BRITISH COLUMBIA GEOLOGY 12 (MGEOL12) · FINAL EXAM · 50 QUESTIONS

Final Exam — 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 colour of the powder left when a mineral is scratched across an unglazed plate is called its**

- A density
- B lustre
- C streak
- D fracture

Understand It with Pulse | Flag a mistake

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

- A solid nickel
- B thin and dense basalt
- C thick and light granite
- D molten iron

Understand It with Pulse | Flag a mistake

3 **Magma is molten rock below the surface, while lava is molten rock that has**

A turned into ash only

B reached the surface

C cooled into granite

D mixed with seawater

Understand It with Pulse | Flag a mistake

4 **The principle of superposition states that in undisturbed sedimentary layers, the oldest layer is at the**

A surface

B bottom

C top

D middle

Understand It with Pulse | Flag a mistake

5 **The hardest mineral on the Mohs scale is**

A diamond

B quartz

C topaz

D corundum

Understand It with Pulse | Flag a mistake

6 **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

7 **An eruption is more likely to be explosive when the magma is**

A mixed with river water

B thick, sticky and rich in trapped gas

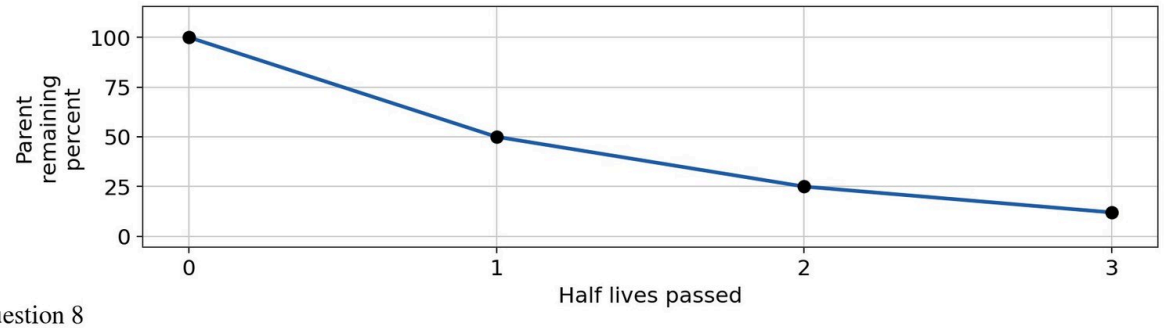
C runny and low in gas

D completely cooled

Understand It with Pulse | Flag a mistake

8

The graph shows the percentage of parent isotope remaining against half lives passed. The percentage remaining after 2 half lives, in percent, is



Question 8

The graph shows the percentage of parent isotope remaining against half lives passed. The percentage remaining after 2 half lives, in percent, is

A) 12

B) 25

C) 50

D) 100

A 12

B 25

C 50

D 100

Understand It with Pulse

Flag a mistake

9 **Quartz is hard and resists weathering mainly because its crystal structure is made of strong bonds between**

A sodium and chlorine

B calcium and carbon

C silicon and oxygen

D iron and carbon

Understand It with Pulse | Flag a mistake

10 **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

11 **A lahar is a destructive flow of**

- A volcanic debris mixed with water
- B pure lava
- C glacial ice
- D desert sand

Understand It with Pulse | Flag a mistake

12 **A fossil is best defined as preserved evidence of**

- A a volcanic eruption
- B a meteorite impact
- C a new mineral
- D past life

Understand It with Pulse | Flag a mistake

13 **On the Mohs scale, a mineral that can scratch glass but is scratched by quartz has a hardness closest to**

