

# Plate Boundaries

Name:

Date:

**INQUIRY**

**Why does Japan have over 1,500 earthquakes per year, but Germany has almost none?**

Discuss with your partner. Write your initial ideas below:

## Key Vocabulary

Term	Definition
<b>Convergent</b>	Plates move toward each other. Mountains, subduction.
<b>Divergent</b>	Plates move apart. New crust forms in the gap.
<b>Transform</b>	Plates slide past each other. Causes earthquakes.
<b>Subduction</b>	One plate slides under another into the mantle.

## Part A — Knowledge

1. Name the three types of plate boundary and describe the movement at each one. [6 marks]

2. What is subduction? At which type of boundary does it occur? [2 marks]

3. The Tan-Lu Fault runs near Nanjing. What type of boundary is this most similar to? [3 marks]

## Part B — Application

---

4. The Himalayas formed when the Indian Plate collided with the Eurasian Plate. What type of boundary is this? The mountains still grow ~1 cm per year — explain why. [3 marks]

5. The Rhine Graben in Germany is a rift valley. What type of plate boundary created it? [3 marks]

6. South Korea's Gyeongju earthquake (2016, M 5.8) was the largest in Korean recorded history. Why does Korea experience fewer earthquakes than Japan? [4 marks]

## Part C — Inquiry Extension

---

7. A new island has appeared in the Pacific Ocean due to volcanic activity. What type of plate boundary is most likely responsible? Explain step by step. [4 marks]