



# NOAA Jeopardy

## Grades 9-12: Ocean

### Available Categories

- Begins with 'S'
- Name the animal
- Ecosystems
- Tides & currents
- Protected species
- Sea turtles
- At the movies
- Hodgepodge
- Bodies of water
- Rip currents

### Begins with 'S'

Answer	Question
Amount of salt in water	What is Salinity?
Pacific Northwest anadromous fish	What is a Salmon?
Organisms living together, both benefiting from the association	What is Symbiosis?
Used by instruments to measure depth	What are sound waves?
Book that began environmental movement	What is 'Silent Spring'?



## Name the Animal

Answer	Question
Main character in 'Jaws'	What is a Great White Shark?
Small oceanic drifting plants	What are phytoplankton?
Largest animal that has ever lived	What is the Blue Whale?
Bivalve mollusk with many 'eyes'	What is a scallop?
'Recently' discovered fish previously thought to be extinct	What is a Coelacanth?

## Ecosystems

Answer	Question
Aquatic name for where the rivers meet the sea	What is an Estuary?
Living place of organism, characterized by its physical and biological properties	What is a habitat?
Rock outcroppings where seawater collects	What is a tide pool?
Calcium carbonate skeleton & zooxanthallae	What is a coral reef?
Deepest ocean zone	What is the hadalpelagic zone?



## Tides and Currents

Answer	Question
Warm current off the eastern US coast	What is the Gulf Stream?
Apparent force that causes freely moving objects to deflect to the right in the Northern hemisphere	What is the Coriolis Force?
Narrow surface current moving from shore at an abnormally rapid speed	What is a rip current?
Tide type that always has 2 equal highs and 2 equal lows per day	What is a semi-diurnal tide?
Tide seen when the moon is on the opposite side of the earth from the sun	What is Spring Tide?

## Hodgepodge

Answer	Question
NOAA Administrator	Who is no one?
Non-native species that cause harm	What is an invasive species?
Plastic 6 pack rings; monofilament line; plastic grocery bags	What is marine debris?
Chased by Captain Ahab	Who is Moby Dick?
Deepest spot in the world's oceans	What is the Marianas Trench?



## Protected Species

Answer	Question
Congress passed this law in 1973 to protect threatened and endangered species	What is the Endangered Species Act?
Seals, sea lions, and walrus are part of this order of marine mammals?	What are pinnipeds?
Whales, dolphins, and porpoises are part of this order of marine mammals?	What are Cetaceans?
This fish turns red at spawning time	What is a sockeye salmon?
Most endangered marine species	What is the Right Whale?
Congress passed this law in 1973 for the protection of marine mammals	What is the Marine Mammal Protection Act?
Only marine invertebrate listed under the Endangered Species Act	What is the white abalone?
Two characteristics of whales used by scientists for identification	What are (pick 2) fins, flukes, callosities, or head shape?
Term used to describe being born in fresh water, migrating to the ocean to grow as adults, and then returning to fresh water to spawn	What is anadromous?
Only type of seal that lives in the tropics	What is the Hawaiian Monk Seal?



## Sea Turtles

Answer	Question
The largest species of marine turtle	What is the leatherback turtle?
Device designed to keep turtles out of fishing nets	What is a Turtle Excluder Device?
Sea turtle shell used to make 'tortoise shell' items	What is the Hawksbill turtle?
Hawksbill, Green, Leatherback, Olive Ridley, Kemp's Ridley, and Loggerhead	What are the sea turtles listed as endangered or threatened under the Endangered Species Act?
Regulates sea turtles when they are on land	What is the Department of the Interior Fish and Wildlife Service?

## At the Movies

Answer	Question
Father tries to find his son	What is 'Finding Nemo'?
Fish lies and vegetarian diets	What is 'Shark Tale'?
New England community terrorized by shark	What is 'Jaws'?
Boy spray paints tank, Killer whale escapes	What is 'Free Willy'?
Boy and dolphin become friends	What is 'Flipper'?



## Bodies of Water

Answer	Question
Ocean near Antarctica	What is the Southern Ocean?
Lies south of Louisiana and north of Central America	What is the Gulf of Mexico?
Rock of Gibraltar stands at the mouth	What is the Mediterranean Sea?
Found between Alaska and Russia	What is the Bering Sea?
Colorful sea found between Saudi Arabia and Sudan	What is the Red Sea?

## Rip Currents

### *Rip Currents True or False*

Answer	Question
Rip currents only occur in beaches near the ocean	What is False?
Rip currents can be very narrow or more than 50 yards wide	What is True?
Rip currents do not affect strong swimmers/Olympic swimmers	What is False?
A break in an incoming wave pattern means a rip current	What is True?
If you are caught in a rip current, it is important to fight the current	What is False?



## Rip Currents

### *Rip Current Statistics True or False*

Answer	Question
Around 100 people die in rip currents each year in the U.S.	What is True?
Most victims are in the ocean waters of Florida, California, and Carolinas	What is True?
Rip currents also kill people in the Great Lakes	What is True?
The chance of drowning at a beach protected by lifeguards affiliated with USLA is 1 in 18 million	What is True?
More people die in rip currents than the deaths from hurricanes, lightning, flooding, and tornadoes	What is True?

## Rip Currents

### *Rip Current Formation*

Answer	Question
Sequence of rip current formation stages – wave travels to beach, waves break on sandbar, water runs off beach through a channel	What is waves break on sandbars, wave travels to the beach, water runs off beach through a channel
Rip currents become dangerous under these conditions	What is during high surf conditions as the wave height and wave period increases?
This is proportional to amplitude or height squared	What is wave energy?
The longer the period between waves A. the longer the waves, B. the faster the waves move, C. the more momentum the waves carry	What is A, B, & C (or all)



## Rip Currents

### *Types of Rip Currents*

Answer	Question
This type of rip current is short in duration (less than 10 minutes)	What is a flash current?
This type of rip current develops along jetties, piers, and groins	What is a permanent rip current?
This type of rip current is dependent upon shape of coast, bays, points, reefs, or sand bars	What is a fixed rip current?
This type of rip current occurs with long shore current	What is traveling current?
A long shore current may push a swimmer into A. Flash rip current, B. Permanent rip current, or C. Fixed rip current?	What is A, B, & C (or all)?

## Rip Currents

### *Rip Current Safety True or False*

Answer	Question
Rip currents do not pull people under the water – they pull people away from the shore	What is True?
Undertow and riptides are the same as rip currents	What is False?
Rip currents only occur in oceans near beaches	What is False?
Rip currents can be very narrow or more than 50 yards wide	What is True?
Rip currents do not affect strong swimmers/Olympic swimmers	What is False?



## Rip Currents

### *Principle Reasons Why People Die in Rip Currents True or False*

Answer	Question
Poor swimmers	What is True?
Unaware of hazardous conditions	What is True?
Intoxication	What is True?
No flotation device	What is True?
Panic and swim directly toward shore against the rip current, become exhausted and drown	What is True?