











The ocean is a vast place, and not all of it looks the same – with varying temperatures, light, and marine life, scientists have classified the ocean into five main zones.

### Twilight zone 200m to 1,000m below

Twilight zone is where deep sea starts and has low levels of sunlight that it's virtual darkness for human eyes. Marine species in this zone are usually capable of bioluminescence which means that they can produce their own light, just like fireflies! This is to help them see or hide from predators by means of counter-illumination. Octopus, squid, and hatchet fish can be found here.

### Abyssal zone 4,000m to 6,000m below

The abyssal zone alone covers around 83% of the total area of the ocean! Temperatures in this zone are near freezing and water pressure increases with ocean depth. Marine species that can withstand the pressure are usually invertebrates, like tiny squid or sea stars.

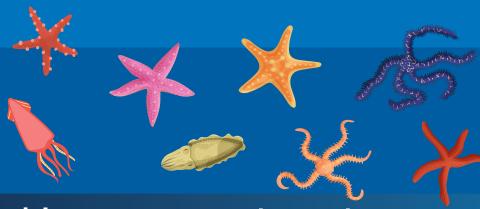


Sunlight zone is the upper most part of the ocean and receives plenty of sunlight. With sunlight, plants and microscopic organisms, such as algae and plankton, can carry out photosynthesis which allow them to survive!

Most marine species live in this zone including fishes, sharks, whales, jellyfishes and sea turtles.

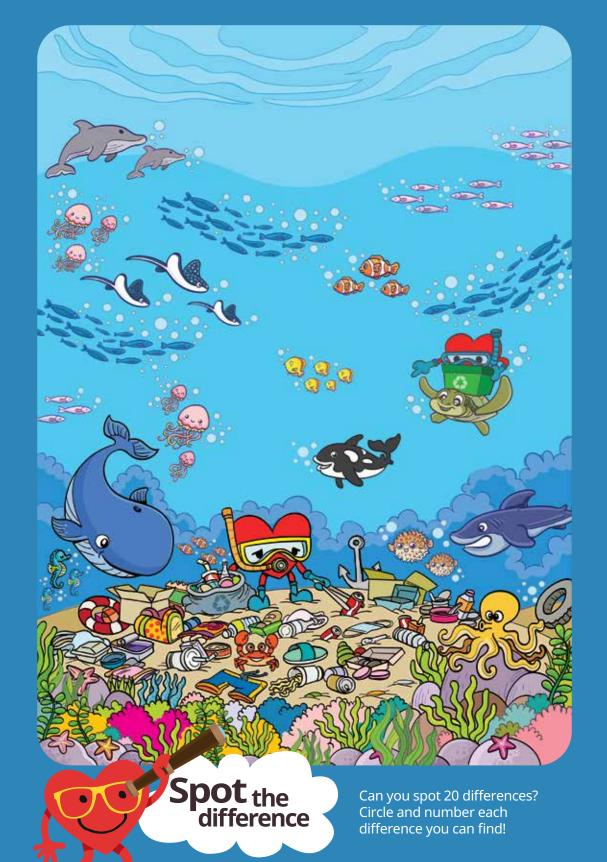
## Midnight zone 1,000m to 4,000m below

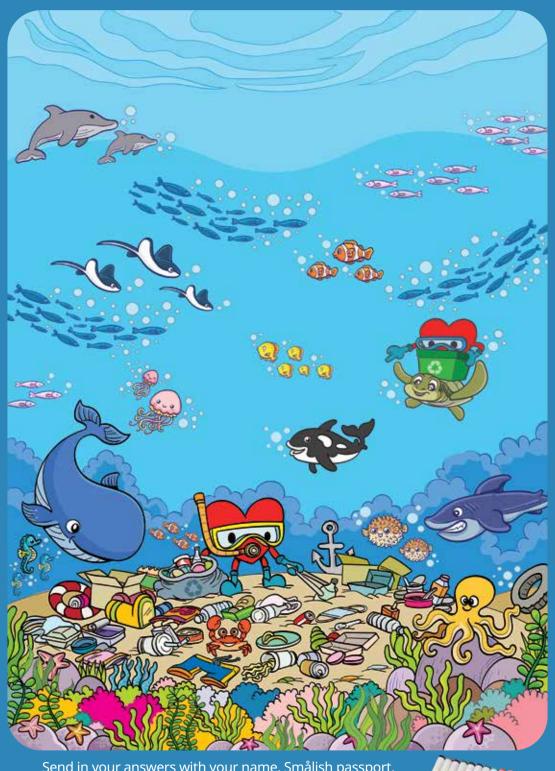
The midnight zone is in absolute darkness. Any light that is produced here comes from bioluminescent fish! Along with sperm whales that venture down here to feed, the midnight zone is home to certain kinds of algae, anglerfish, mussels, vampire squid, and tripod fish.



