***Investigation 2: How do we recognize plate boundaries? Assessment***

Answer the questions below in complete sentences.

1. What major plate lies west of the North American plate?

*The major plate west of the North American plate is the Pacific plate.*
2. What plate lies northeast of the North American plate?

*The plate NE of the North American plate is the Eurasian plate.*
3. What plate borders the North American plate to the southeast?

*The plate that borders the North American plate to the southeast is the African plate.*
4. Which three plates border the North American plate to the south?

*The Caribbean, Cocos, and South American plates border the North American plate to the south*.
5. What plate borders the North American plate in the U.S. Pacific Northwest?

*The plate that borders the North American plate in the U.S. Pacific Northwest is the Juan de Fuca Plate.*

1. How are earthquakes and volcanoes related to plate boundaries?

*Earthquake clusters occur on or very near plate boundaries. Volcanoes occur about 100 kilometers away from a plate boundary in the overriding plate.*

1. What kind of plate boundary separates the North American and Eurasian plates?

*A divergent plate boundary separates the North American and Eurasian plates*.

1. What kind of plate boundary separates the North American and Pacific plates at 31˚ latitude,
-115˚ longitude?

*A transform plate boundary separates the North American and Pacific plates at 31˚ latitude,
 -115˚ longitude.*

1. What kind of plate boundary separates the North American and Pacific plates at 55˚ latitude,
-160˚ longitude?

*A AAconvergent plate boundary separates the North American and Pacific plates at 55˚ latitude, -160˚ longitude.*

1. What type of plate boundary is located between the North American and Juan de Fuca plates?

*A convergent plate boundary is located between the North American and Juan de Fuca plates*.

1. What type of plate boundary is located between the Pacific and Juan de Fuca plates?

*A divergent plate boundary is located between the Pacific and Juan de Fuca plates.*

1. What types of lithosphere make up tectonic plates?

*Tectonic plates are made up of continental and oceanic lithosphere.*

**Assessing the exported map images:**

**Step 2-3: Trace the North American plate boundaries**



Students’ exported images should include 3 boundaries drawn by tracing the earthquake clusters:

1. The western edge of the North American plate boundary.
2. The eastern edge of the North American plate boundary.
3. The east-west boundary dividing the Eurasia and Africa plates to the east of the North American plate.

**Step 4: Revisit the U.S. Pacific Northwest and trace the Juan de Fuca plate using volcanoes**



Students’ exported images should include the eastern edge of the Juan de Fuca plate made by tracing the line of volcanoes in the U.S. Pacific Northwest.