**Aquatic Science Spring Final Exam Review**

**Taxonomy to be familiar with:**

Phylum Porifera

Class Hexactinellida

Class Calcarea

Class Demospongiae

Phylum Cnidaria

Class Anthozoa

Class Cubozoa

Class Hydrozoa

Class Scyphozoa

Class Staurozoa

Phylum Ctenophora

Phylum Platyhelminthes

Phylum Nemertina

Phylum Gastrotricha

Phylum Rotifera

Phylum Acanthocephala

Phylum Bryozoa

Phylum Nematoda

Phylum Nematomorpha

Phylum Mollusca

Class Monoplacophora

Class Aplacophora

Class Polyplacophora

Class Bivalvia

Class Gastropoda

Class Scaphopoda

Class Cephalopoda

Phylum Priapulida

Phylum Sipuncula

Phylum Annelida

Phylum Arthropoda

Class Crustacea

Class Merostomata

Phylum Echinodermata

Class Asteroidea

Class Ophiuroidea

Class Echinoidea

Class Crinoidea

Class Holothuroidea

Phylum Hemichordata

Phylum Chordata

Subphylum Urochordata

Subphylum Cephalochordata

Subphylum Vertabrata

Class Agnatha

Class Chorndrichthyes

Class Osteichthyes

Class Amphibia

Class Reptilia

Order Crocodylia

Order Squamata

Order Chelonia

Class Aves

Class Mammalia

Order Cetacea

Suborder Mysteceti

Suborder Odondoceti

Order Pinnipedia

Order Sirenia

Order Fissipedia(Carnivora)

Family Ursidae

Family Mustelidae

**Vocabulary to be familiar with:**

* Amimal
* Balen
* Bilateral symmetry
* Cartilage
* Chitin
* Cnidoblast
* Countershading
* Cryptic coloration
* Drag
* Echolocation
* Ectotherm
* Endotherm
* Exoskeleton
* Gas exchange
* Gill membranes
* Hermatypic
* Invertebrate
* Lateral line system
* Medusa
* Metamerism
* Molt
* Notochord
* Osmoregulation
* Oxygen revolution
* Phylum
* Polychaeta
* Polyp
* Radial symmetry
* Salt glands
* Schooling
* Suspension feeder
* Swim bladder
* Teleostei
* Tunicate
* Turbulence
* Vertebrate
* Viscosity
* Water vascular system
* Zooxanthellae

**Concepts to be familiar with:**

What makes an animal an animal?

What caused life to finally evolve past primitive bacteria?

What are protozoans?

Which two invertebrate phyla have the most species?

What type of symmetry do Echinoderms have?

What are arthropod skeletons composed of?

What is the evolutionary order of the vertebrates?

What allowed agnathans to evolve into chondrichthyes?

List three differences between chondrichthyes and osteichthyes?

How do water and blood move through fish gills?

Why did we not discuss amphibians in class?

What advancement allowed amphibians to evolve into reptiles?

What are some characteristics of marine turtles?

What are some characteristics of sea snakes?

What are some characteristics of marine birds?  
What are some characteristics of cetaceans?

What are some differences between mysticetes and odontocetes?

What is the largest mysticete?

What is the largest odontocete?

What is the largest dolphin?

What is a narwhal?

How long ago did terrestrial mammals begin moving back into the oceans?

What are two differences between penguins and puffins?

Where are polar bears found?

What are three differences between seals and sea lions?

In which habitat are sea otters and purple urchins found?