their food, then answer the questions in full sentences.



basking shark

The two biggest sharks in the oceans **filter** tiny **microorganisms** from the water. Both the whale shark and basking shark (right) sieve **plankton** from the water (this may contain a variety of tiny floating creatures). They simply move through the water with their jaws wide open.

humpback whale

The humpback whale targets large masses of small fish or krill. They release **curtains of bubbles** that prevents prey escaping. This is known as "**bubble-netting**". A surge upwards and the mouth of this massive mammal is full. Seawater is forced back out and brush-like **baleen** catches the food that remains.

EXPLAIN HOW THESE METHODS ARE...

A, SIMILAR _____

_____

B, DIFFERENT _____

_____

garden spider

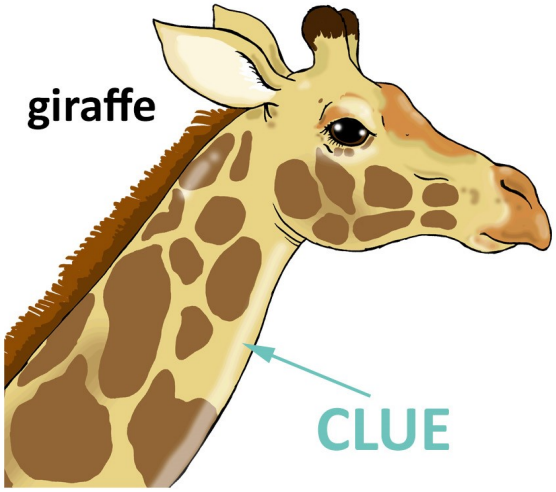
Whilst some animals actively seek out their prey, others use a more **patient** strategy. Spider **webs** are the most elaborate traps in nature, with **sticky strands of silk** ensnaring flying insects which the spider wraps in more silk before feeding.

DRAW A WEB FOR THE SPIDER AND A FLY TRAPPED WITHIN IT

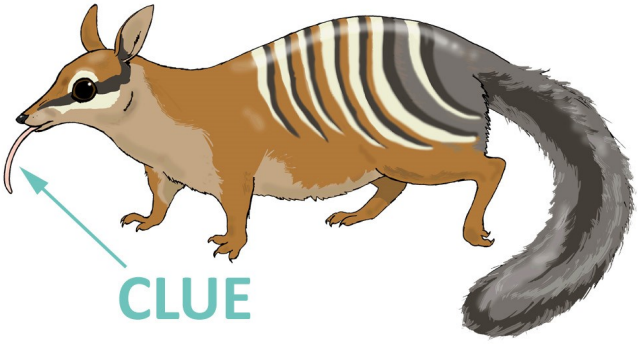
Adaptations: **Accessing Food** name

Look at the animals below. Use the clues to explain how they are adapted to reaching food? (you can do extra research)

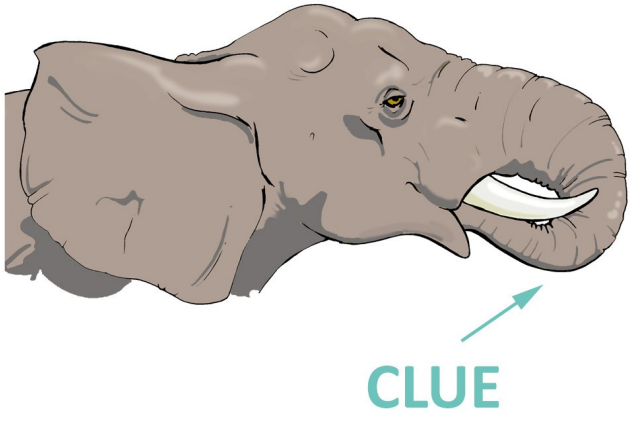
giraffe



numbat



African elephant



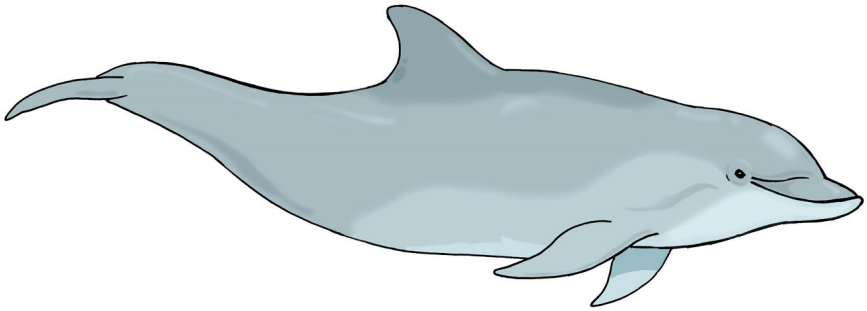
LIVING WORLD EDUCATION

Adaptations: Echolocation

name

Draw soundwaves to show how these animals project sound and bounces off objects. The returning echo enabling them to detect their surroundings, including prey.
(You could add prey items to your diagram)

