

Exam 2

Due Oct 16 at 10pm**Points** 100**Questions** 50**Available** Oct 16 at 8am - Oct 16 at 10pm 14 hours**Time Limit** 60 Minutes

Instructions

- 50 questions, 60 minutes
- 1 attempt
- Timer will continue to run if you leave the exam

This quiz was locked Oct 16 at 10pm.

Attempt History

| | Attempt | Time | Score |
|--------|---------------------------|------------|------------------|
| LATEST | Attempt 1 | 58 minutes | 90.83 out of 100 |

❗ Correct answers are hidden.

Score for this quiz: **90.83** out of 100

Submitted Oct 16 at 3:43pm

This attempt took 58 minutes.

Question 1

2 / 2 pts

Which igneous feature is circled in this photo?



☐ Dike

☒ Sill

☐ Banding

☐ Layering

Question 2**2 / 2 pts**

According to Bowen's reaction series, which minerals should never be found together in the same rock?

☐ Muscovite and potassium feldspar

☐ Sodium-rich feldspar and biotite

☒ Quartz and olivine

☐ Pyroxene and amphibole

Question 3**2 / 2 pts**

A [Answer1] is a mixture of water and pyroclastic material that moves downslope. (Fill in the blank)

Lahar

Question 4**2 / 2 pts**

What type of lava is erupting out of this volcano?



☐ ultramafic

☒ mafic

☐ intermediate☐ felsic

Partial

Question 5**1.5 / 2 pts**

Which of the following are common characteristics of high viscosity magma? (select all that apply)

☐ Low silica content☐ Intermediate or felsic in composition☒ Gases become trapped☐ Gases easily escape☐ Lead to passive eruptions☒ Lead to violent eruptions☒ High silica content☐ Mafic in composition**Question 6****2 / 2 pts**

What type of volcano is Mt. St. Helens?

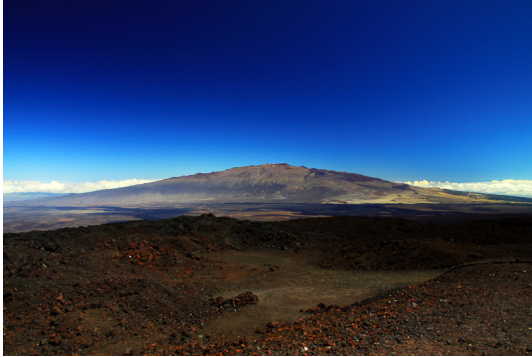
☒ Composite☐ Cinder cone☐ Shield**Question 7****2 / 2 pts**

The volcano in this image is a [type of volcano] volcano.



Question 8**2 / 2 pts**

The volcano shown in this image is a [type of volcano] volcano.

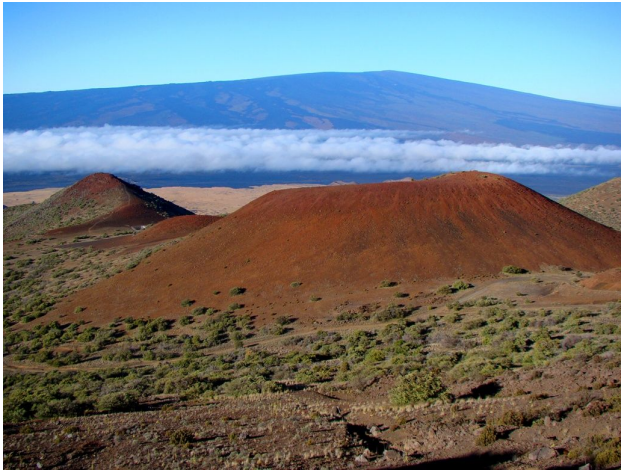
**Partial****Question 9****1.33 / 2 pts**

Select all of the following that are true about Mauna Loa.

- ☐ It's a composite volcano
- ☒ It's a shield volcano
- ☐ It erupts explosively
- ☐ It is not near a tectonic plate boundary
- ☒ It formed from a hot spot
- ☐ It formed from a subduction zone

Incorrect**Question 10****0 / 2 pts**

How many different types of volcanoes are shown in this photo?

☐ 3☐ 4☒ 1☐ 2**Question 11****2 / 2 pts**

What hazard killed 22,000 people in a Colombian village during the 1985 eruption of Nevado del Ruiz?

