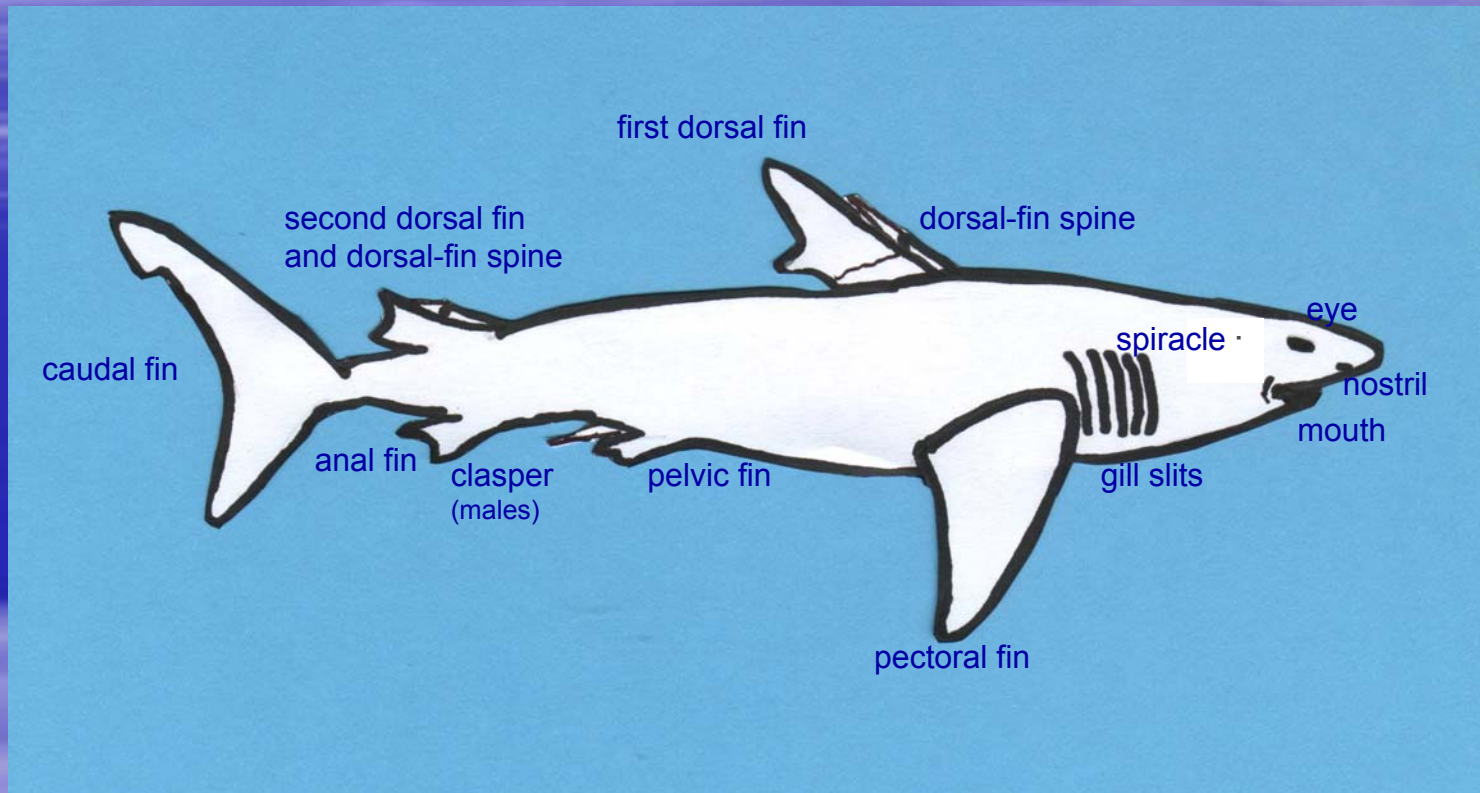


SHARKS



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Features of a shark



Information about sharks

- Sharks are part of the fish family.
- The skin is different from the skin of other fish. They have tough skin because it is covered by thousands of tiny teeth, called denticles.
- The sharks take oxygen from the water, when water passes through the gills, and passes it into their bloodstream.
- Most sharks live in warm water, some species survive in polar regions and some sharks can live only where the water is cooler.
- Most sharks have good eyesight.
- Sharks have between five and seven gill openings.
- Sharks have an excellent sense of smell.
- Most sharks give birth to live babies, called pups.
- Some sharks lay eggs.
- Sharks vary in size from 15 cm to 13 metres.
- There are 375 different species of sharks.
- Sharks can replace their damaged or lost teeth all the time.

