



Name: _____ ODD Period: _____

Week: 17-18

Dates: 12/7-12/18

Unit: Finals Review

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
7 O *CREED PROJECT *STUDY FOR FINAL	8 E *CLEMENT GONE	9 O *CREED PROJECT *STUDY FOR FINAL	10 E	11 O *FFA CREED DUE *LATE/ABSENT WORK DUE BY 2PM S1 *STUDY FOR FINAL
14 E *CLEMENT GONE	15 O *STUDY FOR FINAL *PACKET DUE (WILL BE RETURNED IN CLASS) *CLEMENT GONE	16 FINALS 1,3,7	17 FINALS 2,4	18 FINALS 5,6 1ST SEMESTER ENDS

ASSIGNMENT	YOUR SCORE	TOTAL POINTS POSSIBLE
FINALS STUDY GUIDE (20 POINTS PER PAGE)		320
TOTAL		320



Winter Break
Dec. 19- Jan.3rd

AG EARTH SCIENCE FACT OF THE WEEK

MOST CHRISTMAS TREES ARE GROWN ON TREE FARMS. THEY ARE CONSIDERED AN AGRICULTURAL PRODUCT. FOR EVERY CHRISTMAS TREE HARVESTED, THREE SEEDLINGS ARE PLANTED IN ITS PLACE. IN THE US, THERE ABOUT 1 MILLION ACRES DEDICATED TO TREE FARMING. EACH ACRE PROVIDES ENOUGH OXYGEN FOR 18 PEOPLE.

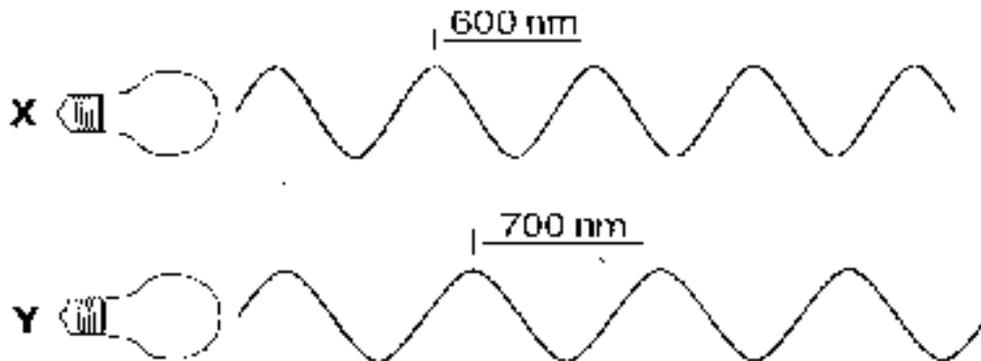
SEMESTER FINAL STUDY GUIDE

You will only get 50 questions from this list! Use your old packets to study!

Fall Semester Final

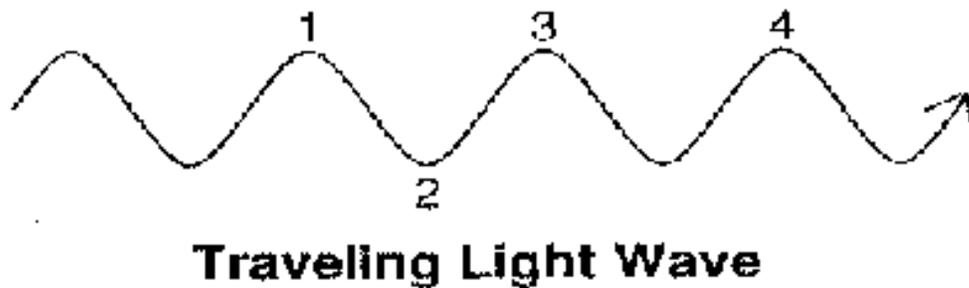
1. Meteorology is the study of the earth's oceans.
True
False
2. Astronomy is a branch of earth science.
False
True
3. The atmosphere is one part of the geosphere.
True
False
4. Most plastics are biodegradable.
False
True
5. Earth scientists study the geosphere.
False
True
6. Ecology is a field of study that unites earth science and biology.
True
False
7. One way scientists state a problem is by asking questions based on observations.
True
False
8. A controlled experiment usually tests several variables at one time.
False
True
9. In order for a theory to become a law, it must be proven correct every time it is tested.
False
True
10. Once a scientific law is well established, it becomes a theory.
True
False
11. According to the big bang theory, all galaxies in the universe are moving toward the earth.
False
True
12. The wavelength of red light is longer than that of blue light.
True
False
13. The relationship between plants and animals in a lake would most likely be studied by
a meteorologist.
an oceanographer.
a geologist.
an ecologist.