- A 7
- B 9
- C 5
- D 6

Understand It with Pulse | Flag a mistake

14 **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

15 **Weathering is the process that**

A moves rock to a new location

B melts rock underground

C cements sediment together

D breaks rock into smaller pieces in place

Understand It with Pulse | Flag a mistake

16 **Trace fossils such as footprints and burrows show mainly how an organism**

A reproduced

B migrated to space

C moved and behaved

D looked in colour

Understand It with Pulse | Flag a mistake

17 **A sedimentary rock made mainly of sand sized grains is**

A sandstone

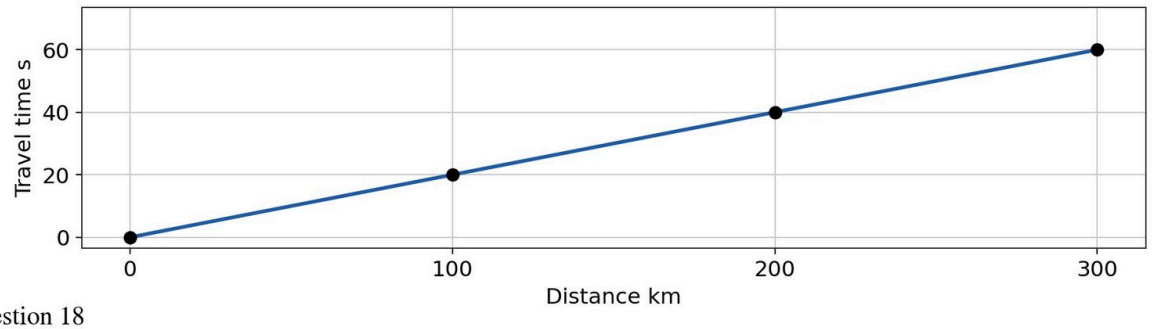
B shale

C granite

D marble

Understand It with Pulse | Flag a mistake

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



Question 18

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

19 **A river valley with a V shape is mainly carved by**

A glacial ice

B wind only

C volcanic lava

D flowing water

Understand It with Pulse | Flag a mistake

20 **The extinction at the end of the Cretaceous is associated with the loss of the non avian**

A first fish

B first mammals

C dinosaurs

D trilobites

Understand It with Pulse | Flag a mistake

21 **Marble is a metamorphic rock that forms from**

A sandstone

B basalt

C granite

D limestone

Understand It with Pulse | Flag a mistake

22 **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

23 **A glacier moves mainly by**

- A being pushed by wind
- B floating on rivers
- C flowing and sliding under its own weight
- D melting completely each summer

Understand It with Pulse | Flag a mistake

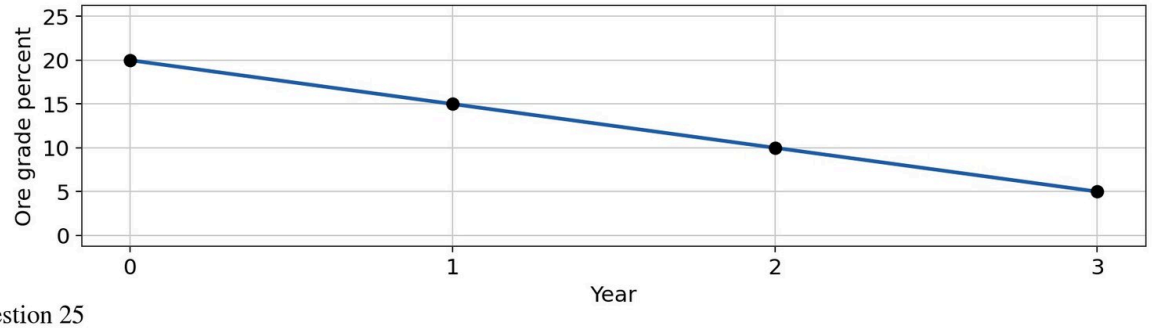
24 **The planets Mercury, Venus, Earth and Mars are called terrestrial planets because they are mainly**

- A made of plasma
- B rocky
- C gaseous
- D icy only

Understand It with Pulse | Flag a mistake

25

The graph shows ore grade over four years at a mine. The ore grade in year 2, in percent, is



Question 25

The graph shows ore grade over four years at a mine. The ore grade in year 2, in percent, is

A) 15

B) 20

C) 5

D) 10

A 15

B 20

C 5

D 10

Understand It with Pulse

Flag a mistake

26 **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

27 **Deposition occurs when a river or glacier loses energy and drops the sediment it was**

A heating

B carrying

C melting

D dissolving

Understand It with Pulse | Flag a mistake

28 **Mars shows dry river channels and minerals that form in water, which suggests Mars once had**

A liquid water on its surface

B no atmosphere at all

C only frozen carbon dioxide

D a thick ocean today

Understand It with Pulse | Flag a mistake

29 **The schematic map of Canada shows mineral resource levels by region in the data shown. The region at level 3 , the highest level, is**

A Prairies

B Ontario

C British Columbia

D Atlantic

Understand It with Pulse | Flag a mistake

30 **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

31 **A hot spot is a place where magma rises from the mantle independently of a plate boundary, forming**

