

RECOMMENDED GRADES: 3-5



TIME NEEDED: 30-45 MINUTES

Description

Play a fun game that locates the trenches of the Pacific and the directional movement of the oceanic plates.

Learning Objectives

Students will:

- provide knowledge of oceanic trenches and the Pacific "Ring of Fire" while playing a game based on the Duck-Duck-Goose classic

Materials

- Extension cord (optional)
- Poly Arrows (8 total: 4 red, 4 green) (optional)
- String of red holiday lights (optional)

Preparation

5 minutes

- Place the red and green poly arrows on the map representing the direction the plates are moving. (See reference map at end of activity.)
- Plug in holiday lights and use extension cord if needed.

Tips/Modifications

Modification

- Substitute red holiday lights with red rope or have students create paper chains using red paper.
- Have students create red and green arrows using construction paper as a substitute for the poly arrows.

Rules

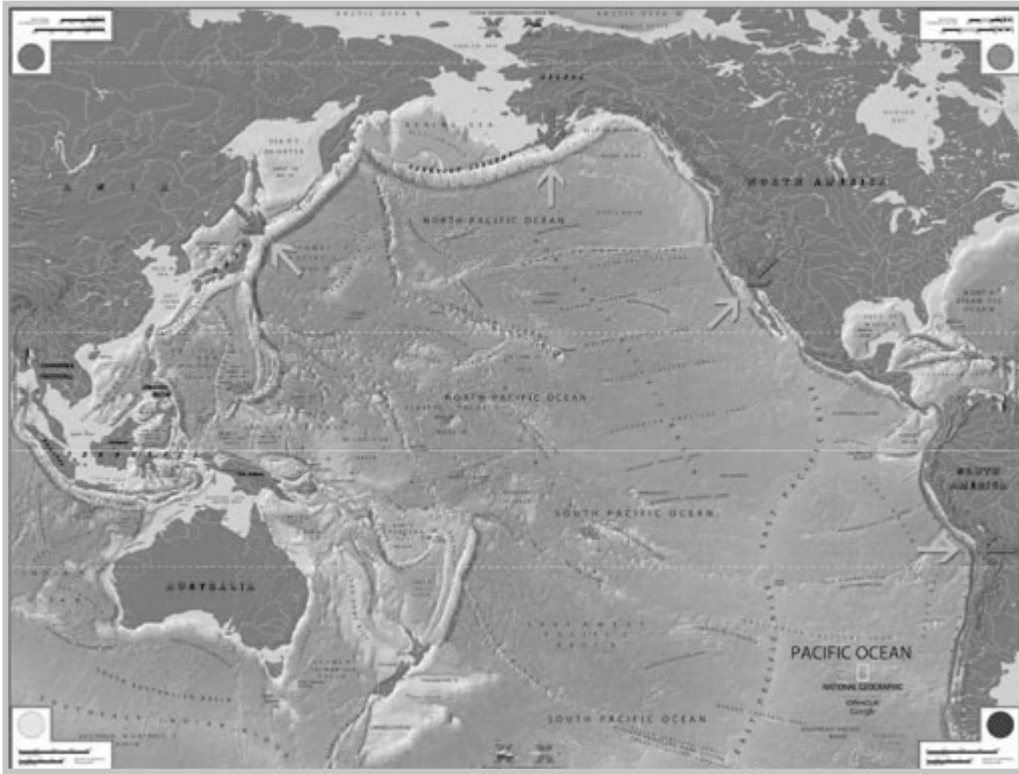


Have students remove shoes before walking on the map.

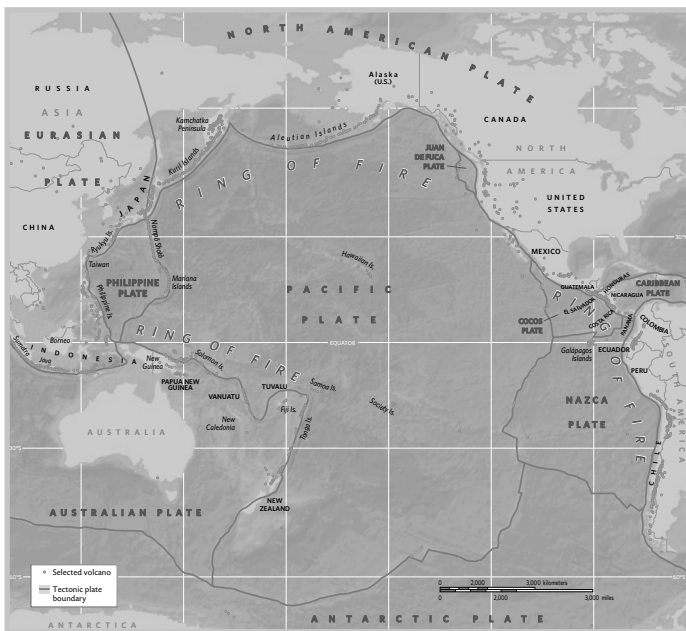
DIRECTIONS

1. Instruct students to listen for their name as you walk along the Ring of Fire and point to a spot for each of them to be seated. Forming a large, upside down U, have the first student sit on the North Island of New Zealand and the last student sit in the Peru-Chile Trench along South America. Make sure students are spread across the whole Ring of Fire (use reference map provided at the end of this activity).
2. Give each student part of the string of red holiday lights to hold representing the volcanoes along the Pacific plate.
3. Introduce the following facts about the Ring of Fire and the Pacific Ocean:
 - The Pacific Ocean is very large. It is big enough for all of the world's continents as well as an additional Africa to fit inside!
 - The Ring of Fire is home to 75% of all active volcanoes in the world.
 - A trench is formed when one plate is subducted by another. Usually, this leads to intense volcanic and earthquake activity.
 - There are many trenches along the Ring of Fire. This map of the Pacific Ocean has twenty-two identified (see Pacific Ocean Features list).
 - Use poly arrows and the trench map provided to illustrate the directional movement of the plates on the map. Use green arrows for the movement of the oceanic plate and red arrows to illustrate the movement of the continental landmass plates. In each case, the two arrows should be pointing at one another representing converging plates.
4. Have students play a game of Duck-Duck-Goose. Explain the rules of the game to students. As students are seated around the Ring of Fire, one student walks around the outside of the ring and taps each classmate lightly on the head saying, "trench" each time. Once the student tagger picks a classmate and screams, "rise!" the student picked jumps up from their trench, screams the name of the trench she is sitting on, and runs to try to catch the tagger before he reaches his own trench and sits on it. If the student is not successful, they are the new "tagger," and the game begins once again. Play as many rounds as time permits. Instruct students to be careful as they run around the Ring of Fire. All other "trenches" sitting on the ring must keep their hands, feet, and string of holiday lights on the inside of the circle so there is no danger of chasers tripping and getting hurt.

TRENCH MAP



RING OF FIRE



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