bottlenose dolphin



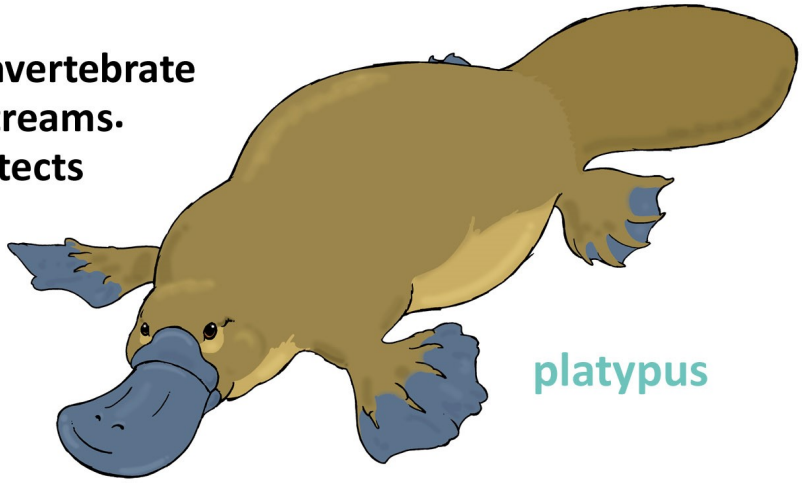
pipestrelle bat

EXTENSION - search for recordings of bat and dolphin noises. What similarities do you notice?

Adaptations: Searching For Prey

name

The platypus forages for small invertebrate prey on the beds of rivers and streams. Their super sensitive bill also detects tiny electrical signals. Having webbed feet and thick fur further helps this mammal cope in the cool waters.

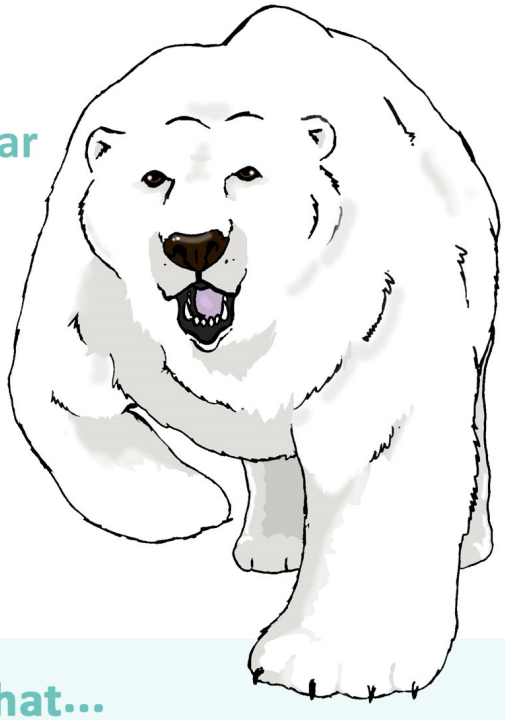


platypus

raccoon

Raccoons have incredibly sensitive paws and whiskers that detect the presence of the creatures it eats. Rummaging through the shallow waters, they are skilled in grabbing the frogs, crayfish and insects that make up part of a varied diet.

polar bear



Food is so scarce at the frozen Arctic, the polar bear heavily relies on a powerful sense of smell to detect any feeding opportunity. Their noses can locate food that may be very far away, for example, the scent of a whale carcass may draw in bears from far around.

Use ICT skills to research other animals that...

- Use whiskers to sense their surroundings
- Detect prey with electroreception
- Find food using a sense of smell.

Create a fact sheet or presentation on the subject.

