

# OCEANS OF FUN TRIVIA

## AGES

Multigenerational

## PROGRAM DESCRIPTION

Give patrons a chance to learn and share how much they know about the ocean! For a virtual program, use Zoom (or any other live instruction format) and the virtual quiz platform, Kahoot! (or any other sequential presentation software). A Jeopardy-style game would also work well, especially for libraries whose patrons don't all have access to their own devices. This makes a fun family program. See Printables for quizzes for all age groups. Suggested runtime: 30 min.



Image source: Shutterstock

Outcomes:

- Participants will engage with each other in friendly competition
- Through gamifying learning, participants will learn important facts about the ocean, biodiversity, pollution, and climate change

## MATERIALS AND PREPARATION

Materials:

- Computer (host)
- A virtual program hosting platform (e.g., Zoom, Google hangout, etc.) (host)
- The Kahoot quiz/es you will be using (host)
- Prizes, real or virtual (host)
- Access to the virtual platform (phone/tablet/computer) (participants)
- Access to [www.kahoot.it](http://www.kahoot.it) or the Kahoot! App (participants)

## GAME/ACTIVITY | LOW COST

Before the program, use the online quiz platform Kahoot, PowerPoint, or Google Slides to create a trivia contest. Tailor your contest to the topics that are most interesting to your teens, such as ocean animals, pirates, climate change, movie trivia, etc. See Resources for quizzes.

To run:

- Explain the procedure and rules to your participants. For example, “We’re going to be using the Kahoot! website on your phones/tablets/computers. Go to [www.kahoot.it](http://www.kahoot.it) and enter the game pin. Answer the questions as quickly as you can to earn more points!”
- Offer prizes to the individual or teams that score the most points for guessing correct answers

## UNIQUE SPACE AND/OR PERSONNEL NEEDS

Solo-librarian friendly.

## RESOURCES

### Web

Free trivia app Kahoot: [www.kahoot.com](http://www.kahoot.com)

How to create learning games from Kahoot: <https://bit.ly/3vy1lw8>

Kahoot! Ocean Quizzes from National Geographic: <https://bit.ly/2SCn38U>

Trivia questions from Free the Ocean: <https://bit.ly/3fpQnZf>

Quiz scorekeeping spreadsheet from Table Quiz Helper:  
<https://bit.ly/2QYcFYV>

### Books

#### Non-fiction

*The Sea: Trivia, Crafts, and Recipes Inspired by the World’s Best Shorelines, Beaches, and Oceans* (2019) by Isobel Carlson (YA)

*Fun Facts About The Ocean For Kids* (2019) by A.D. Largie and Sabrina Pichardo (children’s)

*Oceans: Discover the Beauty of our Underwater World* (2017) by Daniel Gilpin (adult)

### Printables

Ocean Trivia

# OCEAN TRIVIA

## Trivia Questions: Ocean Tides and Weather

### Children

1. What object in outer space is mainly responsible for the Earth's tides? **The Moon**
2. How often do tides usually happen? **Two high tides and two low tides per day.**
3. Why does the moon have a bigger effect on Earth's tides than the Sun? **Because it is closer.**
4. What is caused by the wind blowing over the surface of the water? **Waves**
5. What is the chemical formula for water? **H<sub>2</sub>O**
6. A long, high sea wave caused by an earthquake, submarine landslide, or other disturbance is called what? **A tsunami**
7. Tides are caused because the moon's gravity is pulling the water (**up** or down), while the earth's gravity is pulling the water (up or **down**).
8. Where do jet streams form? **At the boundaries between hot and cold air masses.**
9. Where are jet streams found? **Six to nine miles above the Earth.**
10. Can a plane fly through a jet stream? **Yes**

### Teens

1. Tides are affected by the Moon's what? **Gravitational pull**
2. What is a basic definition of a tide? **Tides are very long-period waves that move through the oceans in response to the forces exerted by the moon and sun.**
3. What is a strong, offshore current that is caused by the tide pulling water through an inlet along a barrier beach, at a lagoon or inland marina where tide water flows steadily out to sea during ebb tide. **A rip tide**
4. How do you spot a rip tide? **a) A gap in the waves. Not between one wave and the next but within the line of the waves, perpendicular to the shore; b) A channel of particularly choppy water or break in the waves. c) A channel of seaweed or other debris visibly moving away from the shore. d) Discolored water, caused by sand and other sediment picked up by the current.**
5. What astrologer, astronomer, and mathematician suggested that the moon was responsible for tides, in 1609? **Johannes Kepler.**
6. The tides which cause most damage to our beaches and occur at full and new moon phases are? **Spring tides**
7. What happens when a plane flies in the same direction as a jet stream? **When an airplane is flying in the same direction as the stream of air, it can travel very fast and use up less fuel.**
8. If you live in the United States, you are most affected by the \_\_\_\_\_ jet stream because it flows across most of the land. **Polar jet stream**
9. The \_\_\_\_\_ jet stream tends to stay to the south of the U.S. border. **Subtropical**
10. Jet streams affect the path of what tropical weather occurrence? **Hurricanes**

### Adults

1. Name three natural occurrences that affect water levels. **Rain, hurricanes, and tides**
2. What is a neap tide? **A less than average tide occurring at the first and third quarters of the moon.**
3. Where are the highest tides in the world found? **The Bay of Fundy**
4. The sun's gravitational effect on tides is \_\_\_\_ that of the moon. **50%**
5. What are the two principal factors that produce tides? **Gravitational attraction and centripetal force**
6. Where on Earth are tides the weakest? **At the Equator.**

## Trivia Questions: Ocean Creatures

### Children

1. What is the largest fish in the world? **Whale shark**
2. What creature has a secret pocket in their armpit to store food? **Sea otter**
3. Which species of sea creature does the male give birth and care for the babies? **Seahorse**
4. Which sea creature sleeps with one eye open? **Dolphin**
5. What color are clownfish? **Orange and white**
6. At 188 decimals, the call of what animal is the loudest sound made by any animal on the planet. **Blue whale**
7. Where is a shrimp's heart? **In its head**
8. What creatures have no head, mouth, eyes, feelers, bones, heart, lungs, or brain, yet they are alive? **Sea sponges**
9. What creature lives on every continent except Antarctica? **Turtles**
10. Do sharks have bones? **No, they have cartilage.**

### Teens

1. Sharks are covered with tiny little teeth called? **Dermal denticles.**
2. About how long can a shark go without eating? **Six weeks**
3. What is the world's smallest known fish? **Tiny goby**
4. How do fish "breathe"? **Through their gills**
5. How many kinds of lobsters are there in the US? **Two: American and spiny**
6. What do oysters and clams eat? **Plankton**
7. What is the average size of a giant squid? **14 Meters**
8. How many species of starfish are there? **2,000**
9. How many hearts does an octopus have? **Three**
10. What fish is immune to the anemone's tentacles stinging cells called nematocysts? **Clownfish**

### Adults

1. What fish produces its own antifreeze to keep the blood flowing? **Atlantic wolffish**
2. Which fish can literally turn itself inside out when under attack? **The deep sea cephalopod or the "vampire squid"**
3. What color is a lobster's blood? **Colorless**
4. How does a lobster grow? **Molting or shell-shedding.**
5. How does an oyster make a pearl? **When a foreign substance such as a grain of sand lodges in its shell, the oyster reacts by depositing layers of nacreous (pearl-like) material around the foreign body to wall it off and reduce irritation.**
6. Which fish possess venom that's 1,200 times more poisonous than cyanide? **Pufferfish or blowfish.**