

## Sharks and rays fact sheet



Sharks and rays are a special group of fish that do not have bones in their skeleton. Their skeleton is made from cartilage. Cartilage is soft and can bend. You have cartilage at the end of your nose and your ears. Cartilage is also at the end of your bones.

Fish have gills to get oxygen from the water. They have fins and a tail to help them swim. Their bodies are shaped so they can slide through the water.

There are about 375 different kinds of sharks and 490 different kinds of rays living in the world's seas. The body of shark is more like the shape of a fish. Their gills are on the side of their head. Rays have large fins that along the length of their body. Their fins look like wings. Their gills are under their body.

Many large sharks give birth to live young. Many of the smaller sharks lay large eggs. These eggs are camouflaged so they can hide among seaweed. Sometimes the eggs are washed up onto the beach.

All sharks and rays hunt and eat other animals in the sea.

Bottom and top left – Hunting sharks like the grey nurse shark have many teeth that can be replaced many times. They eat many swimming sea creatures and are not dangerous to people.

Top right – Eagle rays with their long fins look like they are flying through the water. They have flat teeth used for crushing shellfish. They do not have a poisonous barb on their tail.

Centre – Sawfish are a type of ray. They feed on the sea floor. Their long saw is sensitive to movement in the sand. They can use it to dig in the sand for animals. They can also swipe animals trying to escape. Their flat teeth crush shellfish and crabs.

Bottom right – Fiddler ray or banjo shark are a type of ray. They are found in shallow water lying on the bottom where they find shellfish, crabs and worms to feed on. They are not dangerous to people.

Many sharks and rays have become rare and endangered because of fishing. All the sawfish are endangered. Millions of sharks are killed just for the fin on their back which is used to make soup. Many sharks are killed when they get caught in fishing nets meant to catch other fish.

**Additional teacher notes**

- There are 182 shark and 125 ray species in Australian waters.
- In children the middle of a long bone such as the thigh which is growing is made of cartilage. Once growth is completed this cartilage is replaced by bone.
- The cartilage at the end of our bones is smooth and is a much better surface for moving joints than is bone.
- Sharks and rays have 5 to 7 gill slits. Bony fish have one gill slit.
- Large sharks and rays breed later in life and only have a few live young at a time. Their reproductive rate is low compared to most bony fish. Fishing for sharks and rays will have a bigger impact on declining numbers than fishing for bony fish.