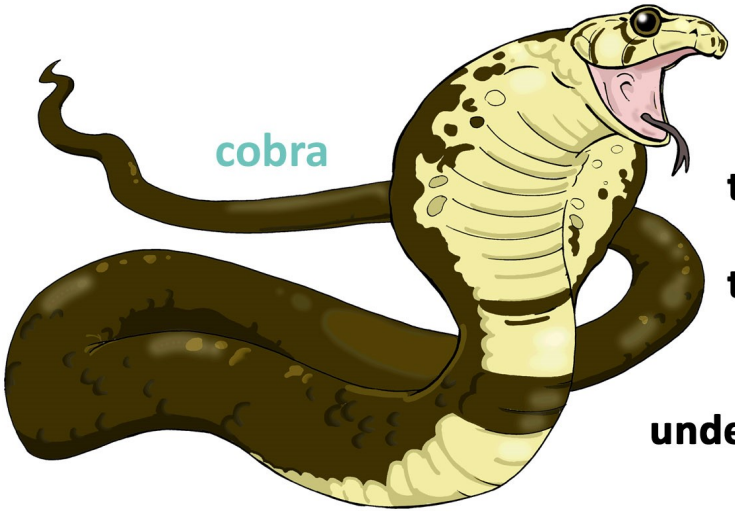
Adaptations: Defensive Displays

name

Rather than try to hide from predators, some animals have evolved to give striking warnings that they are not an easy meal.

Snakes such as the red headed krait employ vivid colouration to demonstrate they have toxic venom. Such is the effectiveness of this strategy, that some non-venomous snakes mimic their poisonous relatives.

red headed krait

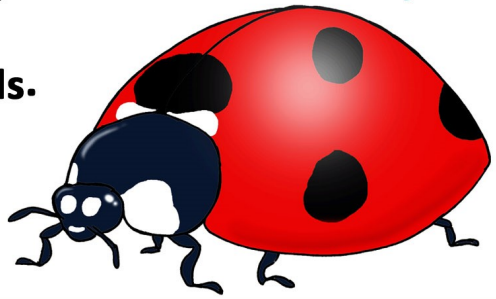


cobra

Cobra have distinctive hoods that they can erect when threatened. They raise up and wave to ensure they are seen. A would be predator, or a large animal that may injure the snake is warned before they get too close. The cobra may then spit venom at the source of danger if undeterred, and ultimately, it may strike out with sharp fangs.

The brightly coloured wing covers of ladybirds give a clear warning to predators that they emit unpleasant smelling and tasting chemicals. Whilst this may not save the insect, the predator will remember the experience and so others will look for better tasting prey.

ladybird



The animals above all also use chemicals to also keep them safe. Explain how the visual signs and chemicals keep them safe?

LIVING WORLD EDUCATION

Adaptations: **Black Cape Cobra** name

LABEL, THEN LINK THE FEATURE TO THE FUNCTION

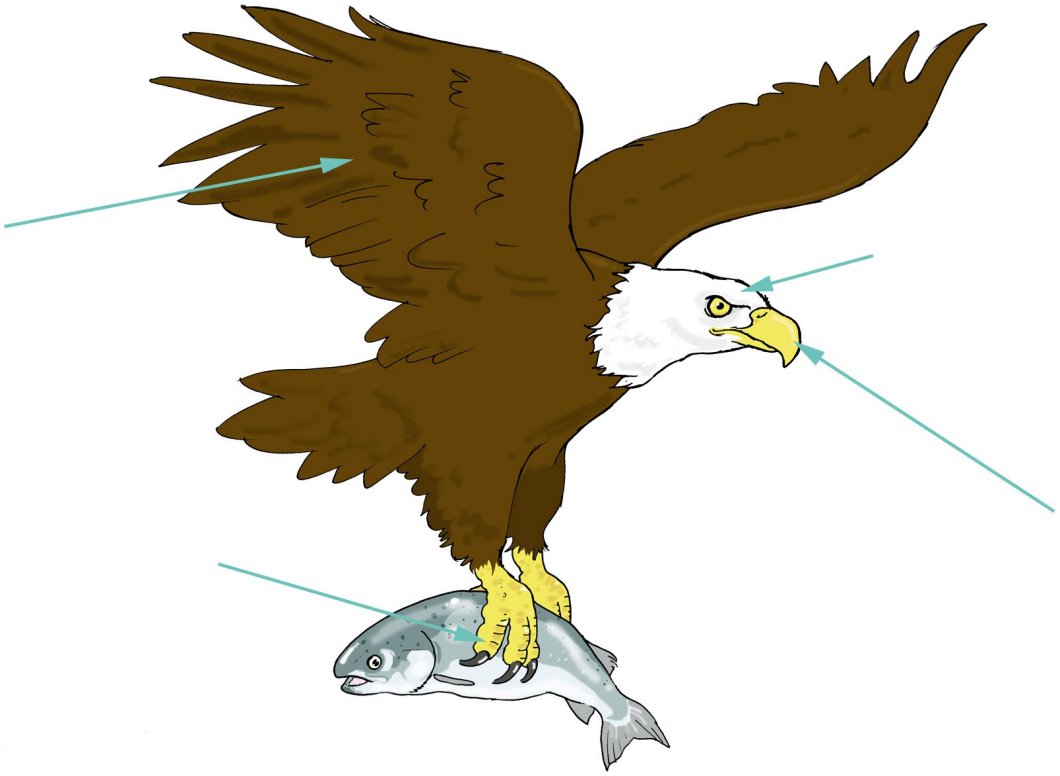
muscular tail	makes cobra look big/ scary
hood	detects movements of prey
tongue	detects scent of prey
large eyes	moves the snake and grips

