NORTHWEST TERRITORIES PHYSICAL GEOGRAPHY 12 (MPGEO12) · UNIT C · 25 QUESTIONS

The Geosphere and Plate Tectonics — 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

The crust is best described as the outermost layer of Earth, which is thin and solid and is

A thicker under continents than under oceans in general

B liquid through its whole depth

C the largest layer by volume

D made only of iron

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Flag a mistake

2 **The mantle is the layer of Earth below the crust that makes up most of Earths volume and moves slowly by**

A evaporation

B convection

C photosynthesis

D erosion

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3 **The outer core is best described as a layer of liquid iron and nickel whose movement helps generate Earths**

A atmosphere directly

B ocean tides

C magnetic field

D soil layers

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4 **The inner core is solid rather than liquid mainly because pressure at Earths centre is so great that it keeps iron and nickel**

- A frozen by ocean water
- B mixed with air
- C cooled by the mantle
- D solid despite very high temperature

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5 **The lithosphere is best described as the rigid outer shell of Earth made of the crust and the**

- A uppermost mantle
- B outer core
- C inner core
- D whole mantle

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6 **The asthenosphere is the layer below the lithosphere that is hot enough to flow very slowly, allowing plates above it to**

- A stay fixed forever
- B move
- C evaporate
- D turn to gas

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7 **Plate tectonics is the theory that Earths lithosphere is divided into plates that move over the**

- A exosphere
- B troposphere
- C asthenosphere
- D hydrosphere

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8 **At a divergent plate boundary, plates move apart and new crust forms, often at a feature called a**

A deep ocean trench

B fold mountain only

C transform fault only

D mid ocean ridge

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9 **At a convergent plate boundary, plates move together and one plate may sink beneath another in a process called**

A subduction

B seafloor spreading

C weathering

D deposition

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10 **At a transform plate boundary, plates slide past each other sideways, which commonly produces**

A new ocean floor only

B earthquakes with little new crust created or destroyed

C large volcanoes only

D fold mountains only

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11 **In subduction, which plate usually sinks beneath the other?**

A The less dense continental plate

B Both plates equally

C The denser oceanic plate

D Neither plate sinks

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12 **The Ring of Fire is the zone around the Pacific Ocean known for frequent earthquakes and**

A volcanoes along plate boundaries

B tornadoes only

C deserts only

D glaciers only

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13 **Igneous rock forms when molten rock cools and solidifies, either underground as magma or at the surface as**

A sand

B lava

C clay

D peat

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14 **Sedimentary rock forms when sediments are deposited in layers and then compacted and cemented together, often preserving**

A molten lava flows

B metamorphic crystals only

C fossils in the layers

D volcanic ash only

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15 **Metamorphic rock forms when an existing rock is changed by heat and pressure without melting completely, producing new**

A liquid magma

B loose sediment

C fossil fuels only

D minerals and textures

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16 **Weathering is the process that breaks down or alters rock in place, while the transport of the resulting material by water, wind or ice is called**

A erosion

B deposition

C subduction

D condensation

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17 **Erosion differs from weathering because erosion involves the**

A breaking of rock with no movement

B transport of weathered material to a new location

C melting of rock underground

D formation of soil horizons only

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18 **Deposition occurs when transported sediment settles out of water, wind or ice, often forming layers in a riverbed, lake or**

A volcano crater

B mid ocean ridge

C delta

D fault line

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19 **Fold mountains can form at a convergent boundary when layers of rock are squeezed and bent upward by**

A evaporation

B freezing rain only

C ocean currents

D compression

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20 **A river valley with a V shaped cross section is usually formed mainly by**

A river erosion cutting downward into rock

B wind deposition only

C volcanic eruption only

D ocean tides only

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21 **Topsoil is the upper soil horizon that is usually darkest and most fertile because it contains the most**

A bedrock

B organic matter

C gravel only

D salt only

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22 **Soil formation is influenced by parent material, climate, organisms, relief and time, and in a wet warm climate soil usually develops**

- **A** slower in all cases
- **B** only on steep slopes
- **C** faster than in a cold dry climate
- **D** without organisms

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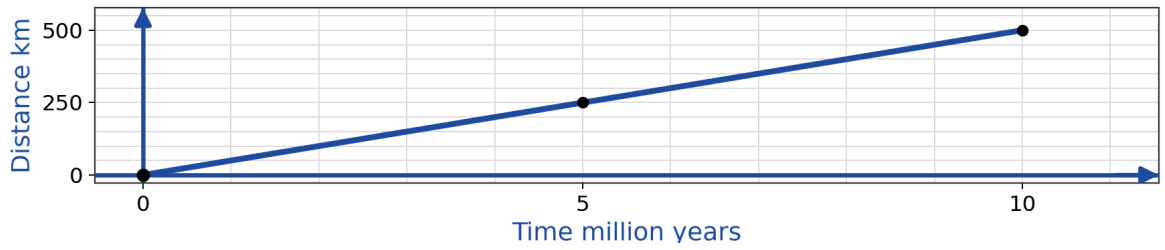
23 **The graph shows distance moved by a plate against time. The distance moved after 10 million years, in kilometres, is**



- **A** 0
- **B** 250
- **C** 100
- **D** 500

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24 **The schematic map of Canada highlights British Columbia. British Columbia is dominated by the mountain system known as the**

- A Cordillera
- B Canadian Shield
- C Interior Plains
- D Appalachian region

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25 **The triangle shows a cross section of a mountain with a base of 4 kilometres and a height of 3 kilometres. The label at the peak of the mountain is**

- A A
- B C
- C B
- D D

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ANSWER KEY

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

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