14. The ecosystem that encompasses all other ecosystems is called the
biosphere.
hydrosphere
geosphere
atmosphere
15. A possible explanation of or solution to a problem is called
a hypothesis.
a conclusion.
a law.
an observation.
16. The first step in using scientific methods to solve a problem is to
form a hypothesis.
state the problem.
reach a conclusion.
gather information.
17. A well-established and proven theory is most likely to become
a conclusion.
an observation.
a scientific law.
a hypothesis.
- 18.



In the diagram, compared with the light coming from source X, the light coming from source Y appears
more blue.
more red.

19.

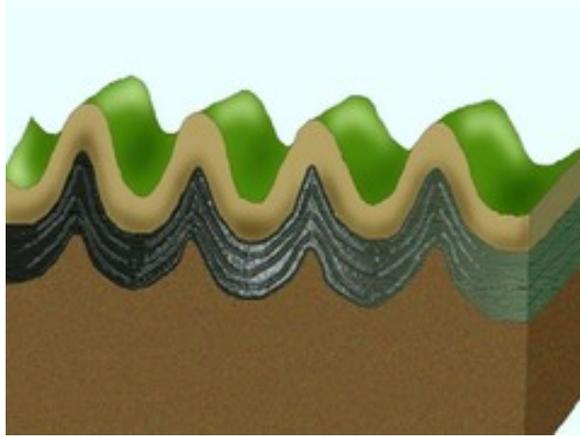


Look at the diagram above. One wavelength is equal to the distance between points

- 1 and 3.
 - 2 and 4.
 - 1 and 4.
 - 2 and 3.
20. The explosion that scientists think created the universe is called the _____.
- Big Bang Theory
 - Doppler Effect
 - element
 - spectrum
21. The apparent shift in the wavelengths of energy emitted by an energy source moving away from or toward an observer is known as the _____.
- element
 - Big Bang Theory
 - Doppler Effect
 - spectrum
22. Alfred Wegener hypothesized that continents are fixed and unable to move.
- False
 - True
23. The theory of continental drift states that present-day continents were once a single landmass.
- False
 - True
24. Fossil records provide a clue to earlier positions of lithospheric plates.
- False
 - True
25. Movement of the earth's crust away from a mid-ocean ridge is called seafloor spreading.
- True
 - False
26. Bands of alternately older and younger rocks occur on each side of rifts in mid-ocean ridges.
- False
 - True
27. The earth's oldest rocks are found along the Mid-Atlantic Ridge.
- False
 - True

28. Which scientist first proposed that the continents were once joined in a single landmass called Pangaea?
Dietz
Hess
Wegener
Suess
29. Seafloor spreading occurs at
divergent boundaries.
subduction zones.
terrain boundaries.
transform boundaries.
30. The earth's layer of solid rock that flows under pressure is called the
crust.
hydrosphere.
lithosphere.
asthenosphere.
31. The theory of plate tectonics is most directly based on which of the following interactions?
lithospheric plates riding on the asthenosphere
microplate terrains moving over magma
the Panthalassa plate being subducted under the Pangaea plate
32. Which of the following may result from the collision of one plate with another?
a convergent boundary
a transform boundary
a divergent boundary
a rift valley
33. Pieces of land bounded by faults that have different geologic features from those of neighboring land are most likely to be
microplate terrains.
island arcs.
spreading centers.
hot spots.
34. Rocks deform permanently in two ways:
Brittle and soft deformation
Brittle deformation and ductile deformation
Ductile deformation and hard edged deformation
35. Brittle deformation of rocks causes them to
change shape and size
create a new fault boundary
create new rock types
fracture
36. Forces that are unable to deform rock when first applied may cause:
the rock to flow if the force is maintained over a long period of time
the rock to harden if there is a sudden change in motion
the rock to remain the same structure with increased stress

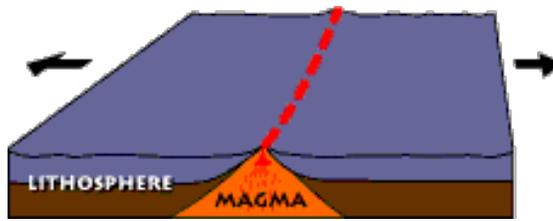
37.