How do the physical features of the cobra help it survive? (WOW words may help)

WOW WORDS

reptile strike predator venom slither forked

Adaptations: **Bald Eagle** name



LIVING WORLD EDUCATION

LABEL, THEN LINK THE FEATURE TO THE FUNCTION

hooked beak	gliding on air currents
sharp talons	tearing up prey
excellent eyesight	gripping/ holding prey
broad wings	detecting prey

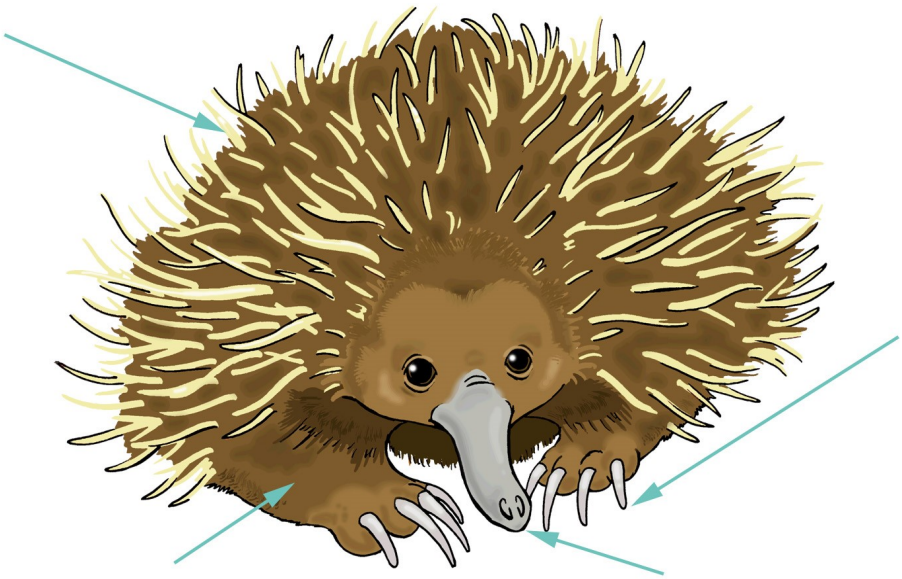
How do the physical features of the eagle help it survive? (WOW words may help)

