

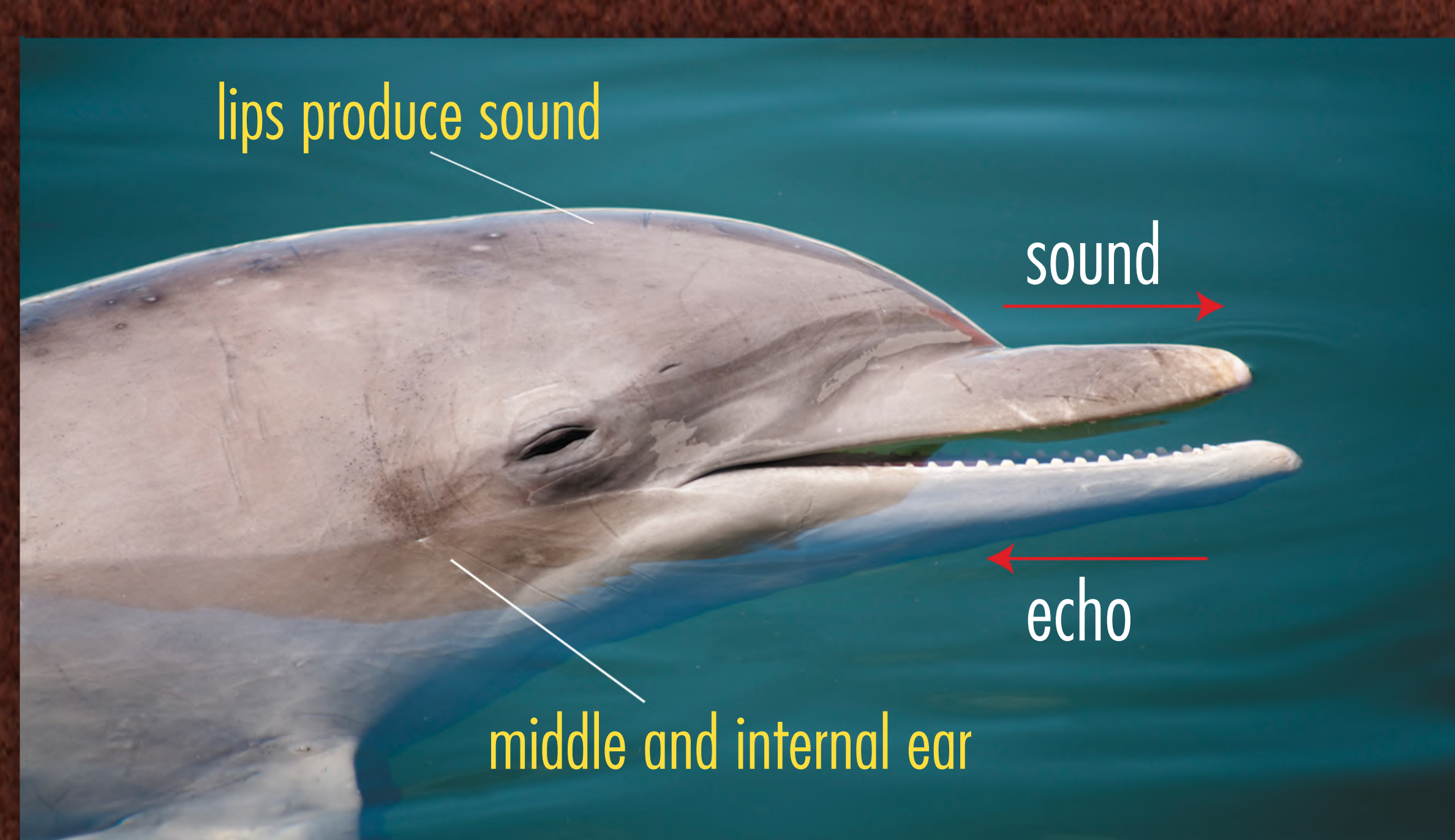


FIFTH DAY OF CREATION Sky AND SEA ANIMALS

God said, "Let the water teem with living creatures, and let birds fly above the earth across the expanse of the sky." So God created the great creatures of the sea and every living and moving thing with which the water teems. . . and every winged bird." Genesis 1:20, 21.

