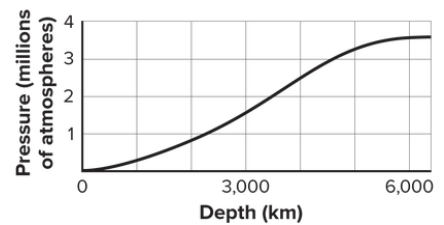
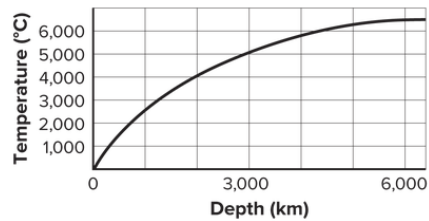
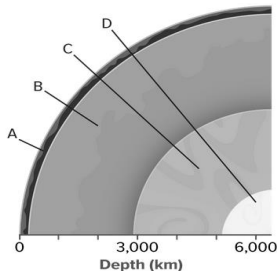


Earth Science Exam: Chapters 2 and 3

Name: _____

Date: _____

Section: _____



_____ 1. In which layer of Earth are temperature and pressure greatest?

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

_____ 2. John finds a rock that contains large, light-colored crystals. The rock shows no signs of being altered by heat or pressure. What can John infer about the rock?

- A. The rock formed below Earth's surface.
- B. The rock formed from hardened magma.
- C. The rock underwent lithification.
- D. The rock underwent metamorphism.

_____ 3. What role does subduction play in the rock cycle?

- A. It breaks rocks into sediment.
- B. It decreases pressure on buried rocks.
- C. It pulls rocks deep into Earth.
- D. It pushes rocks up to Earth's surface.

_____ 4. Which processes cause rocks to be exposed at Earth's surface?

- A. erosion and subduction
B. erosion and uplift
C. extreme heat and pressure
D. melting and cooling

_____ 5. What type of rock is likely to form where continental plates collide?

- A. extrusive B. igneous C. metamorphic D. sedimentary

_____ 6. What processes are necessary in order to turn sand into rock?

- A. compaction and cementation
B. cooling and crystallization
C. uplift and deposition
D. weathering and erosion

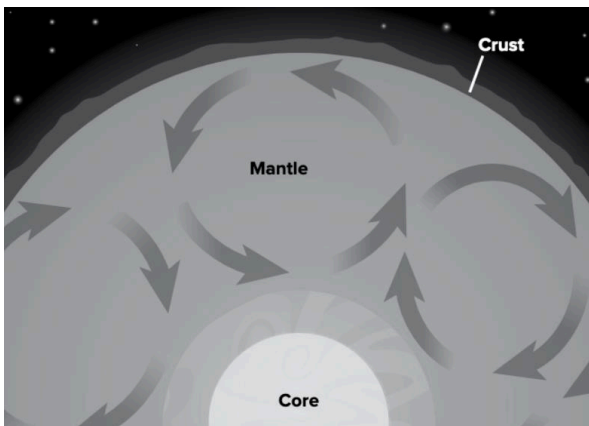
_____ 7. James is making a list of the rock cycle processes that take place below the Earth's surface. Which process belongs on his list?

