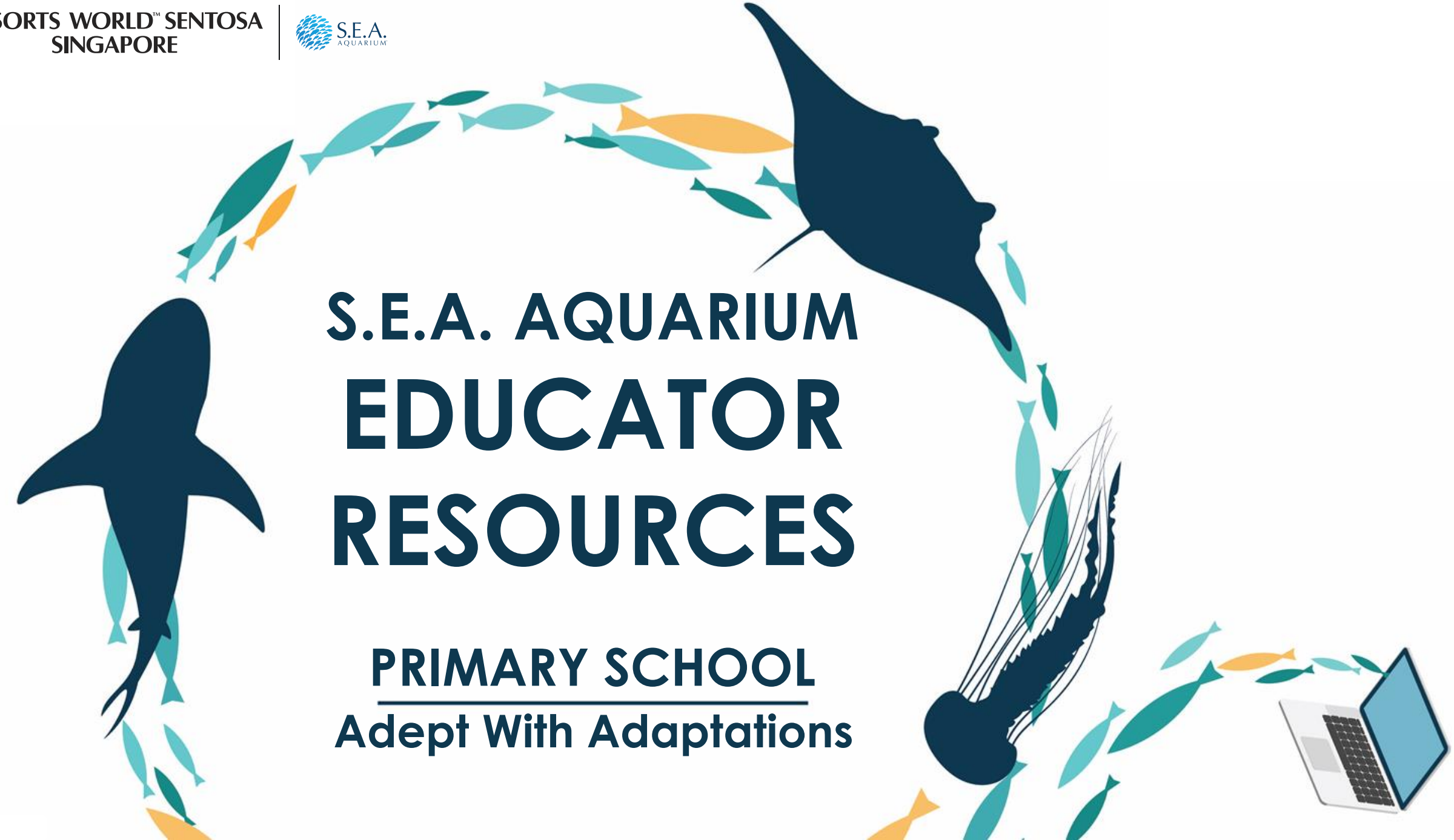
RESORTS WORLD™ SENTOSA
SINGAPORE

S.E.A. AQUARIUM



S.E.A. AQUARIUM EDUCATOR RESOURCES

PRIMARY SCHOOL

Adept With Adaptations

What Are Adaptations?

