

### 3<sup>rd</sup> Quarterly Review

➤ In order to be best prepared for the exam memorize all facts

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➤ Know how all answers on this paper were determined

1. Define interface
2. For each of the following Earth locations listed below indicate the following:
  - Temperatures (actual temperature & melting point)
  - State of Matter (solid, liquid or gas)
  - Pressure

	Temperature Range		Pressure
	<u>Melting pt. / Actual Temp.</u>	<u>State of Matter</u>	<u>(mill. atm.)</u>
a) Outer Core:	_____ / _____	_____	_____
b) Asthenosphere:	_____ / _____	_____	_____
c) Boundary between inner & outer core:	_____ / _____	_____	_____

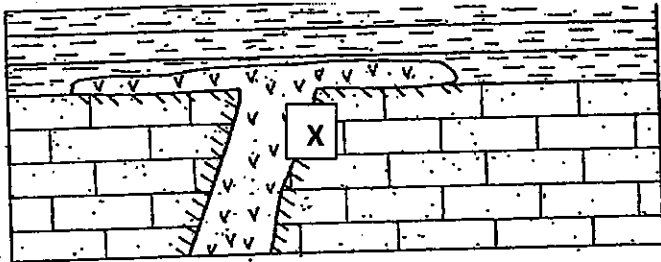
3. What 3 features are found at convergent plate boundaries
4. Draw a convergent plate boundary showing subduction. Use arrows to indicate the relative motion of the plates
5. What feature is found at a divergent plate boundary?
6. Draw a divergent plate boundary with arrows to show the relative motion of the plates.
7. If the pattern of magnetism is N N N S S N on the east side of a mid-ocean ridge, what would the pattern be on the west side of a mid-ocean ridge?
8. What feature is created at the convergence of the Nazca Plate and the South American Plate?  
If an observer is located 9000 km. away from an earthquake epicenter, what is the time difference between the P-waves and S-waves?
9. If an observer is located 4000 km. away from an earthquake epicenter, what is the time difference between the P-waves and S-waves?
10. If a primary wave and secondary wave are 7 minutes and 40 seconds apart, what is the distance to the epicenter?
11. A geologist was exploring some sedimentary rocks and found a placoderm fish. During which era did that organism live on Earth?
12. During what time did the rock that makes up the Adirondack Mountains form?
13. Another geologist located a fossil known as *Stylonurus*. What geologic time period might that organism have existed?
14. Which came first; the Proterozoic or the Phanerozoic?

15. Which came first; The Paleozoic or the Phanerozoic?
16. Which organism existed on Earth for a longer period of time; Dinosaurs or Ammonoids?
17. How many million years ago did sharks first appear on Earth?
18. Approximately what percentage of NYS surface bedrock is Ordovician age rock?
19. Please fill in the blanks on the following table shown below:

You may assume that the original sample of Carbon-14 had a mass of 1600 grams

Half-Life	Mass Remaining	% Remaining	Number of Years
0			
1			
2			
3			
4			
5			

20. Which organism existed on Earth for a longer period of time; Dinosaurs or Ammonoids?
21. Name one other fossil that existed at the same time as Cryptolithus.
22. Name a rock that most like formed at location.



23. Refer to the 2 outcrops below; indicate 2 rock types and fossils by names that are the same age.