A a chain of volcanoes as the plate moves

B a deep ocean trench

C a river delta

D a fault valley

Understand It with Pulse | Flag a mistake

32 **An unconformity in a rock sequence represents a**

A gap in the rock record

B new mineral deposit

C volcanic eruption

D fossil shell

Understand It with Pulse | Flag a mistake

33 **Granite is best described as an igneous rock that is**

A layered and soft

B made only of calcite

C coarse grained and light coloured

D fine grained and dark coloured

Understand It with Pulse | Flag a mistake

34 **Continental crust is generally thicker and less dense than oceanic crust, and is rich in**

A salt water

B granite like rock

C pure iron

D liquid basalt

Understand It with Pulse | Flag a mistake

35 **Pumice floats on water because it contains many**

A iron crystals

B salt crystals

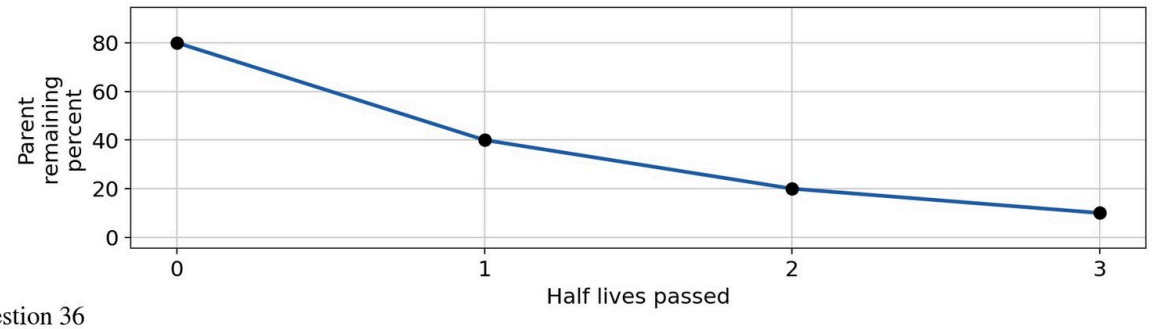
C clay grains

D gas bubbles

Understand It with Pulse | Flag a mistake

36

The graph shows parent isotope remaining for a second sample. The percentage remaining after 2 half lives, in percent, is



Question 36

The graph shows parent isotope remaining for a second sample. The percentage remaining after 2 half lives, in percent, is

A) 40

B) 80

C) 100

D) 20

A 40

B 80

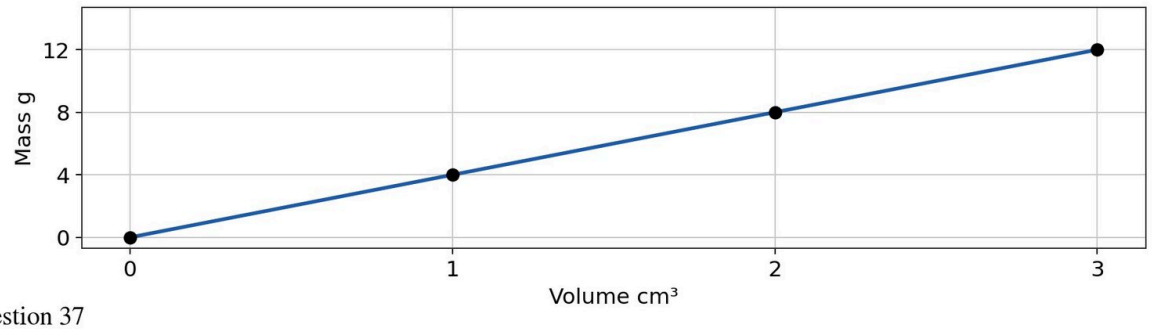
C 100

D 20

Understand It with Pulse

Flag a mistake

37 **The graph shows mass against volume for a second sample. The mass at a volume of 3 cm³, in grams, is**



Question 37

The graph shows mass against volume for a second sample. The mass at a volume of 3 cm^3, in grams, is