*"Adaptations are **special characteristics** of an organism that **enhance its survival** in its environment"*

Examples of Adaptations

- Tentacles for gripping onto a substrate or prey
- Able to change colour to camouflage

- Breathe through blowhole
- Engage in social behavior and work together

Class Activity

Match the correct adaptations to each of the animals below.

Stingray

Surgeonfish

Seahorse

Long snout

Burrowing into the sand

Prehensile tail

Stinging barb

Bright coloration

Schooling with other fish

Class Activity

Match the correct adaptations to each of the animals below.

Stingray

Surgeonfish

Seahorse

Stinging barb

Bright coloration

Long snout

Burrowing into the sand

Schooling with other fish

Prehensile tail

Types of Adaptations

Structural Adaptation	**Physical features** of an organism
Behavioural Adaptation	**Specific actions** taken by an organism

Types of Adaptations

Structural Adaptation

Walking legs

Stinging barb

Hard shell

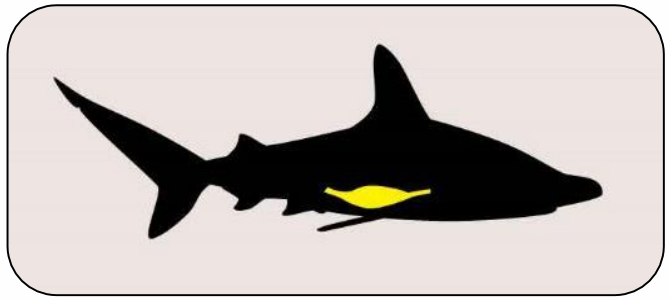
Behavioural Adaptation

Nocturnality

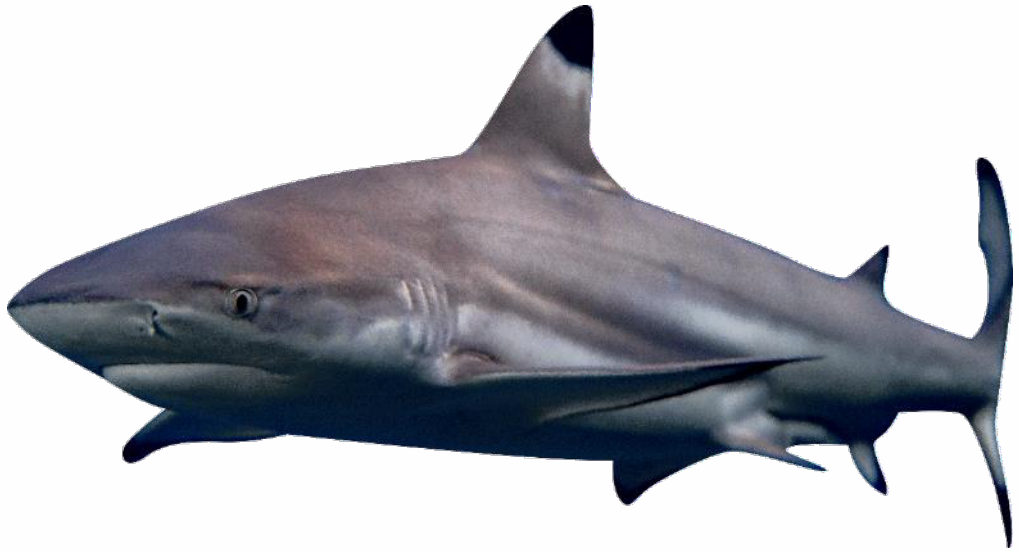
Schooling

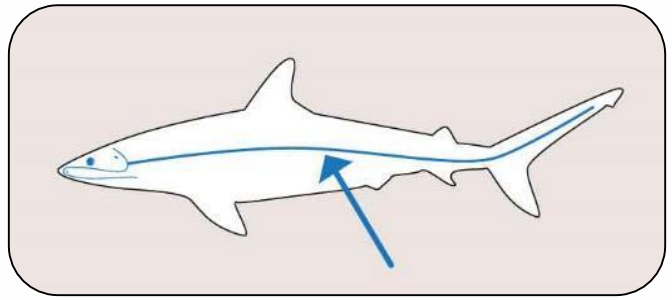
Social behavior

Group the following adaptations of a shark into structural or behavioural.



