

PLATE TECTONICS

Grammar: Expressing Purpose

Task 1. Use the words below to complete the summary on plate tectonics.

separation theory interact evidence type three
careful divergent surface ridges

Geology 201 Essay

Plate Tectonics

Plate tectonics is the science of the movement of the Earth's (1) _____ .

Prior to plate tectonics, scientists debated a (2) _____ called continental drift. It's a companion theory to plate tectonics. Through (3) _____ research, plate movement was proved through physical (4) _____ .

There are (5) _____ major types of boundaries. Convergent, (6) _____ , and transform boundaries are locations where plates (7) _____ in some way. The interaction may be a collision, (8) _____ , or subduction.

Depending on the (9) _____ of movement, certain geologic features develop. Oceanic (10) _____ and trenches are the result of plate movement.

Task 2. Match the sentence halves to form complete sentences expressing purpose. Write the letters in the boxes.

1. Geologists study convergent boundaries []
2. Seismologists use high-precision seismographs []
3. Engineers design earthquake-resistant buildings []
4. Scientists monitor movements along fault zones []
5. Governments invest in early warning systems []

Options to choose from:

- a. so that they can record the exact magnitude of ground vibrations.
- b. with the aim of notifying the public seconds before a disaster hits.

- c. for the purpose of preventing structural collapse during seismic activity.
- d. so as to improve the quality of urban transportation.
- e. to examine the processes that lead to the formation of mountain ranges.
- f. in order to map areas where tectonic stress is accumulating.

Task 3. Choose the correct option to complete each sentence.

1. A GPS system is used _____ tracking plate movements.
a) in order to b) for c) so that
2. Volcanoes release gases _____ regulate pressure inside the Earth.
a) to b) with the aim of c) for
3. Scientists monitor tectonic activity _____ prevent disasters.
a) in order to b) with a view to c) for
4. Remote sensing technology is used _____ monitoring deforestation and land degradation.
a) in order to b) for c) to
5. Engineers develop early warning systems for tsunamis _____ coastal communities can evacuate in time.
a) so that b) for c) with the aim of
6. Seismologists study fault lines _____ reducing earthquake hazards.
a) with the aim of b) in order to c) for
7. Climate scientists analyze atmospheric patterns _____ they can predict future weather trends.
a) so that b) with a view to c) for
8. Geodesists measure the Earth's gravitational field _____ improve satellite navigation accuracy.
a) in order to b) with the aim of c) for
9. Governments establish conservation areas _____ endangered ecosystems will be protected.
a) in order to b) with a view to c) so that
10. Researchers collect ice core samples _____ examining past climate fluctuations.
a) for b) so that c) to
11. Scientists monitor volcanic gas emissions _____ predicting possible eruptions.
a) in order to b) for c) with the aim of
12. Flood control measures are implemented _____ minimizing damage from rising water levels.
a) with a view to b) so that c) in order to