This picture is showing which type of stress?

- tension
- shear
- compression
- transform

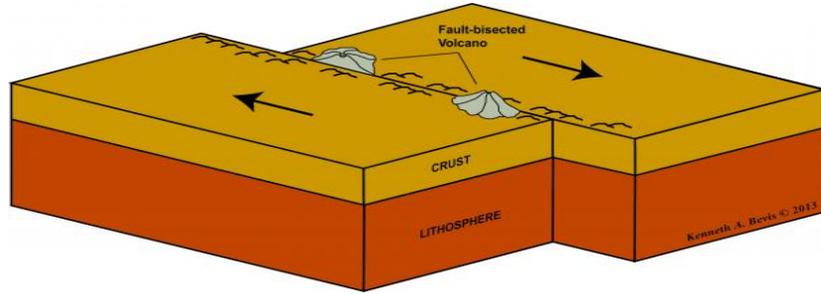
38.



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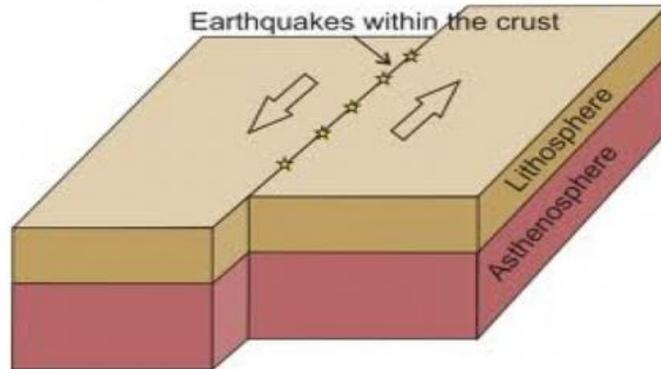
39.



This picture is showing which type of stress?

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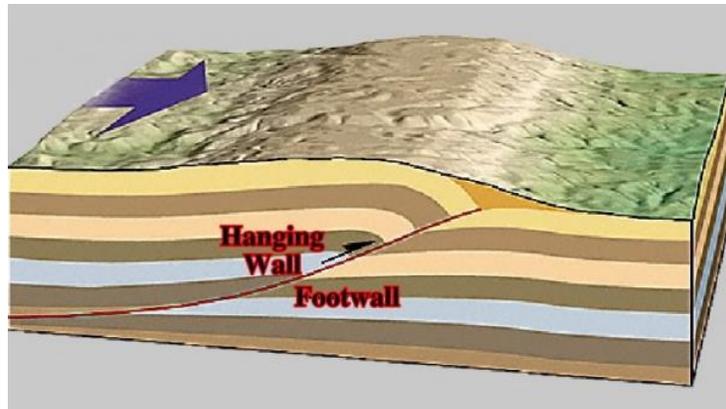
40.



This graphic illustrates a _____ fault.

- thrust fault
- reverse fault
- normal fault
- strike slip fault

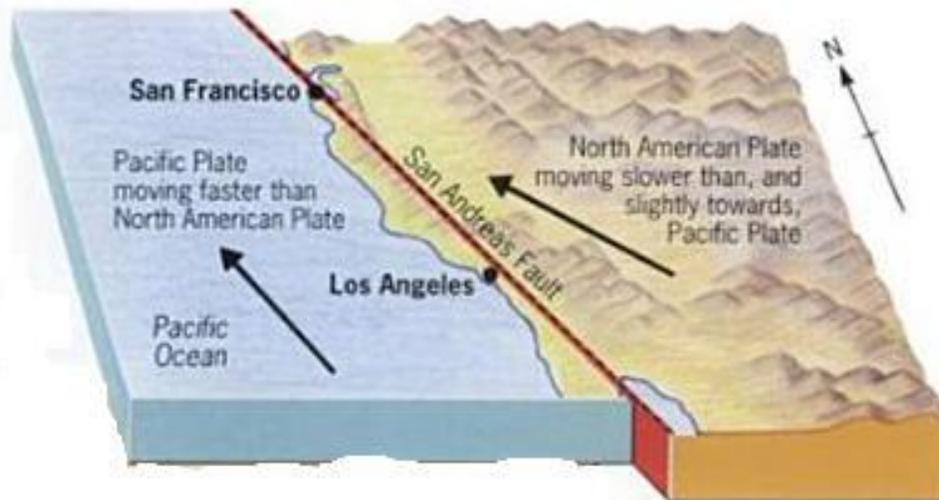
41.