WOW WORDS

soaring plummet predator grasp powerful vision

Adaptations: Echidna

name



LIVING WORLD EDUCATION

LABEL, THEN LINK THE FEATURE TO THE FUNCTION

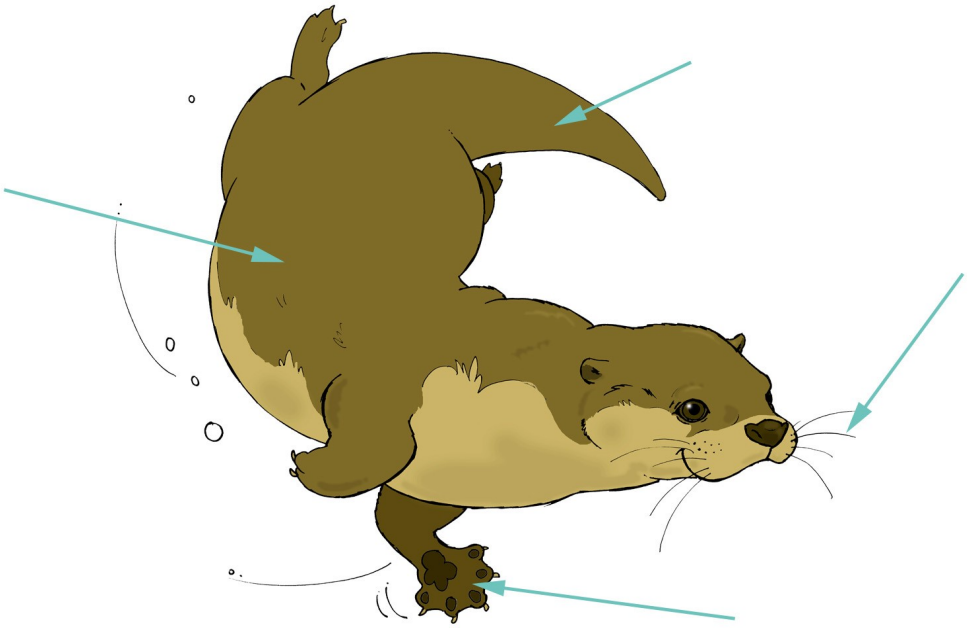
powerful forelimbs	scraping away soil
spines	digging up hard soil
long claws	detecting small prey
long nose	protection from predators

How do the physical features of the echidna help it survive? (WOW words may help)

WOW WORDS

mammal sensitive excavate defensive hunting

Adaptations: **European Otter** name



LABEL, THEN LINK THE FEATURE TO THE FUNCTION

thick fur	detecting prey
webbed paws	propels it in water
tail	helps steer in water
whiskers	keeps body warm

How do the physical features of the otter help it survive? (WOW words may help)

WOW WORDS

sensitive mammal predator graceful agile insulate

Adaptations: # Macaroni Penguin

name

LABEL, THEN LINK THE FEATURE TO THE FUNCTION

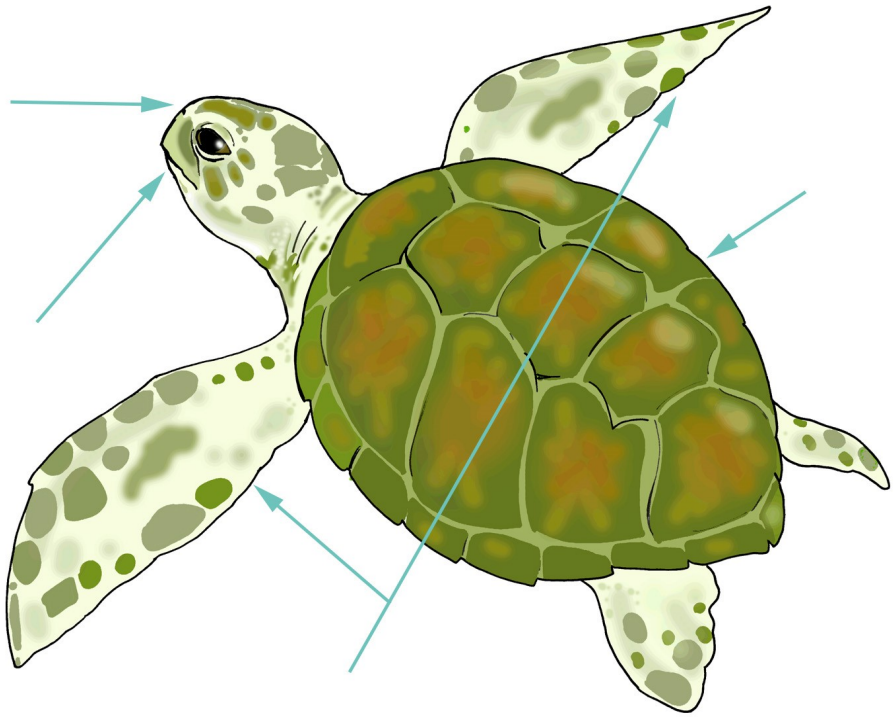
webbed feet with claws	display
thick feathers	steer and propel
short wings	paddling and gripping ice
large, bright feathers	protects against heat loss