☒ Lahar☐ Earthquake☐ Ash fall☐ Pyroclastic flow☐ Lava flow**Question 12****2 / 2 pts**

Which type of volcano did the lava flow in this image most likely erupt from?



- ☐ Cinder cone
- ☒ Shield volcano
- ☐ Composite volcano

Question 13**2 / 2 pts**

What is the most abundant gas released by mafic magma?

- ☐ Carbon dioxide
- ☐ Sulfur dioxide
- ☐ Nitrogen
- ☐ Argon
- ☒ Water vapor

Question 14**2 / 2 pts**

What type of lava would you expect to erupt out of this volcano?



- ☐ mafic
- ☐ mafic and ultramafic
- ☐ ultramafic
- ☒ intermediate/felsic

Question 15

2 / 2 pts

Would this volcano erupt passively or explosively?



- ☐ both passive and explosive
- ☐ passively

- ☒ explosively

Question 16**2 / 2 pts**

At what type of plate boundary would you expect to find pillow lavas?

- ☒ Divergent
- ☐ Convergent
- ☐ Transform

Question 17**2 / 2 pts**

Match the type of volcano with the material it is composed of.

Shield

Mafic lava flows

**Composite**

Alternating layers of pyroclas

**Cinder cone**

Mafic pyroclastic material

**Question 18****2 / 2 pts**

How does frost wedging in cracks cause rocks to physically weather?

- ☒ Water expands as it freezes, forcing cracks to open wider.
- ☐ Cracks are pelted with falling snow and ice, making them wider.
- ☐ The surface of the crack is coated in ice, making the rock more brittle.
- ☐ The freezing water alters the crystalline structure of minerals in the rock, causing the cracks to grow.

Question 19**2 / 2 pts**

Why is water a good solvent?

- ☐ All of the above
- ☐ None of the above

- ☒ It's a polar molecule.
- ☐ It's less dense than most other substances.
- ☐ It's very abundant.
- ☐ It's liquid at room temperature.

Question 20**2 / 2 pts**

How do clay minerals form?

- ☐ Oxidation of iron-bearing minerals
- ☐ Hydration of minerals in rocks
- ☐ Dissolution of calcite
- ☒ Hydrolysis of silicate minerals

Question 21**2 / 2 pts**

What type of chemical weathering is responsible for the landscape seen in this image?



- ☐ Hydrolysis
- ☐ Oxidation
- ☐ Frost wedging
- ☒ Dissolution



Question 22**2 / 2 pts**

Warm, humid climates are favorable to [typeofweathering] weathering. (Fill in the blank)

chemical

Question 23**2 / 2 pts**

Match the types of chemical weathering with their descriptions.

DissolutionRocks and minerals are sepe **Hydrolysis**Hydrogen ions replace cation **Oxidation**Free oxygen is involved in a **Question 24****2 / 2 pts**

What do wind, water, and ice have in common?

☐ They are dependent on atmospheric pressure changes.☐ They move due to gravity.☐ They chemically breakdown rocks.☒ They all erode sediment.**Question 25****2 / 2 pts**

[Answer] is the material derived from physical and chemical weathering of rocks. (Fill in the blank)

Question 26**2 / 2 pts**

Which of the following minerals is least resistant to weathering processes?

☐ Quartz☐ Pyroxene☐ Amphibole☒ Olivine☐ Feldspar

Question 27**2 / 2 pts**

What is the most important factor controlling soil formation?

- ☒ Climate
- ☐ Plants and animals
- ☐ Topography
- ☐ Parent material
- ☐ Time

Question 28**2 / 2 pts**

What is the main difference between a conglomerate and a breccia?

- ☐ All of the above
- ☒ The shape of the clasts
- ☐ The sorting of the clasts
- ☐ The size of the clasts
- ☐ The kind of cement

Question 29**2 / 2 pts**

If a rock is poorly sorted, this means the rock contains _____.

- ☐ some angular and some rounded clasts
- ☒ a wide range of clast sizes
- ☐ mostly sand
- ☐ a great variety of rock types
- ☐ some parts that are reddish and others that are not

Question 30**2 / 2 pts**

Which best describes the transport history of the sediment that makes up this rock in the image?



- ☐ The particles were blown by winds and deposited in a deep marine environment.
- ☐ The particles have undergone a significant amount of chemical weathering.
- ☐ The particles travelled very far from their source.
- ☒ The particles were moved only a short distance from their source.