This graphic illustrates a _____ fault.

- normal fault
- strike slip fault
- reverse fault
- thrust fault

42. At what type of fault boundary would compressional stresses be the dominant force?
 Transform boundaries
 Divergent boundaries
 Convergent plate boundaries
43. Most mountain building occurs at _____ plate boundaries.
 transform
 convergent
 divergent
44. What type of plate boundary mainly produces volcanic mountains?
 oceanic-oceanic transform
 oceanic-oceanic convergent
 continental-continental convergent
 oceanic-continental convergent
45. Oceanic-continental convergent boundaries mainly produce _____.
 fault block and folded mountains
 volcanic and folded mountains
 volcanic and fault block mountains
46. At a convergent boundary between two continental plates, what land formations will result?
 fault block mountains
 volcano mountains
 folded mountains
 thrust fault volcanoes
47. _____ is the concept of floating crust in gravitational balance.
 Isostasy
 Accretion
 Faulting
 Terrane
- 48.

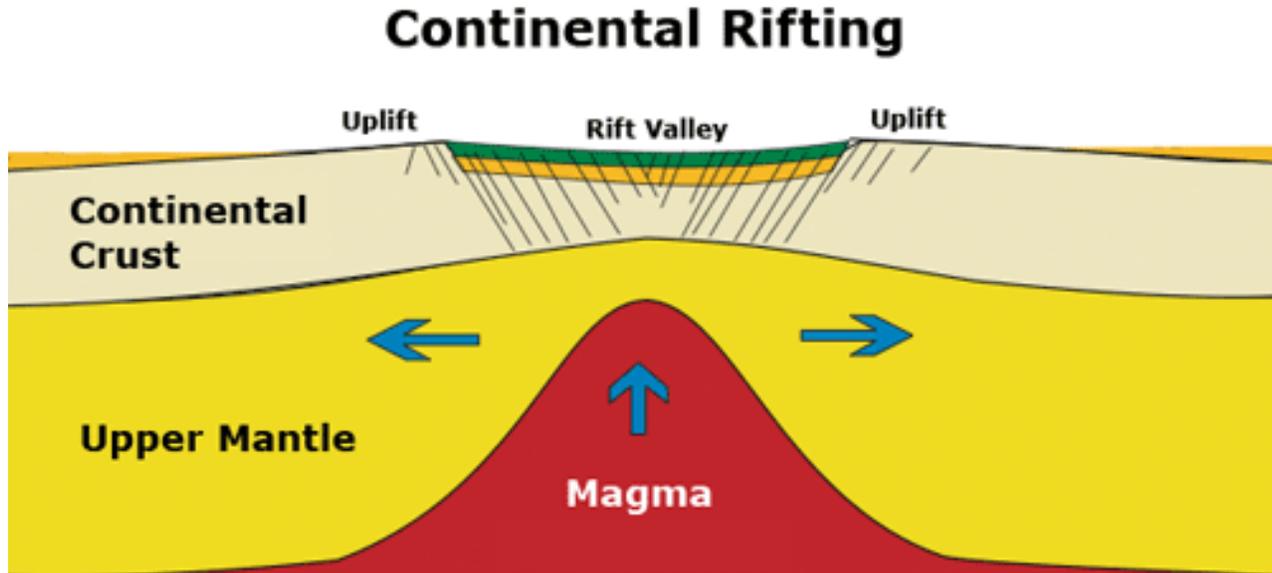


The San Andreas fault is an example of what type of fault?

- reverse
- thrust
- strike slip
- normal

49. Folding is usually the result of of what type of stress?
 compressional stress
 shear stress
 tensional stress
 faulting

50.



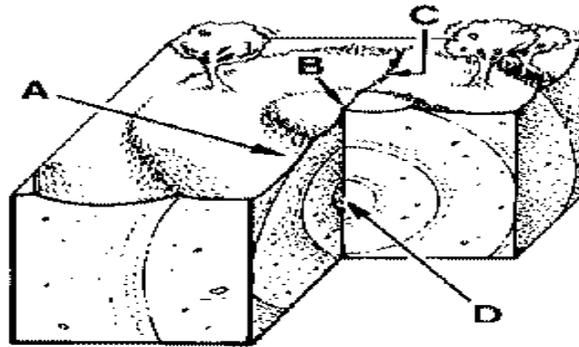
This diagram illustrates a rift valley. What type of stress causes a rift valley?

