YUKON 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

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

A thin and dense basalt

B solid nickel

C thick and light granite

D molten iron

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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

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

A crust

B upper mantle

C atmosphere

D outer core

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

A mantle

B outer core

C inner core

D asthenosphere only

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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

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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

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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

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9 **New oceanic crust forms mainly at**

A mid ocean ridges

B deep ocean trenches

C transform faults

D continental interiors

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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

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

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

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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

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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

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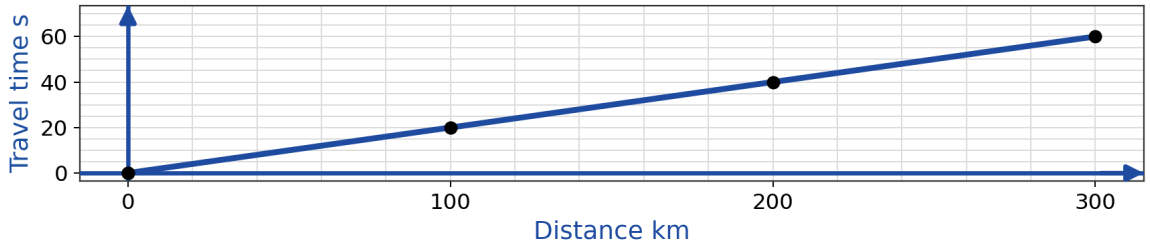
**14** **The graph shows travel time against distance for a seismic wave. The travel time at a distance of 200 kilometres, in seconds, is**




- **A** 20
- **B** 40
- **C** 60
- **D** 80

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

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

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

A focus

B ridge

C fault

D epicentre

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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

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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

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19 **A seismograph records**

A ocean temperature

B wind speed

C ground motion during an earthquake

D air pressure only, measured by a barometer as the weight of the air above a place

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**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

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**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

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22 **The schematic map of Canada highlights British Columbia. Coastal British Columbia has a high earthquake hazard because**

A its crust never moves

B it lies near an active plate boundary

C it lies far from any plate boundary

D it has no faults

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

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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

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