Oil-filled liver





Lateral line

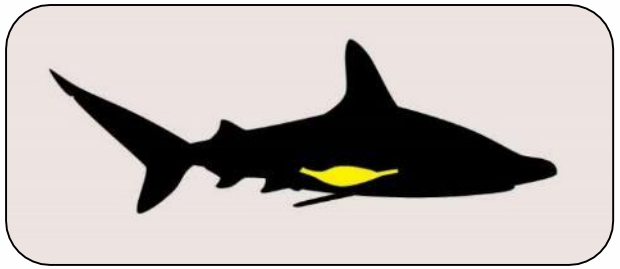
Nocturnality

Rolling back of eyes

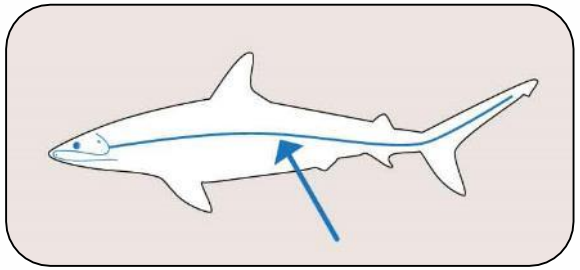
Ampullae of Lorenzini

Test biting

Structural Adaptations



Oil-filled liver



Lateral line

Ampullae of Lorenzini

Behavioural Adaptations

Test biting

Rolling back of eyes

Nocturnality

Adaptations and Their Functions

Feeding

Movement

Mating

Defence

Match the organisms to their suitable habitats!

Hermit Crab

Moray Eel

Whale

Coral Reef

Open Ocean

Intertidal

Match the organisms to their suitable habitats!

Hermit Crab

Moray Eel

Whale

Coral Reef

Open Ocean

Intertidal

Group Activity!

1. Get into groups of 4 or 5.
2. List as many adaptations as you can for each animal shown in the next slide.
3. Explain how the adaptations you have listed help each animal to survive in its habitat.

Group Activity!

Hermit Crab

Moray Eel

Whale

Adaptations of a hermit crab

- **Walking legs** – enable hermit crab to move around the intertidal zone

- **Outer shell** – protects hermit crab from harm

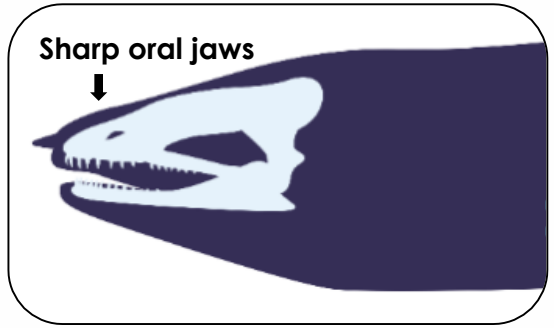
- **Hiding behavior** – remain hidden from predators

Adaptations of a moray eel

- **Slender body shape –** allows moray eel to swim into crevices of coral reefs

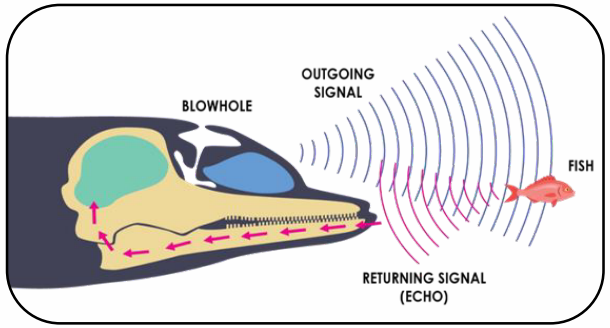
- **Spotted colouration –** camouflage with its surroundings

- **Sharp jaws –** sharp, needle-like teeth to grab onto its prey



Adaptations of a whale

- **Large flippers** – support whale's weight when swimming
- **Blubber** – a thick layer of fat that keeps whale warm and helps it to stay buoyant
- **Blowhole** – allows whale to breathe at the water surface
- **Echolocation** – using sound waves to locate prey, mates, and navigate



Summary

- Adaptations are **special characteristics** of an organism that **enhance its survival** in its environment.
- Structural adaptations refer to **physical features** of an organism.
- Behavioural adaptations refer to **specific actions** taken by an organism.
- Every adaptation has a **function** to help an organism survive in its habitat.