- Tension
- Shear
- Compression

51. The place where slippage first occurs (below the surface) is called an earthquake's
 focus.
 epicenter.
 magnitude.
 intensity.
52. Geologists use the elastic rebound theory to explain
 the cause of tsunamis.
 the magnitude of tsunamis.
 the intensity of an earthquake.
 the cause of an earthquake.
53. Which of the following best describes aftershocks?
 seismic waves that cannot travel through liquids
 areas along a fault where slippage and fracturing first occur
 giant ocean waves that originate at a fault zone
 a series of small tremors occurring after a major earthquake
54. Deep-focus earthquakes usually occur in areas in which one plate
 remains stationary against another.
 subducts under another.
 slides past another.
 moves apart from another.

55. The force that can change the size and shape of rocks is called
magnitude.
elasticity.
friction.
stress.
56. Which type of seismic wave travels the fastest?
tsunami
P wave
surface wave
S wave
57. S waves can travel only through
liquids.
solids.
gases and liquids.
gases.
58. Which of the following generally causes the most damage during an earthquake?
secondary wave
aftershock
surface wave
primary wave
59. What is the minimum number of seismograph stations a scientist must have data from in order to locate the epicenter of an earthquake? (HINT: You did this in a lab!)
- 1
 - 4
 - 3
 - 2
60. If a seismograph station detects S waves shortly after it detects P waves, then the earthquake was
far away.
very strong.
nearby.
very weak.
61. To determine how far away from a seismograph station an earthquake occurred, scientists plot the difference in arrival times between
P and S waves.
P and surface waves.
seismic waves and tsunamis.
S and surface waves.
62. The magnitude of an earthquake is a direct measure of
how much energy it releases.
how many tsunamis it creates.
how much damage it causes.
how many aftershocks it causes.

63.



The point that indicates the epicenter of the earthquake in the diagram is

- A
- D
- C
- B

64. Seismic waves that can penetrate the liquid part of the earth's core are called

- S waves
- P waves
- surface waves

65. The last waves to be recorded by a seismograph are the

- S waves
- P waves
- surface waves

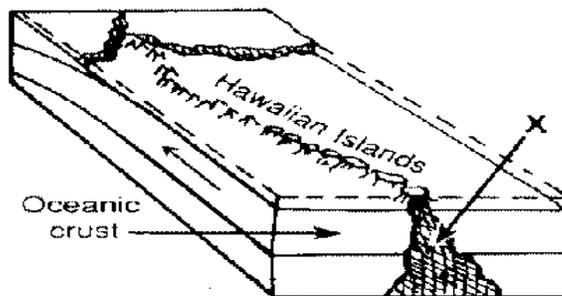
66. The amount of energy released by an earthquake is also known as its

- surface waves
- magnitude
- wave length

67. Most volcanic activity in the world occurs along the

- Pacific Ring of Fire
- The Equator
- The Prime Meridian
- Mid Atlantic Ridge

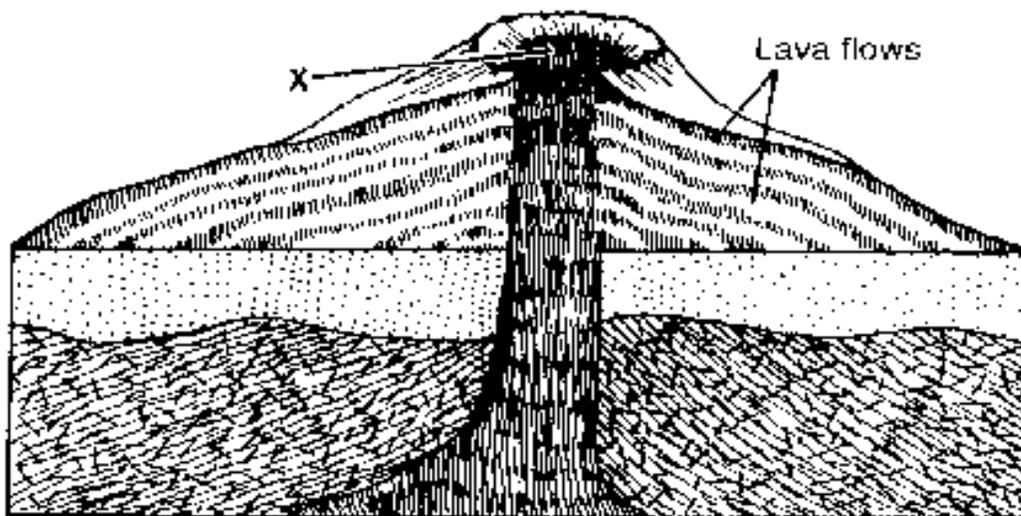
68.