Amazing facts



Shark skin does not have scales like a bony fish, instead it is covered in tiny teeth-like points called denticles. These denticles are continually replaced.

The shark skin used to be used as sandpaper to polish wood. It is smooth in one direction and rough in the other.

Sharks can't move their pectoral fins like paddles so they are unable to swim backwards or hover in the water. They also don't have a swim bladder which acts as a buoyancy aid in boney fish, but they do have an oil-rich liver which helps reduce their weight in the water.

Live young – pups -

Sharks are slow growing, late maturing and have a low reproductive rate.

Most sharks give birth to live young instead of laying eggs.

Sharks that give birth to live babies (called pups) usually only have very few at one time. For example, a great white shark only has four to 10 pups. Some sharks are pregnant for two to three years before giving birth.

Laying eggs

The eggs are usually laid in pairs. Hatching is dependent on water temperature, and is usually over a period of several months.



This is the egg case from a Port Jackson shark. Sometimes the mother wedges its spiral-shaped egg case into rocks to stop predators eating it.

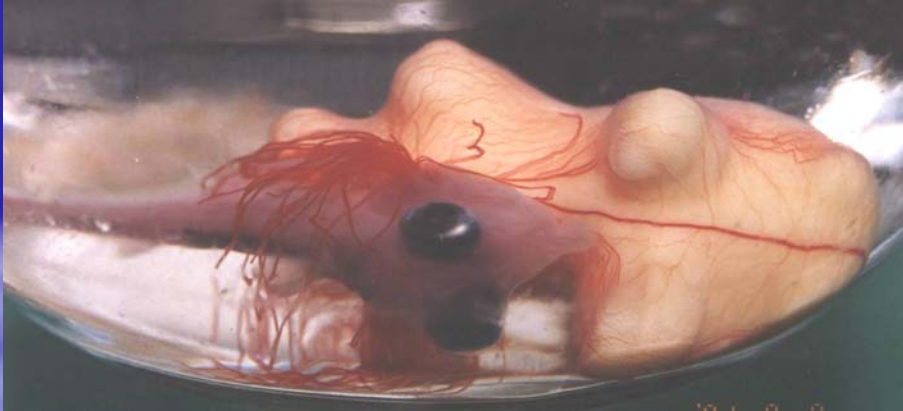


This is a Port Jackson shark embryo.

Laying eggs



This is an Elephant fish egg capsule (case).



This is an Elephant fish embryo. Elephant fishes are related to sharks and rays, but they have a skin covering their gills, with a single opening instead of gill slits. Their skins are smooth.

GLOSSARY

anal fin: the unpaired fin placed ventrally behind the anus

bone: hard calcareous substance that makes up the skeleton of some fish

bouyancy: the ability to float, rise or sink in water

cartilage: a skeletal material consisting of matrix of soft white or translucent
chondrin

caudal fin: the tail fin

claspers: modified portions of the pelvic fins in male sharks

denticle: a small, tooth-like structure

dorsal fin: an unpaired fin on the back or upper tail

gill: organ for breathing or extracting oxygen contained in water

gill slit: a long, narrow gill opening

nostril: external opening of the nasal organs

GLOSSARY continued

pectoral fin: paired fins just behind or below the gill opening united to form a disc in most rays

scale: a small membranous or horny modification of the skin of many fishes

spiracle: a respiratory opening behind the eye in sharks and rays

tail: the part of the fish between the vent and the origin of the caudal fin

teeth: hard outgrowths on the jaws, roof of the mouth or pharynx (the part of the throat into which the gill slits open); used for biting and masticating food

vertebra: a bony segment of the backbone