

## MARINEreview: Nekton Part Two – The Tetrapods

Your most important resources are [www.sciencrush.net](http://www.sciencrush.net) and PowerSchools. Use them! I am available every day before school, after school, and during lunch for extra help. Let me know if there is anything I can add to this review to help you.

### Marine Organisms of the Day

- 1. Elephant Seal (*Mirounga angustirostris* and *Mirounga leonine*):** The northern elephant seal and the southern elephant seal were both hunted to the brink of extinction at the end of the 19th century, but the populations have recovered. The large trunk that gives them their name is called a proboscis, which is used by the male to produce loud roaring noises, especially during mating season. <https://www.youtube.com/watch?v=IpT1u2IFkXs> (3:43)
- 2. Hawksbill Sea Turtle (*Eretmochelys imbricate*):** The Hawksbill Sea Turtle is critically endangered. They can grow up to be about 45 inches long (shell length) and 150 pounds, which is relatively small for a sea turtle. Their shells are strikingly colored and they are often harvested illegally for their shells and meat. <https://www.youtube.com/watch?v=uCbeFLizHuM> (0:50)
- 3. Killer Whale aka Orca (*Orcinus orca*):** Orcas hunt in pods of up to 40 individual whales, which can be deadly for their prey. They have extremely sophisticated echolocation systems where they emit clicks, then listen for the echo. It is the largest member of the dolphin family and was given the name "killer whale" by ancient sailors that observed groups of orcas preying on whales. The species is found worldwide, but orca populations are localized. <https://www.youtube.com/watch?v=-DANuOqoLAE> (0:46)
- 4. Blue Whale (*Balaenoptera musculus*):** The Blue Whale is the largest creature ever to have lived on the planet. It can reach almost 100 feet long and 400,000 pounds. The heart alone can weigh 400 pounds. A blue whale calf can drink 100 gallons of milk per day in order to gain 200 pounds every 24 hours. <http://www.bbc.com/earth/story/20150820-see-the-worlds-biggest-heart-blue-whales-is-first-to-be-preserved> (1:34)
- 5. Common Bottlenose Dolphin (*Tursiops truncatus*):** The Common Bottlenose Dolphin is what you typically think of when you think of a dolphin. They are the most common species found in captivity, and were featured in the TV show, *Flipper*. [https://www.youtube.com/watch?v=VjMn\\_dVCJyA](https://www.youtube.com/watch?v=VjMn_dVCJyA) (1:15)
- 6. Emperor Penguin (*Aptenodytes forsteri*):** The Emperor Penguin is the largest of the penguin species, reaching four feet tall and almost 100 pounds. They eat primarily fish in their Antarctic home. This is the species featured in the film *March of the Penguins*. <https://www.youtube.com/watch?v=L7tWNwhSoCE> (2:25)
- 7. Narwhal (*Monodon monoceros*):** The Narwhal is known as the Unicorn of the Sea for its tusk, which is actually a tooth that grows out through the upper lip of the male (only a small percentage of females have it). The scientific name actually means "one horn, one tooth". The tusk is a sensory organ, and not used for fighting or feeding. <https://www.youtube.com/watch?v=YO58kt-jETA> (2:13)
- 8. Marine Iguana (*Amblyrhynchus cristatus*):** Marine Iguanas are the only lizards that spends its time in the ocean. They feed on underwater algae and are only found in the Galapagos Islands. Marine Iguanas are also known for their very efficient salt glands, where they "sneeze" out salt. [https://youtu.be/UDAutlF\\_aRYv](https://youtu.be/UDAutlF_aRYv) (2:44)

### Top 10 Terms for This Exam

Nekton	Tetrapod
Cetacean	Pinniped
Echolocation	Melon
Geomagnetic Sensory System	Baleen
Appendicular Swimmer	Undulatory Swimmer

### The Gimme Questions for This Exam

- Oceanic nekton include members of all of these groups **except**
  - a. sharks
  - b. reptiles
  - c. amphibians
  - d. mammals

2. Environmental conditions significant to oceanic nekton include all of these **except** the
- a. lack of shelter from predators
  - b. transparency of the medium
  - c. range between high and low tides
  - d. absence of the physical boundaries or structures

3. Several environmental conditions of oceanic nekton have combined to facilitate various adaptations, which include all of the following **except**
- a. speed and mobility
  - b. development of camouflage
  - c. nervous and sensory systems
  - d. increased body density

4. All of these adaptations help marine birds or mammals maintain body heat **except**
- a. having large body size
  - b. countercurrent design of circulatory system
  - c. waving flippers in the air
  - d. having a thick layer of fat or blubber

**Finding Nemo Clips for This Exam**

17 – News Travels      9 – Dory Speaks Whale      21 – Inside the Whale