The area labeled X in the diagram is located over

- a mid-ocean ridge.
- an island arc.
- a caldera.
- a hot spot.

69. What happens when a plate with oceanic crust meets a plate with continental crust?
 The continental plate is subducted.
 New crust forms over a hot spot.
 New crust forms under a hot spot.
 The oceanic plate is subducted.
70. As a result of the subduction of oceanic crust under a continent, magma is most likely to erupt from
 an island arc.
 an oceanic ridge.
 a volcano.
 subduction zone.
71. Which of the following does NOT affect volcanic eruptions?
 atmospheric pressure
 magma composition
 viscosity
 dissolved gases
72. Which volcanic material would most likely be produced by a violent eruption?
 pahoehoe
 aa
 pyroclastic material
 pillow lava
73. The broad volcanic feature formed by quiet eruptions of thin lava flows is called a
 stratovolcano.
 shield volcano.
 cinder cone.
 rift.
- 74.



What type of volcanic formation is represented by the diagram ?

- cinder cone
- stratovolcano
- shield volcano
- caldera

75. Before a volcanic eruption, seismic activity seems to increase in frequency and decrease in intensity.
decrease in frequency and increase in intensity.
increase in both frequency and intensity.
decrease in both frequency and intensity.

76. Areas of volcanism within lithospheric plates are known as _____.
volcanoes
hot spots
vents

77. Lava that breaks into jagged chunks is called _____.
aa
magma
pyroclastic material
pillow lava

78. Another name for a composite volcano is a(n) _____.
stratovolcano
cinder cone
shield volcano

79. What happens to the viscosity of lava when temperature increases?

Hint: Low viscosity refers to substances that are thin, such as water, while high viscosity substances are thick.
An example of a high viscosity liquid is syrup.

Viscosity decreases
Viscosity increases

80. Magmas contain various amounts of dissolved _____.
plate boundaries
gases
living organisms
materials

81. In our melting temperatures of rocks lab, at what depth did the idealized internal temperature of Earth reach 1,400 degrees C?
75km
25km
200km
100km

82.

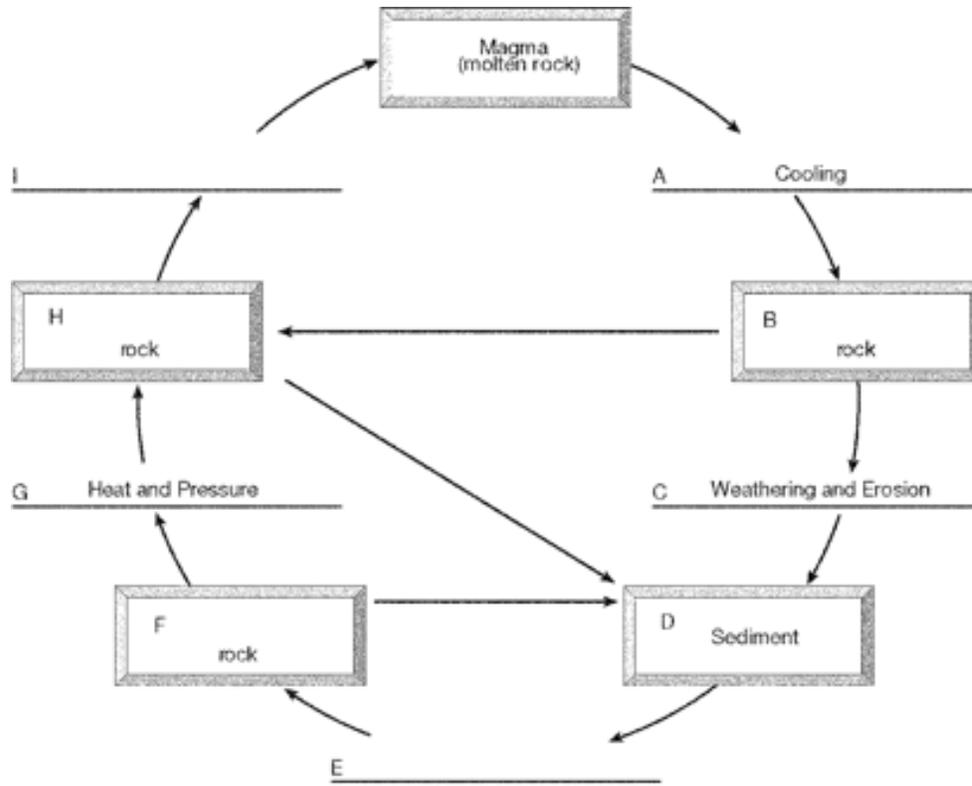


Figure 3-1

In Figure 3-1, what type of rock should occur in the part of the rock cycle labeled B?

