

Name:

Ocean Teens



Classification and Taxonomy Worksheet

1. Why do scientists classify organisms?

2. How do scientists classify organisms?

3. What are the five recognised Kingdoms?

- a.
- b.
- c.
- d.
- e.

4. Carolus Linnaeus developed a hierarchical system of classifying organisms. Name the major groups that were further refined from his original work:

Group	Example
	Animalia
	Mollusca
	Cephalopoda
	Sepiida
	Sepiidae
	<i>Sepia</i>
	<i>apama</i>

5. Write the scientific names of the two penguin species at Kelly Tarlton's:

Genus:

Species:

Genus:

Species:

6. Discuss why these animals are grouped in the same genus but classified as separate species:

7. What other information can be gained from identifying and classifying animals into these groups, more specifically animals that share the same genus:

8. Taxonomy is usually based on features that an organism possesses. What relatively new technology (that does not rely on physical traits) can be used to further assist in taxonomic classification?

9. Find the scientific name of the following shark species:

Common Name	Scientific Name
Sand Tiger Shark	
Broadnose Sevengill Shark	
Wobbegong Shark	
School Shark	

10. What is the advantage of using scientific names?

11. List some of the distinguishing characteristics that define each class in the table below. Provide an example of two species within each class.

Phylum: Mollusca soft bodies – muscular foot – mantle cavity				
Class: Gastropoda		Class: Bivalvia		Class: Cephalopoda
Examples:		Examples:		Examples:
Phylum: Echinodermata mesodermal spines – radial symmetry				
Class: Asteroidea			Class: Echinoidea	
Examples:			Examples:	
Phylum: Arthropoda jointed legs – segmented body – chitin exoskeleton				
Class: Malacostraca		Class: Insecta		Class: Arachnida
Examples:		Examples:		Examples:
Phylum: Chordata dorsal neural tube/spinal cord – bilateral body plan				
Class: Aves	Class: Mammalia	Class: Actinopterygii	Class: Chondrichthyes	Class: Reptilia
Examples:	Examples:	Examples:	Examples:	Examples:

