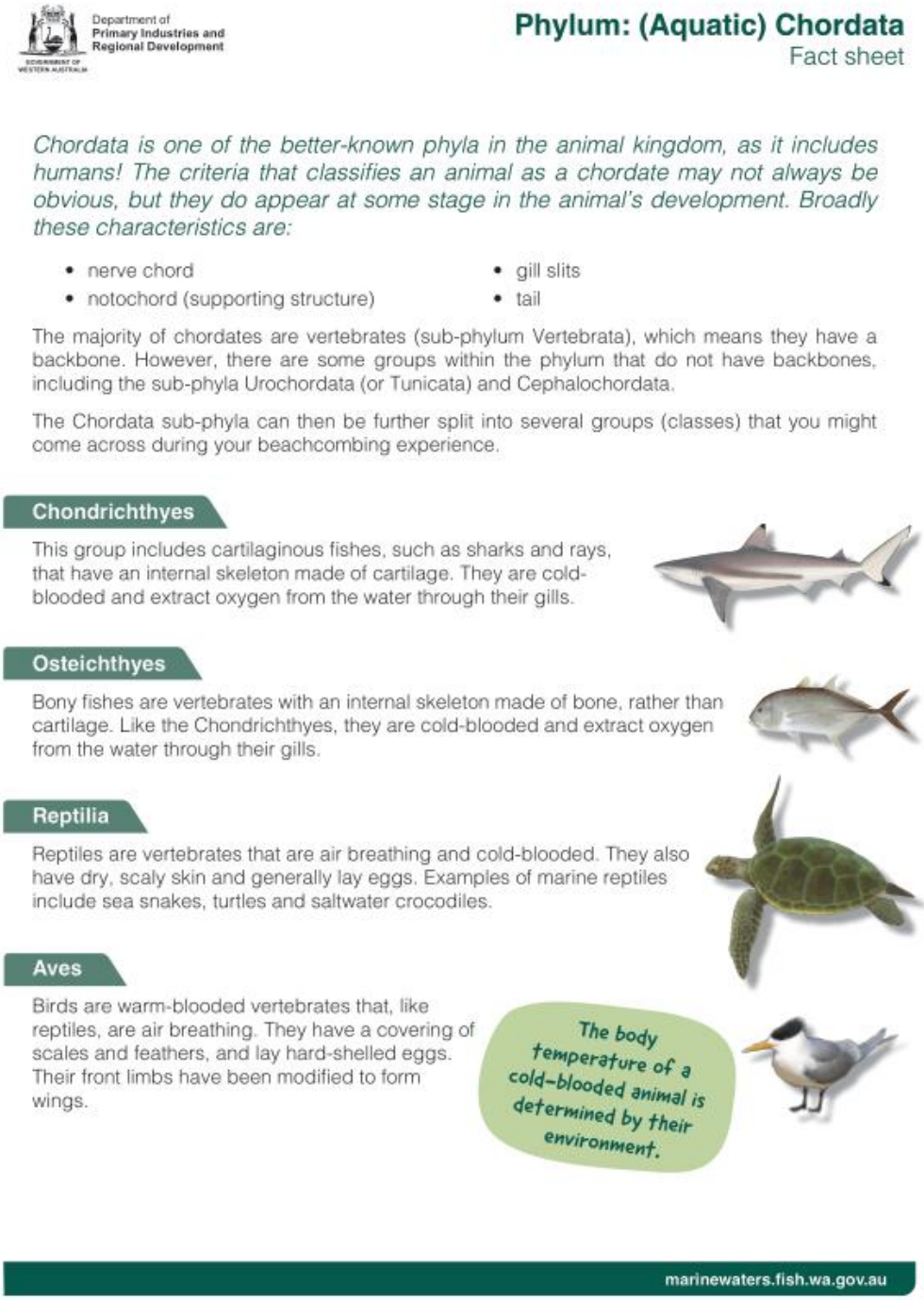
Fact Sheet: Chordata (aquatic)

Phase of learning
Years 7 - 8, Years 9 - 10, Senior Secondary (Years 11-12)

Region
North Coast, Gascoyne Coast, West Coast, South Coast, Indian Ocean Territories

Summary
Chordata is one of the better-known phyla in the animal kingdom, as it includes humans! This fact sheet explains the common characteristics of all chordates, as well as the main groups of chordates you are likely to find in aquatic environments across Western Australia.



Department of Primary Industries and Regional Development

Phylum: (Aquatic) Chordata

Fact sheet

Chordata is one of the better-known phyla in the animal kingdom, as it includes humans! The criteria that classifies an animal as a chordate may not always be obvious, but they do appear at some stage in the animal's development. Broadly these characteristics are:

- nerve chord
- notochord (supporting structure)
- gill slits
- tail

The majority of chordates are vertebrates (sub-phylum Vertebrata), which means they have a backbone. However, there are some groups within the phylum that do not have backbones, including the sub-phyla Urochordata (or Tunicata) and Cephalochordata.

The Chordata sub-phyla can then be further split into several groups (classes) that you might come across during your beachcombing experience.

Chondrichthyes

This group includes cartilaginous fishes, such as sharks and rays, that have an internal skeleton made of cartilage. They are cold-blooded and extract oxygen from the water through their gills.

Osteichthyes

Bony fishes are vertebrates with an internal skeleton made of bone, rather than cartilage. Like the Chondrichthyes, they are cold-blooded and extract oxygen from the water through their gills.

Reptilia

Reptiles are vertebrates that are air breathing and cold-blooded. They also have dry, scaly skin and generally lay eggs. Examples of marine reptiles include sea snakes, turtles and saltwater crocodiles.

Aves

Birds are warm-blooded vertebrates that, like reptiles, are air breathing. They have a covering of scales and feathers, and lay hard-shelled eggs. Their front limbs have been modified to form wings.

The body temperature of a cold-blooded animal is determined by their environment.

marinewaters.fish.wa.gov.au

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Poster: Marine Classification (Senior)
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