- metamorphic
- lava
- igneous
- sedimentary

83.

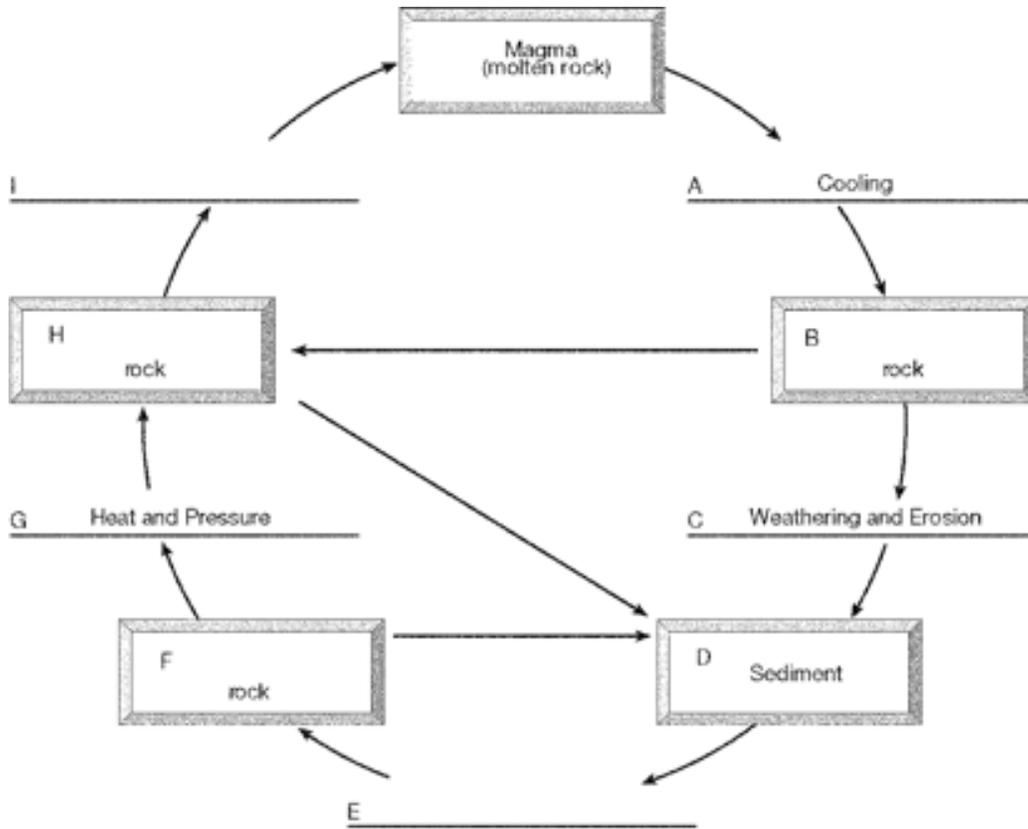


Figure 3-1

In Figure 3-1, what process or processes would be occurring in the part of the rock cycle labeled E?
compaction and cementation
melting
weathering and erosion
cooling

84. Which of the following is NOT one of the three types of rock?
sedimentary
igneous
magma
metamorphic

85. The three groups of rocks are classified by _____.
how they formed
grain size
chemical composition
color

86. Rock formed by from weathered products of preexisting rocks that have been transported, deposited, compacted, and cemented are called _____.
sedimentary rocks
igneous rocks
metamorphic rocks