Incorrect

Question 31**0 / 2 pts**

The two main processes that create sediment are _____.

- ☒ erosion and deposition
- ☐ subduction and melting
- ☐ transportation and deposition
- ☐ physical and chemical weathering

Question 32**2 / 2 pts**

At an outcrop you find a clastic sedimentary rock that is smooth to the touch. What is the name of the rock?

- ☐ Limestone
- ☐ Coal
- ☐ Conglomerate
- ☐ Sandstone
- ☒ Shale

Question 33**2 / 2 pts**

Which clastic sedimentary rock is deposited in low energy environments?

- ☐ Sandstone
- ☐ Conglomerate
- ☐ Breccia
- ☒ Shale

Question 34**2 / 2 pts**

The rock shown here has sediment that is just visible to the naked eye. It is a _____.



- ☐ conglomerate
- ☐ shale
- ☒ sandstone

Question 35**2 / 2 pts**

This image shows chalk. How is it formed?



- ☐ accumulation of silica-rich organisms
- ☒ accumulation of microscopic organisms composed of calcium carbonate
- ☐ precipitation from seawater early in Earth's history
- ☐ evaporation of water in a lake or sea

Question 36**2 / 2 pts**

You find an unknown sedimentary rock and want to identify what it. You've determined that it reacts with dilute hydrochloric acid. What sedimentary rock is it?

- ☐ Chert
- ☒ Limestone
- ☐ Shale
- ☐ Sandstone
- ☐ Coal

Question 37**2 / 2 pts**

A sedimentary rock with rounded grains did not travel far from its source.

- ☒ disagree
- ☐ agree

Question 38**2 / 2 pts**

Sedimentary rocks composed of pieces of pre-existing rocks are called [Answer1] sedimentary rocks.

clastic

Question 39**2 / 2 pts**

What type of sedimentary rock is shown in this image?



☒ Chemical

☐ Organic

☐ Clastic

☐ Mafic

Question 40**2 / 2 pts**

Most of Earth's land area is covered with _____.

☒ sediment and sedimentary rocks

☐ metamorphic rocks

☐ igneous and metamorphic rocks

☐ igneous rocks

Question 41**2 / 2 pts**

The process of lithification can be summarized as _____.

☐ the transport of sediment to a site of deposition

☐ sediment settling from the water column

☒ loose sediment hardening into sedimentary rock

☐ loose sediment breaking off of sedimentary rocks

Question 42**2 / 2 pts**

Which of the following processes is NOT involved in turning sediment into sedimentary rock?

- ☐ Cementation
- ☐ Burial
- ☒ Metamorphism
- ☐ Compaction

Question 43**2 / 2 pts**

What type of sedimentary rock would be indicative of a slow-moving river?

- ☐ Coal
- ☐ Conglomerate
- ☐ Limestone
- ☒ Shale
- ☐ Sandstone

Question 44**2 / 2 pts**

Continental environments are oxygen-poor.

- ☐ True
- ☒ False

Question 45**2 / 2 pts**

Limestone most commonly forms in a _____ environment.

- ☒ warm, shallow, tropical-marine
- ☐ glacial
- ☐ river
- ☐ desert

☐ deep marine

Incorrect

Question 46

0 / 2 pts

What type of environment formed this sedimentary structure?



☐ Desert

☐ Glacial

☐ Shallow marine

☒ River

☐ Deep marine

Question 47

2 / 2 pts

Which category of sedimentary environments does a river delta belong to?

☐ Marine

☐ Continental

☒ Transitional

Question 48

2 / 2 pts

The particle size of sediment deposited in a given depositional environment will depend on _____.

☐ the composition of the sediment

☐ the roundness of the sediment

☒ the energy of the environment

☐ the distance the sediment travels

Incorrect

Question 49

0 / 2 pts

What is the direction of flow indicated by this sedimentary structure?



- ☐ Right
- ☒ Left
- ☐ Bi-directional (two directions)
- ☐ Up
- ☐ Down

Question 50

2 / 2 pts

What type of sedimentary structure is shown in this image?



- ☐ Asymmetrical Ripple Marks
- ☐ Raindrop Impressions
- ☐ Mudcracks
- ☐ Cross-bedding
- ☒ Symmetrical Ripple Marks

Quiz Score: **90.83** out of 100