A. erosion

B. deposition

C. melting

D. weathering



_____ 8. What does the diagram above show?

A. convection currents in the mantle

B. pressure differences in the mantle

C. speed of P-waves through the mantle

D. circulation of water through the mantle

_____ 9. Which process is involved in forming BOTH metamorphic and sedimentary rocks?

A. cementation

B. crystallization

C. heat

D. pressure

_____ 10. Why is the Earth's inner core solid?

A. It is made of iron.

B. It is cooler than the outer core.

C. There is movement in the outer core.

D. There is more pressure than in the outer core.

_____ 11. Which is true of oxidation?

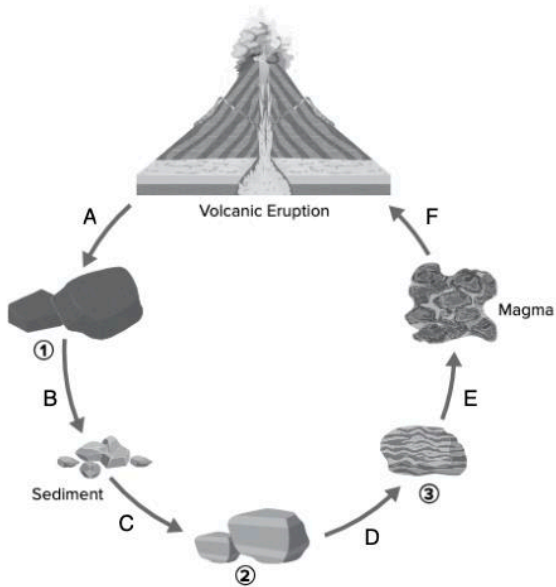
A. It is a physical process.

B. No change occurs in the makeup of rock.

C. Rocks weather at different rates

D. Water freezes in cracks in rock.

Partial Rock Cycle



_____ 12. In order, from numbers 1 through 3, what labels should the students add to their diagram?

- A. Igneous rock, metamorphic rock, sedimentary rock
- B. Igneous rock, sedimentary rock, metamorphic rock
- C. Metamorphic rock, sedimentary rock, igneous rock
- D. Sedimentary rock, metamorphic rock, igneous rock

_____ 13. How should the students label the arrows B and C?

- A. B: high temperature and pressure; C: melting and cooling
- B. B: melting and cooling; D: high temperature and pressure
- C. B: deposition, compaction, and cementation; d: weathering and erosion
- D. B: weathering and erosion; C: deposition, compaction, and cementation

Rain sample	pH
1	5.3
2	4.7
3	5.5
4	4.3

_____ 14. Students collected and recorded the pH of four samples of rainwater in the table above. Which sample would cause the most amount of chemical weathering?

- A. 1
- B. 2
- C. 3
- D. 4

_____ 15. Which is NOT a cause of physical weathering?

- A. A mole burrows underground?
- B. A plant grows into a crack in a rock.
- C. Rainwater dissolves a stone statue.
- D. Waves break along a shoreline.

_____ 16. Which of the following typically is NOT a depositional environment?

- A. delta
- B. mountain peak
- C. ocean floor
- D. swamp

_____ 17. Which agent of erosion can create a limestone cave?

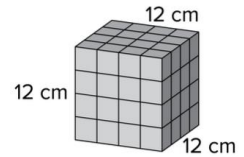
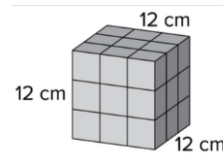
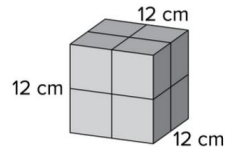
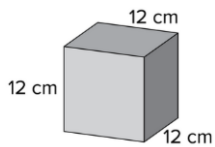
- A. freezing and melting ice
- B. growing plant roots
- C. acidic water
- D. strong wind

_____ 18. Rushing water moving sediment down slopes and a glacier forming a U-shaped valley as it moves past mountains are examples of

- A. weathering
- B. erosion
- C. deposition
- D. rounding

_____ 19. To which material would the largest amount of water attach?

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



_____ 20. How do Florida's caverns form?

- A. When vegetation such as mangrove trees is removed, the rock is eroded, forming holes in the ground.
- B. Repeated freezing and thawing of ice wedging breaks rocks apart. Then water washes away the sediment.
- C. Wind and rain physically weather the rock into sediment. As a result of mass wasting, caverns were formed.
- D. Acidic groundwater seeps through rock. It dissolves and washes away the limestone.

_____ 20. Which feature is NOT associated with an increase in chemical weathering?

- A. oxidation
- B. abrasion
- C. acid rain
- D. warm climate