87. Which of the following is a use for fossils found in sedimentary rocks?
 indicating when the rock formed
 matching rocks of the same age found in different places
 all answers are correct
 interpreting past environments
88. Most metamorphic processes take place _____.
 several hundred kilometers below Earth's surface
 at Earth's surface
 a few kilometers below Earth's surface
89. The primary agent of contact metamorphism is _____.
 flowing water
 heat
 weathering
 extreme pressure
90. Which of the following is NOT an agent of metamorphism?
 a hydrothermal solution
 running water
 pressure
 heat
91. Igneous - Comes from the Latin word "ignis" which means "_____".
 fire
 heat
 water
 earth
92. _____ - rocks that form when lava hardens (cools) above the Earth's surface.
 Extrusive Igneous Rocks
 Intrusive Igneous Rocks
93. Slow cooling in igneous rocks means _____ crystals. _____ crystals exhibit "course-grained" texture.
 small
 large
94. Sedimentary - Comes from the Latin word "sedimentum" which means "_____".
 deposition
 compaction
 settling
95. The changes in mineral composition and texture of a rock subjected to high temperatures and pressure within the Earth is known as _____.
 metamorphism
 igneous
 sedimentation
96. The hot, watery solution that escapes from the mass of magma during later stages of crystallization is called _____.
 pressure
 heat
 hydrothermal solution

97. Nonfoliated metamorphic rocks have a texture that _____ exhibit a banded or layered appearance.
does
does not

98. Most _____ rock changes occur at elevated temperatures and pressures. These conditions are found a few kilometers below the earth's surface and extend into the upper mantle.

- igneous
- sedimentary
- metamorphic

99. Fossils are unique in _____ rocks.
sedimentary
metamorphic
igneous

100. The 5 Main Processes that Form _____ Rocks:

- ▲ weathering
- ▲ erosion
- ▲ deposition
- ▲ compaction
- ▲ cementation

- sedimentary
- igneous
- metamorphic

Name: _____ Period: _____



FFA Creed Assignment

DUE DATE:

Period 5, 7: December 11th

Period 4, 6: December 10th

TEST POINTS: 50

CHOOSE ONE OPTION: Memorize/Present, Video/Present, Poster

NO LATE CREED ASSIGNMENTS WILL BE ACCEPTED!

Criteria	Memorize/Present	Video/Present	Create Poster	Your Points	Points Possible
Content	*Memorize 5 paragraphs of the FFA Creed with 70% accuracy	*Recite all 5 paragraphs of the FFA Creed with 95% accuracy	*Must include all 5 paragraphs of the creed with 100% accuracy		25
Aesthetics	*Use loud, clear public speaking voice *May be creative with accents, raps, songs etc	*Use loud, clear public speaking voice *Entertaining! *May be creative with accents, raps, songs etc	*Use at least 5 pictures per paragraph to convey all paragraphs of the FFA Creed *Must be colorful, neat and professional		15
Format	*Orally present the creed in class on or before the due date	*Must submit the video recording electronically to hclement@syvuhd.org (attach file or link to video) on or before the due date *No more than 3 minutes *NO EXCUSES. Technology must work!	*Poster at least 24" x 36" (Standard poster size) or larger. *Can use a tri-fold poster board		10
Group	*May present in a group (max 6 people), but ALL students must know/present ALL paragraphs	*Max group of 4 *ALL group members must present at least one paragraph of the creed	*Max group of 2 people	N/A	N/A
EXTRA CREDIT	*As an individual, considered an outstanding creed recitation +10 points EC	*Considered an outstanding video that instructors can use for teaching in the future +10 points EC	*Include 3 dimensional or interactive pieces to the poster +5 points EC		N/A
TOTAL TEST POINTS					50



NATIONAL
FFA ORGANIZATION

The FFA Creed

I BELIEVE in the future of agriculture, with a faith born not of words but of deeds - achievements won by the present and past generations of agriculturists; in the promise of better days through better ways, even as the better things we now enjoy have come to us from the struggles of former years.

I BELIEVE that to live and work on a good farm, or to be engaged in other agricultural pursuits, is pleasant as well as challenging; for I know the joys and discomforts of agricultural life and hold an inborn fondness for those associations which, even in hours of discouragement, I cannot deny.

I BELIEVE in leadership from ourselves and respect from others. I believe in my own ability to work efficiently and think clearly, with such knowledge and skill as I can secure, and in the ability of progressive agriculturists to serve our own and the public interest in producing and marketing the product of our toil.

I BELIEVE in less dependence on begging and more power in bargaining; in the life abundant and enough honest wealth to help make it so--for others as well as myself; in less need for charity and more of it when needed; in being happy myself and playing square with those whose happiness depends upon me.

I BELIEVE that American agriculture can and will hold true to the best traditions of our national life and that I can exert an influence in my home and community which will stand solid for my part in that inspiring task.

The creed was written by E.M. Tiffany and adopted at the Third National FFA Convention. It was revised at the 38th and 63rd Conventions.

