



## Grades 9-12

### **Big Pacific, Part 2- “Violent”**

Plunge into the Pacific with researchers and cinematographers and see the ocean's rare and dazzling creatures in a way never before seen on television. Filmed in cinematic 4K, the program examines an ocean that covers a third of the Earth's surface.

Understand how the Pacific, surrounded by the Ring of Fire, is the epicenter of natural mayhem. Violence is part of life in the great ocean, and creatures that live there must choose whether to avoid conflict-or rise to meet it.

Surrounded by the Ring of Fire, the Pacific Ocean is the epicenter of natural mayhem. Violence is part of life in the Pacific, and the creatures that live here must choose whether to avoid conflict...or rise to meet it.

**After watching this episode, choose from the following questions and/or tasks to extend your learning**

#### **Question Box 1**

- What rare and dazzling creatures have been found in the Pacific?
- What is “The Ring of Fire”?
- Why does this “ring” surround the Pacific?
- Why is the Pacific Ocean the epicenter of natural mayhem?
- How is violence a part of life in the Pacific?
- What creatures within the Pacific avoid conflict?
- What creatures within the Pacific rise to meet its conflict?

#### **Question Box 2**

- How does the Pacific Ocean contribute to life outside the ocean?
- Now that it's over, what are my first thoughts about this topic? Are they mostly positive or negative? Explain.
- What were some of the most interesting discoveries I made while watching this TV program?
- What were some of my most powerful learning moments and what made them so?

#### **Question Box 3 (Tasks)**

- Make a poster that illustrates the rare and dazzling creatures that have been

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discovered in the Pacific. Be sure to write a description for each creature that tell what it is, what it does and where it was found.

- The Ring of Fire is approximately 25,000 miles long with 452 active volcanoes. If the volcanoes were evenly spaced, what would be the maximum distance a volcano could be from the coast of Los Angeles?
- Describe the Ring of Fire and its relationship to earthquakes and volcanoes.
- Describe the relationship of the Ring and Fire and plate tectonics.
- Describe the Ring of Fire as an environmental isolation mechanism and give specific examples.
- Create a presentation or pictorial representation of the Ring of Fire.

#### **Question Box 4 (Enrichment)**

- Discover what creatures have been found in the Atlantic Ocean. How do they compare to those found in the Pacific. Why don't the two oceans have the same creatures in them? (ELD) You may use academic words like these: “similar to, unlike, in the same way, in contrast, on the contrary, nevertheless, on the one hand, on the other hand...”
- Develop a model of a subduction zone located within the Ring of Fire and diagram how this structure results in earthquakes and volcanoes.
- Develop a model that demonstrates how South America and Africa were once connected and, once separated, how their biomes changed.

#### **Question Box 5 (Extend/Real-Life)**

- How are volcanoes, earthquakes and tsunamis related?
- Research and list the titles of scientists who study volcanoes, earthquakes and tsunamis.
- Considering we live in California why is it important to have scientists trained in these areas?
- Watch this video about lessons saving lives:  
<https://www.youtube.com/watch?v=V0s2i7Cc7wA>
- Have you ever used knowledge learned in one of your classes to do something positive? If so, what was the lesson and how did you use it?
- **What if:** Plan for a disaster.
  - Make a list of items that would be important to have in a disaster kit.
  - Draw a map of your house/apartment marking all of possible exit routes.
  - List all of the emergency phone numbers that may be needed.
  - Determine a “meet up” spot in case everyone has to evacuate separately.
  - Review your plan with your parents or siblings and discuss how it can be improved or implemented.