### Hadal zone 6,000m to the very bottom

While the hadal zone may be freezing and tremendous ocean pressure, a small percentage of marine species do make their home here. This includes dumbo octopuses, grenadiers, pearlfish, cusk-eels, and cutthroat eels.





Send in your answers with your name, Smålish passport, number, age, address and contact number to alexandtampi@smales.com.sg by 30 November 2022.

15 lucky winners will each win a set of MÅLA wax crayons.

## 10 Interesting facts about the ocean

All of the oceans and seas on Earth are interconnected, making one world ocean.

8

We have only explored % of the ocean.



Ocean water is salty.

Salt in the ocean comes from rocks on land and openings in the seafloor.



The ocean water is constantly in motion due to winds, tides, temperature and other forces.



There are about
1,000,000 species of animals
living in the ocean and
only 200,000 species are
known to us.





Small things can make a big difference. You don't have to do extraordinary things to keep the ocean clean and safe for all. Below are some small things you can do now to help save our oceans.

## How can we play our part?



Share news about ocean issues and help spread the word so they can join you in making a difference.



Carry a reusable water bottle, non-disposable lunch boxes and recycle whenever possible.





Reduce your carbon footprint such as walking/ cycling, turning off all appliances that are not in used and taking shorter showers.



Bring your trash with you. Respect the oceans and don't leave anything behind.



Buy sustainable seafood with environmental certification like Aquaculture Stewardship Council (ASC) or Marine Stewardship Council (MSC).











Alex and Tampi are going to have a cooking party by using recycling papers to make the delicious paper porridge with their Småland friends. Draw what you think the cooking party would turn out to be. Be as creative as you can be.







Keene Yee Xiren, 9 years old



Danzel Pang Shaozhe, 12 years old

#### Next issue theme:

As the sun shines happily on the cool, rippling surface of the sea, Alex and Tampi decide to visit the beach. How do you think Alex and Tampi spend their time on the beach?

Include your name, Smålish passport number, age, address and contact number, and send your drawing to alexandtampi@smales.com.sg by 30 November 2022.

1 lucky winner will win a set of TITTA DJUR Finger puppets.

Best letter

The brothers were strolling in the forest while waving to the creatures living in it. It was a hot day since there was global warming. Everyone had a fan and tried staying home as much as possible. There were air conditioners there.

"We should get one too!" suggests Alex excitedly.

Tampi just shook his head. "If everyone keeps using those, it will be hotter. People shouldn't waste things too as that will make the earth hot." Why don't we encourage everyone not to waste things?" Tampi smiled in agreement. They started making posters. They even made an invitation to a talk about global warming. Everyone agreed with them and stopped cutting down too many trees and planting more. This way, they don't have to go to supermarkets as they have their food. With the help of the creatures, everyone lived a green and healthy life. Why don't you help too?

#### Asiah Iman Bte Aminar, 10 years old





Blue skies and calm waters – a perfect day for diving! Alex and Tampi set out in a little boat. When they reached the dive site, they carefully checked all their equipment and put on their fins and masks. What adventure did Alex and Tampi had?

In no more than 150 words, include your name, Smålish passport number, age, address, and contact number and send your letter to alexandtampi@smales.com.sg by 30 November 2022. 1 lucky winner will win a PEKHULT, soft toy with LED night light.

#### Last issue's theme:

Alex and Tampi have a plan to write a letter on how they can help the environment by practising sustainability daily. Together with Alex and Tampi, share how you will start practising sustainability at home daily.



## Art and craft - Shark Binoculars

\*Adult supervision might be necessary.



Take an empty toilet roll and cut 2 triangles on one of the ends. Save the triangle pieces for the fin.



Cut a small slit (same length as the triangle) on the top of the toilet roll and insert one of the triangles.



Get creative and draw, colour or paint the toilet roll. You can also glue a googly eye!



Let your artwork dry completely.



Take another empty toilet paper roll and repeat step 1 – 4 again.



Once your artwork has dry completely, glue both sharks together side-by-side.

Voila! You have your shark binocular

# Wreck this page

Be creative! Create a painting of your own ocean scene on this page.



### Miss me?

Great news, Småland at IKEA Tampines will be re-opening from 7 Oct! Come and discover the fun and activities planned this Children's Day!