BRITISH COLUMBIA GEOLOGY 12 (MGEOL12) · UNIT B · 25 QUESTIONS

Earth's Interior, Plate Tectonics and Earthquakes — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **From the surface inward, the main layers of Earth are**



A crust, mantle, outer core, inner core

B mantle, crust, inner core, outer core

C crust, outer core, mantle, inner core

D inner core, outer core, mantle, crust

Understand It with Pulse | Flag a mistake

2 **The crust beneath the oceans is mainly**

A thin and dense basalt

B solid nickel

C thick and light granite

D molten iron

Understand It with Pulse | Flag a mistake

3 **The mantle is best described as rock that is mostly**

A made of pure iron

B the same as the crust

C solid but able to flow very slowly

D completely liquid

Understand It with Pulse | Flag a mistake

4 **Earth magnetic field is generated mainly by motion in the**



A crust

B upper mantle

C atmosphere

D outer core

Understand It with Pulse | Flag a mistake

5 **The lithosphere consists of the crust plus the uppermost part of the**

- A mantle
- B outer core
- C inner core
- D asthenosphere only

Understand It with Pulse | Flag a mistake

6 **The asthenosphere is the layer that allows lithospheric plates to**

- A become part of the core
- B move slowly over it
- C melt completely
- D stop moving

Understand It with Pulse | Flag a mistake

7 **Plate tectonics states that Earth outer shell is divided into plates that**

A melt every century

B float on liquid water

C move slowly over the mantle

D stay fixed in place

Understand It with Pulse | Flag a mistake

8 **At a divergent plate boundary, plates move**

A toward each other

B past each other sideways

C downward into the core

D apart from each other

Understand It with Pulse | Flag a mistake

9 **New oceanic crust forms mainly at**



A mid ocean ridges

B deep ocean trenches

C transform faults

D continental interiors

Understand It with Pulse | Flag a mistake

10 **At a convergent boundary, the denser oceanic plate usually**

- A stops at the boundary
- B sinks beneath the other plate
- C rises over the other plate
- D slides sideways

Understand It with Pulse | Flag a mistake

11 **The process in which one plate sinks beneath another is called**

- A weathering
- B erosion
- C subduction
- D rifting

Understand It with Pulse | Flag a mistake

12 **A transform boundary is one where plates**

A pull apart to form new crust

B collide and form mountains

C melt into the mantle

D slide past each other horizontally

Understand It with Pulse | Flag a mistake

13 **The San Andreas Fault is a well known example of a**

A transform fault

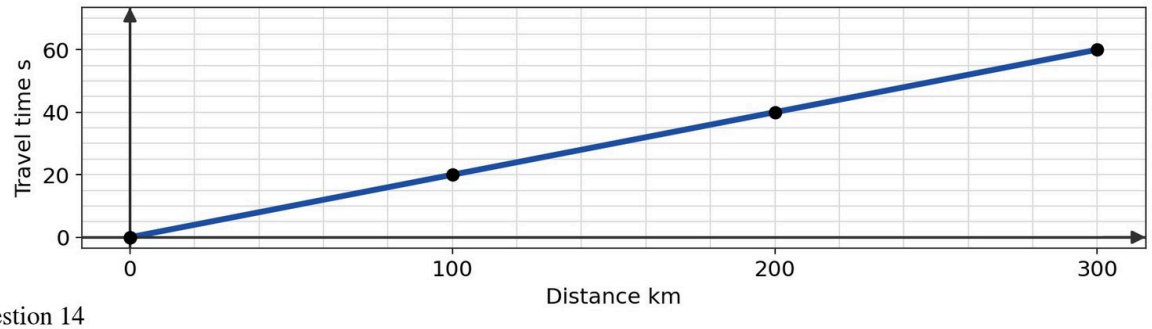
B mid ocean ridge

C subduction zone

D rift valley

Understand It with Pulse | Flag a mistake

14 **The graph shows travel time against distance for a seismic wave. The travel time at a distance of 200 kilometres, in seconds, is**



Question 14

The graph shows travel time against distance for a seismic wave. The travel time at a distance of 200 kilometres, in seconds, is

A) 20

B) 40

C) 60

D) 80

A 20

B 40

C 60

D 80

Understand It with Pulse

Flag a mistake

15 **The point inside Earth where an earthquake starts is called the**

- A crest
- B trench
- C focus
- D epicentre

Understand It with Pulse | Flag a mistake

16 **The point on the surface directly above the focus is called the**

- A focus
- B ridge
- C fault
- D epicentre

Understand It with Pulse | Flag a mistake

17 **P waves travel faster than S waves and are the first to arrive at a seismic station because they**



A compress and expand material along their path

B travel only on the surface

C are slowed by water

D travel through air only

Understand It with Pulse | Flag a mistake

18 **S waves cannot travel through liquid, which tells scientists that part of Earth core is**

A made of gas

B liquid

C solid rock

D empty

Understand It with Pulse | Flag a mistake

19 **A seismograph records**



A ocean temperature

B wind speed

C ground motion during an earthquake

D air pressure only

Understand It with Pulse | Flag a mistake

20 **The moment magnitude scale measures an earthquake mainly by the**

A damage to buildings only

B depth of the ocean

C number of aftershocks

D energy released at the source

Understand It with Pulse | Flag a mistake

21 **An earthquake under the ocean can generate a tsunami when it**



A suddenly moves the seafloor up or down

B warm the ocean surface

C creates a storm at sea

D melts sea ice

Understand It with Pulse | Flag a mistake

22 **The schematic map of Canada shows earthquake hazard levels by region in the data shown. The region at level 3 , the highest level, is**

A Prairies

B British Columbia

C Ontario

D Atlantic

Understand It with Pulse | Flag a mistake

23 **Soil that shakes and behaves like a liquid during strong shaking is an example of**

A rifting

B weathering

C liquefaction

D subduction

Understand It with Pulse | Flag a mistake

24 **A practical earthquake safety step for a home is to**

- A store glass on high open shelves
- B block all exits
- C turn off all lights permanently
- D secure heavy furniture and water heaters

Understand It with Pulse | Flag a mistake

25 **During an earthquake, the safest immediate action indoors is usually to**

- A drop, cover and hold on
- B run outside at once
- C stand under a doorway only
- D use an elevator

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. A
2. A
3. C
4. D
5. A
6. B
7. C
8. D
9. A
10. B
11. C
12. D
13. A
14. B
15. C
16. D
17. A
18. B
19. C
20. D
21. A
22. B
23. C
24. D
25. A

© 2026 Brett Robbins. All Rights Reserved.