How do the physical features of the penguin help it survive? (WOW words may help)

WOW WORDS

elaborate attractive freezing mobility insulation

Adaptations: **Green Turtle** name



LIVING WORLD EDUCATION

LABEL, THEN LINK THE FEATURE TO THE FUNCTION

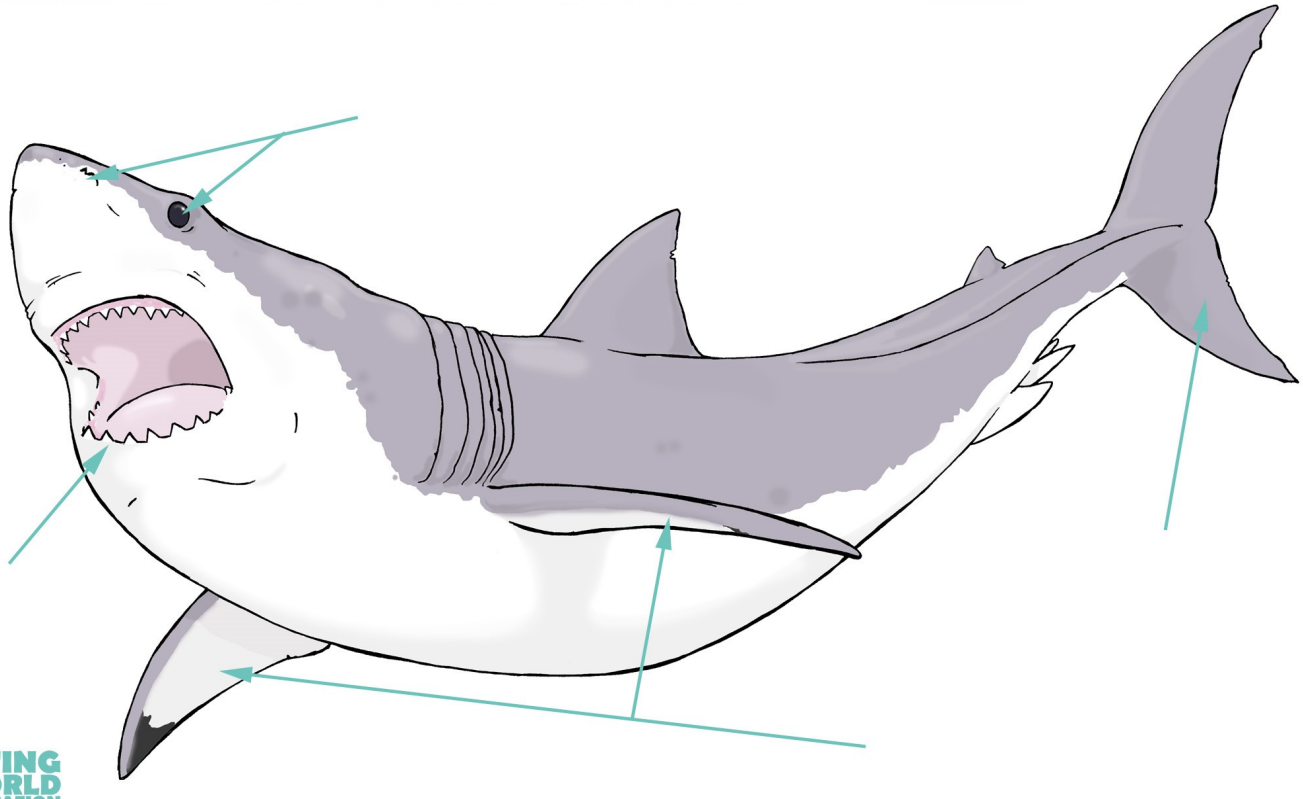
forelimbs	grabbing food to eat
shell	breathing at the surface
beak	paddling and steering
nostrils (high on face)	protects the body

How do the physical features of the turtle help it survive? (WOW words may help)

WOW WORDS

propel reptile defensive scales gliding ocean

Adaptations: **Great White Shark** name



LABEL, THEN LINK THE FEATURE TO THE FUNCTION

teeth	propels the shark
fins	steering and balance
senses	traps and cuts up prey
tail	detects changes

How do the physical features of the shark help it survive? (WOW words may help)

WOW WORDS

predator powerful jaws hunts stalks swallow aquatic