A) 12

B) 16

C) 4

D) 8

A 12

B 16

C 4

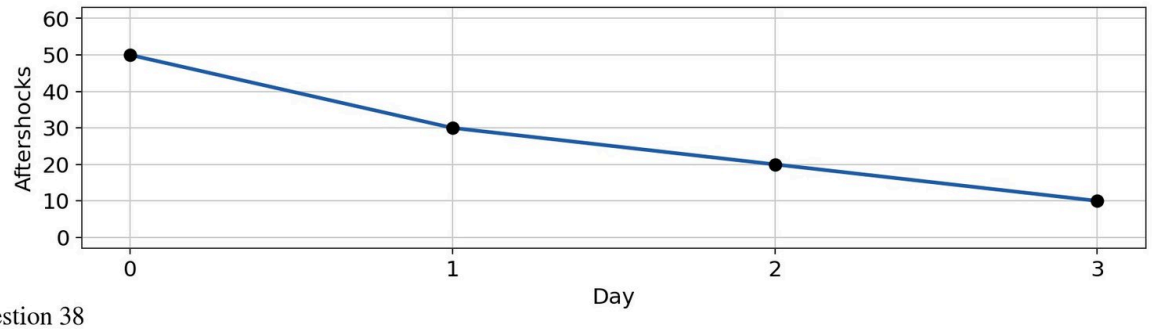
D 8

Understand It with Pulse

Flag a mistake

38

The graph shows aftershock counts after a large earthquake. The aftershock count on day 3 is



Question 38

The graph shows aftershock counts after a large earthquake. The aftershock count on day 3 is

A) 10

B) 20

C) 30

D) 50

A 10

B 20

C 30

D 50

Understand It with Pulse

Flag a mistake

39 **Wind erosion is most effective in dry areas with loose surface material because wind can**

A dissolve calcite quickly

B freeze water in cracks

C pick up and carry sand and dust

D melt rock

Understand It with Pulse | Flag a mistake

40 **Petrified wood forms when minerals replace the original wood material**

A by freezing

B cell by cell over time

C in a single day

D by melting

Understand It with Pulse | Flag a mistake

41 **Shale is a sedimentary rock made mainly of**

A volcanic glass

B recrystallized calcite

C clay sized particles

D large pebbles

Understand It with Pulse | Flag a mistake

42 **Surface waves usually cause the most damage to buildings because they**

A travel through the core

B arrive first

C are too small to detect

D shake the ground strongly at the surface

Understand It with Pulse | Flag a mistake

43 **An erratic is a large rock carried far from its source by a**

A volcano

B wind storm

C glacier

D river

Understand It with Pulse | Flag a mistake

44 **Plate movements over millions of years change Earth surface by building mountains and opening and closing**

A soil layers

B ocean basins

C ice caps only

D river deltas only

Understand It with Pulse | Flag a mistake

45 **Igneous rock forms when**

A loose sediment is buried and cemented

B an existing rock is heated and squeezed

C seawater evaporates in a shallow basin

D molten rock cools and solidifies

Understand It with Pulse | Flag a mistake

46 **The schematic map of Canada shades regions by seismic level. The region shown at level 3, the highest level, is**

A Ontario

B Atlantic

C British Columbia

D Prairies

Understand It with Pulse | Flag a mistake

47 **Longshore drift moves sand along a coast mainly because waves approach the shore at an**

A eruption

B angle

C earthquake

D ice age

Understand It with Pulse | Flag a mistake

48 **Io, a moon of Jupiter, is volcanically active because of heating from**

A tidal flexing by Jupiter gravity

B sunlight alone

C ocean tides

D wind

Understand It with Pulse | Flag a mistake

49 **Mining can harm the environment when waste rock and tailings are not managed, mainly by**

- **A** releasing metals and sediment into water
- **B** cooling the climate
- **C** creating new mineral deposits
- **D** increasing rainfall

Understand It with Pulse | Flag a mistake

50 **A fault is a break in Earth crust along which rocks have moved**

- **A** evaporated
- **B** relative to each other
- **C** melted into lava
- **D** turned into soil

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	C	**18.**	B	**35.**	D
2.	B	**19.**	D	**36.**	D
3.	B	**20.**	C	**37.**	A
4.	B	**21.**	D	**38.**	A
5.	A	**22.**	A	**39.**	C
6.	A	**23.**	C	**40.**	B
7.	B	**24.**	B	**41.**	C
8.	B	**25.**	D	**42.**	D
9.	C	**26.**	A	**43.**	C
10.	D	**27.**	B	**44.**	B
11.	A	**28.**	A	**45.**	D
12.	D	**29.**	C	**46.**	C
13.	D	**30.**	D	**47.**	B
14.	C	**31.**	A	**48.**	A
15.	D	**32.**	A	**49.**	A
16.	C	**33.**	C	**50.**	B
17.	A	**34.**	B		

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