

THE CORAL REEF

What are the characteristics of a coral reef environment?



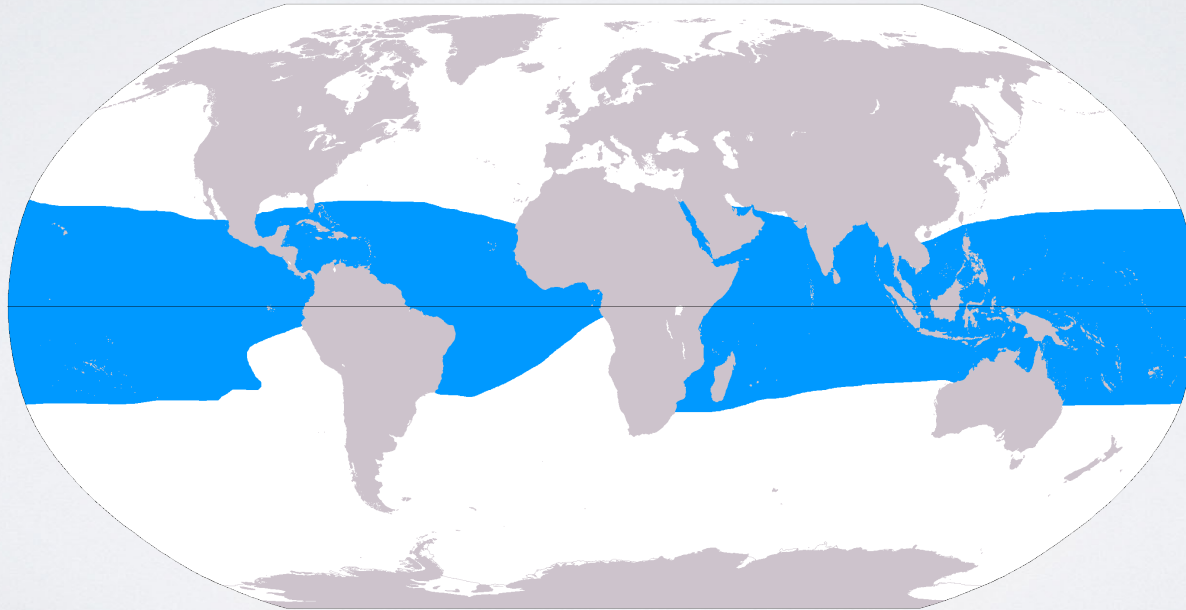
THE CORAL REEF

- Coral Reef - stony formation that is built up from the ocean floor by living organisms
- Coral reefs are the “rain forests” of the ocean due to their abundance of life



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- Coral reefs are found in tropical and subtropical waters



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- Coral reefs form when coral polyps combine calcium and carbon dioxide in their tissue and excreted calcium carbonate (CaCO_3)
 - CaCO_3 is also known as limestone



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- Coral Polyps - tiny mound of tissue (related to sea anemones and jellyfish) that contains a saclike digestive tracts
 - Responsible for the structure of coral reefs





Time Laps Coral Reefs

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- Symbiosis - relationship of mutual benefit or dependence
- Most reef-building corals contain photosynthetic algae called zooxanthellae that live in their tissues
 - The coral provides the algae with a protected environment and compounds needed for photosynthesis and in return the algae produce oxygen and help the coral to remove wastes

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- Coral reefs support a wide variety of marine life with as many as 4,000 fish species living by or in coral reefs world wide
 - Some fish rely on the reefs for protection



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- Coral reefs are important because they:
 - Provide protection for marine species
 - Preserve an environmental balance
 - Regulate CO₂



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- Different types of coral reefs include:
 - Atoll Reef - a string of coral islands that form a circle around a sunken island
 - Fringing Reef - a shallow reef that grows directly from the shoreline and extends right to the beach
 - Barrier Reef - a reef running parallel to the shore but separated from it by a channel of deep water



Atoll Reef



Fringing Reef



Barrier Reef

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- The largest coral reef is the Great Barrier Reef
 - Located in Australia
 - Can be seen from space
 - 133,000 square miles
 - 2,900 individual reefs



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Marine life in and around the reef will be cover soon...



Sharks



Sea Turtles



Clown Fish