STAGE 4 YEAR 7 & 8 – LINKS: ACSSU111 • ACSHE119 • ACSHE121 • ACSIS130 NZ: LIVING WORLD • LEVEL 5 & 6



What it means?

Complete the close passage by using the words from the word bank.

BANK!			
Helps	Classification is the of organising objects or		
Scientists	living based on their similarities or differences		
World	in Classification us to better		
Things	understand the living in which we live in.		
Systems			
Identify Process	use a variety of organising and		
Commonly	keys to help classify and animals and plants.		
Key	The most used are Linnaean System and		
Characteristics	Dichotomous		

SECTION 2

Organising

List the groupings in the hierarchical classification system, from largest to smallest.

К	
Р	
С	
ο	
F	
G	
S	





STAGE 4 YEAR 7 & 8 – LINKS: ACSSU111 • ACSHE119 • ACSHE121 • ACSIS130 NZ: LIVING WORLD • LEVEL 5 & 6

SECTION 3

Dichotomous Key

Numerous keys have been designed to identify species. A dichotomous key gives two choices where only one choice is valid. Below is a dichotomous key used to identify different species of shark. Use this key to identify five shark species found at SEA LIFE.

1	a)	Gills on the side of the head	2
	b)	Gills not on the side of the head	Ray (i.e., not a shark)
2	a)	Seven gill slit openings	Seven-gilled shark
	b)	Less than seven gill slit openings	3
3	a)	Spiracles present	4
	b)	Spiracles Absent	15
4	a)	Large spiracles	5
	b)	Reduced spiracles	7
5	a)	Firm Dorsal ridges	6
	b)	No firm dorsal ridges	7
6	a)	Extended tail longer than body	Zebra shark
	b)	Tail not as long as body	Whale shark
7	a)	Almost Terminal Mouth	8
	b)	Definite Subterminal Mouth	Grey nurse shark
8	a)	Body is moderately fusiform	Tawny nurse shark
	b)	Body not fusiform	9
9	a)	Dorsal fins possess horns	10
	b)	Dorsal fins absent of horns	11
10	a)	Supra orbital crest high and ends abruptly	Crested horn shark
	b)	Dark oblique stripes	Port Jackson shark
11	a)	Extensive barbels around head	12
	b)	Nasal barbels only	14
12	a)	Barbels extending around head and chin	Tasselled Wobbegong
	b)	Barbels not extending around head and chin	
13	a)	Colour; Dark dorsal saddles and blotches outlined by black	Striped Wobbegong
	b)	Colour; Dorsal saddles and spots outlined by white	Spotted Wobbegong
14	a)	Large black spots on pectoral dorsal surface	Epaulette shark
	b)	Black Spots absent	Bamboo shark
15	a)	Heterocercal tail	16
	b)	Homocercal tail	Mako shark
16	a)	Caudal fin longer than body	Thresher shark
	b)	Caudal fin shorter than body	17
17	a)	Dorsal fin originate behind pectoral fins	18
	b)	Dorsal fin originates in line with pectoral fins	Sandbar whaler shark
18	a)	Distinct colour on dorsal fin tip	19
	b)	No colour on dorsal fin tip	Grey reef shark
19	a)	Black colour tip on dorsal fin	Black tip reef shark
	b)	White colour tip on dorsal fin	White tip reef shark

Look for 5 different sharks you can see in one of the exhibits and use the key to see if you can identify which species it is.

Shark 1 is	Shark 4 is
Shark 2 is	Shark 5 is
Shark 3 is	



STAGE 4 YEAR 7 & 8 – LINKS: ACSSU111 • ACSHE119 • ACSHE121 • ACSIS130 NZ: LIVING WORLD • LEVEL 5 & 6



Phylum Chordata

Features: Notochord (a flexible rod supporting the body) at some stage, tail at some stage. How can you tell the difference between sharks, rays and bony fish?

	Class Chondrichthyes (Sharks and Rays)	Class Actinopterygii (Bony Fish)
Features		
Examples in aquarium		

SECTION 5

Phylum: Echinodermata



Class: Astroidea Example: Sea Star



Class: Echinoidea Example: Sea Urchin

Sea Stars and Sea Urchins appear very different but are related and are in the same phylum. What do they have in common?



STAGE 4 YEAR 7 & 8 – LINKS: ACSSU111 • ACSHE119 • ACSHE121 • ACSIS130 NZ: LIVING WORLD • LEVEL 5 & 6



Phylum: Cnidaria



Class: Anthozoa Example: Coral, Anemones



Class: Scyphozoa Example: Sea Jellies

Draw a picture that illustrates the similarities between Anemone and Sea Jellies.