Dolphins show design

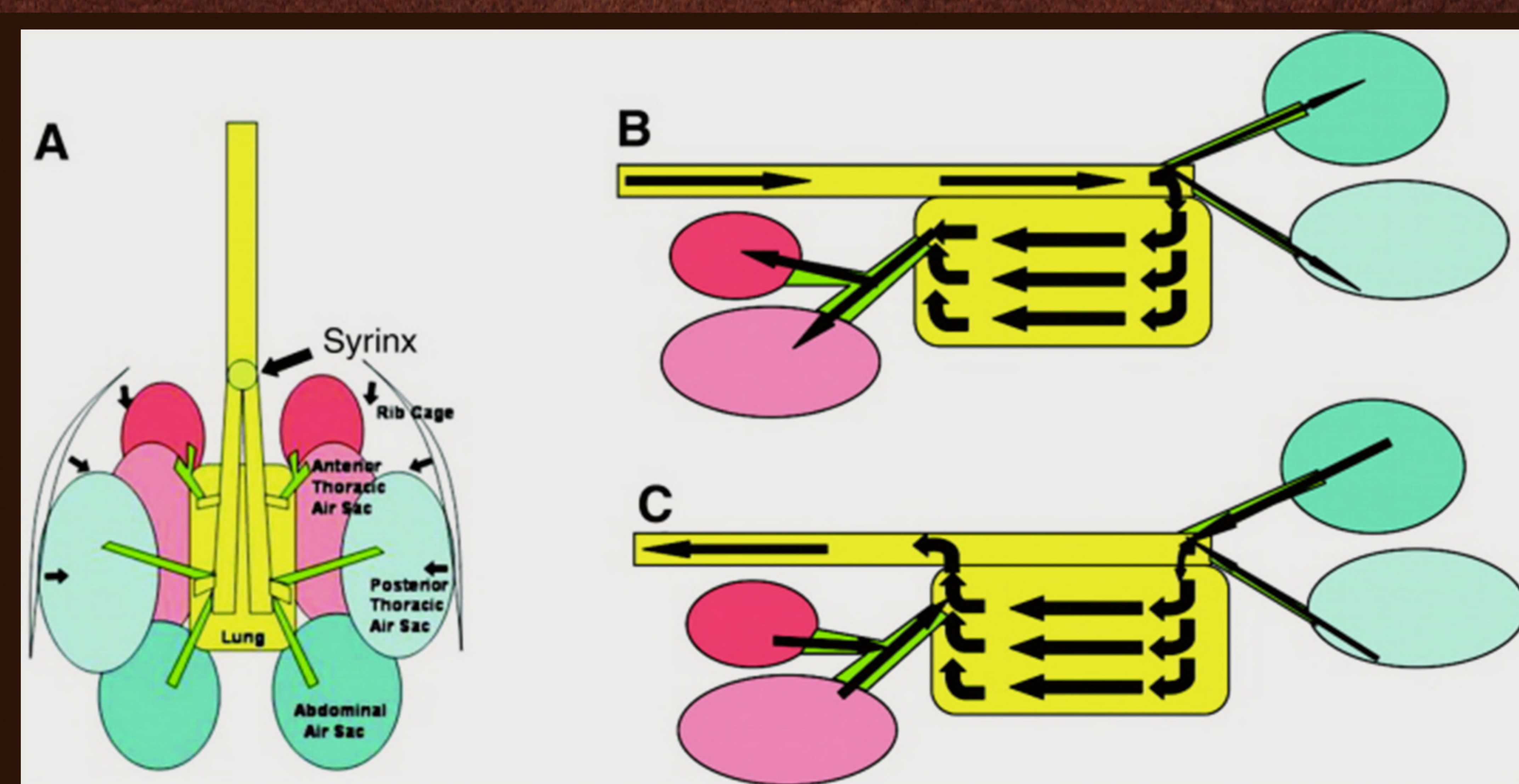
Dolphins use high-frequency sounds to navigate in dark waters. The shape of the face is designed to detect echoes from their sounds, enabling them to detect objects in the water.



- Dolphins have a single nostril (blowhole) on the top of their head, so they can reach the air easily.
- Dolphins exchange 80% or more of the air in their lungs with each breath (humans only 17%).
- Dolphins have a water-proof muscular flap that covers their nostril, preventing water from entering.
- Dolphins have a streamline shape that enables them to swim smoothly through the water.

Birds are designed for flight

The bird respiratory system is unique. During inhalation, part of the air flows through the lungs and into a set of air sacs connected to the front end of the lungs. The rest of the air flows directly into a set of air sacs set connected to the rear of the lungs. During exhalation, air in the front air sacs flow directly outward from the body, while air from the rear set of air sacs flows forward through the lungs. This means that fresh air flows through the lungs during both inhalation and exhalation. Such an efficient system is needed to provide the oxygen required to sustain flight.



A diagram of the avian respiratory system, illustrating the major air sacs and their connections to the lung.

- (A) The lateral and dorsal direction of motion of the rib cage during exhalation is indicated by arrows.
 (B) The direction of airflow during inhalation.
 (C) The direction of flow during exhalation (From: Plummer and Goller 2008).