

Porci's Ocean Patrol Activity Sheet



Series 1: Episode 9 – Facts for Students

What makes a Reef

- Reefs are like an underwater city, bursting with life and activity.
- Reefs are found all along the world's coastlines as well as underwater.
- They can be made up of rocks or stony corals depending on where they are growing.
- Large reef systems are usually made up of many smaller connected habitats.
- In Australia, Ningaloo and the Great Barrier Reef are built by tiny animals called coral polyps that prefer warm, tropical waters.
- In the Great Southern Reef, our cooler and nutrient rich oceans are favoured by seaweed-covered temperate rocky reefs.
- There are also different critters and creatures that will call each one of these reefs home.
- While corals and seaweeds love the shallow, sunny spots near the coast there are other reef builders such as oysters and sponges who are happy to live in the deeper and darker parts of the ocean where they can filter the water without needing any sunlight.
- Port Noarlunga Reef here in South Australia is a snorkelling paradise, this rocky reef is packed with different seaweeds, invertebrates and over 70 different types of fish!
- Reefs can be both natural and artificial. Natural reefs are formed from rocks or corals, while artificial reefs are created by humans, often using materials like old tyres or sunken ships.
- On the Yorke Peninsula, the Windara Reef is the first shellfish restoration reef of its kind in South Australia. Its purpose is to support a healthier marine environment and provide more opportunities for recreational fishers.

Zooplankton

- Zooplankton play a very large role in the ocean's food chains.

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- They drift through the water with the ocean's currents.
- There are thousands of different kinds of zooplankton, from microscopic to big jellyfish.
- Zooplankton can be little creatures like copepods and mysids, or the larvae or babies of larger animals. The larvae of these animals like crabs and urchins will change a lot before they become adults.
- Lots of animals enjoy eating zooplankton, from filter feeders to giant whales.
- To stay safe, some zooplankton are invisible! Their bodies have become as clear as the oceans' waters to avoid being spotted.
- The food that zooplankton eat also plays a large important part of our oceans. Phytoplankton are tiny plant-like algae who soak up the sun to make their energy. They are so small you need a microscope to see them.
- There are a billion billion billion phytoplankton floating around in our oceans. They take carbon dioxide and turn it into oxygen for us to breathe!
- Even though they are small, the phytoplankton are the beginning of the food chain for the zooplankton to eat.

Sea Country - Boomerangs

- The traditional Kaurana name for a boomerang is a Wadna.
- They were designed by the First Scientists. The First Scientists were clever Indigenous explorers and inventors of their time who had to figure out how things worked in the world around them.
- The First Scientists used their curiosity and creativity to solve problems, invent tools, understand the natural world, and pave the way for the scientific discoveries we have today.
- Boomerangs are moulded and cut to be aerodynamic. With rounded edges and wide, flat surface area, this allows boomerangs to glide through the air with ease.
- This design has even inspired modern aeroplane wings.

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- There are different types of boomerangs, each with their own unique function.
- Some were used for hunting, like a precision instrument aimed at the legs of kangaroos or emus.
- Some were larger and wielded in battles or for protection.
- Boomerangs could even double as knives by slotting a shell into them.
- Boomerangs were also used as a musical instrument. Two boomerangs clacking together in rhythmic harmony, creating melodies.