Structure of the Earth & Plate Tectonics

Q1.

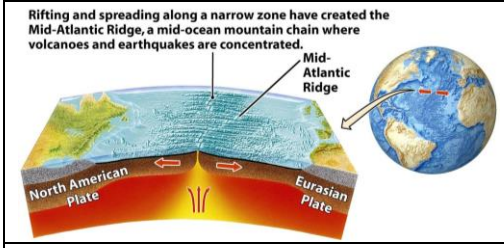
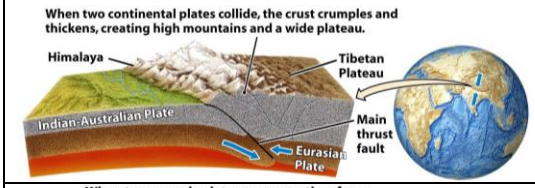
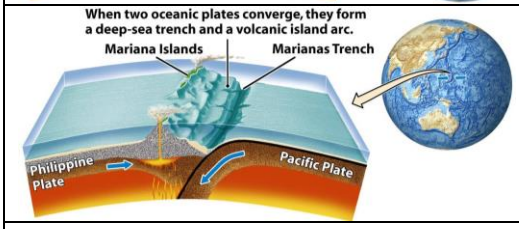
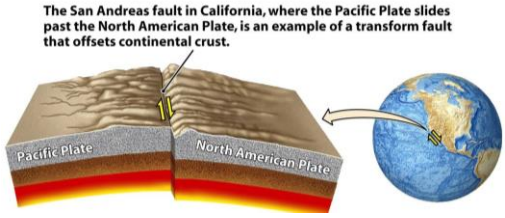
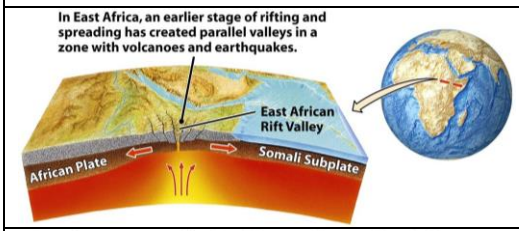
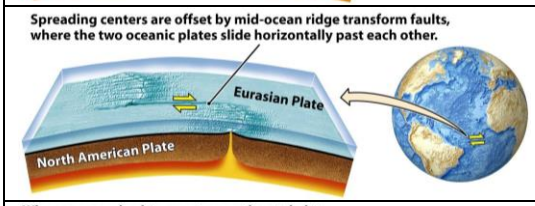
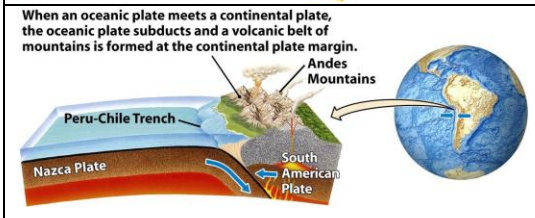
	Has the plate area increased, decreased, OR neither?	What type of stress? (Shear, Compressional, OR Tensional)	What type of plate boundary? (Transform, Convergent, OR Divergent)
			
			
			
			
			
			
			

Figure 1: Tectonic scenarios on Earth, Grotzinger/Jordan, 8th edition, pages 30f

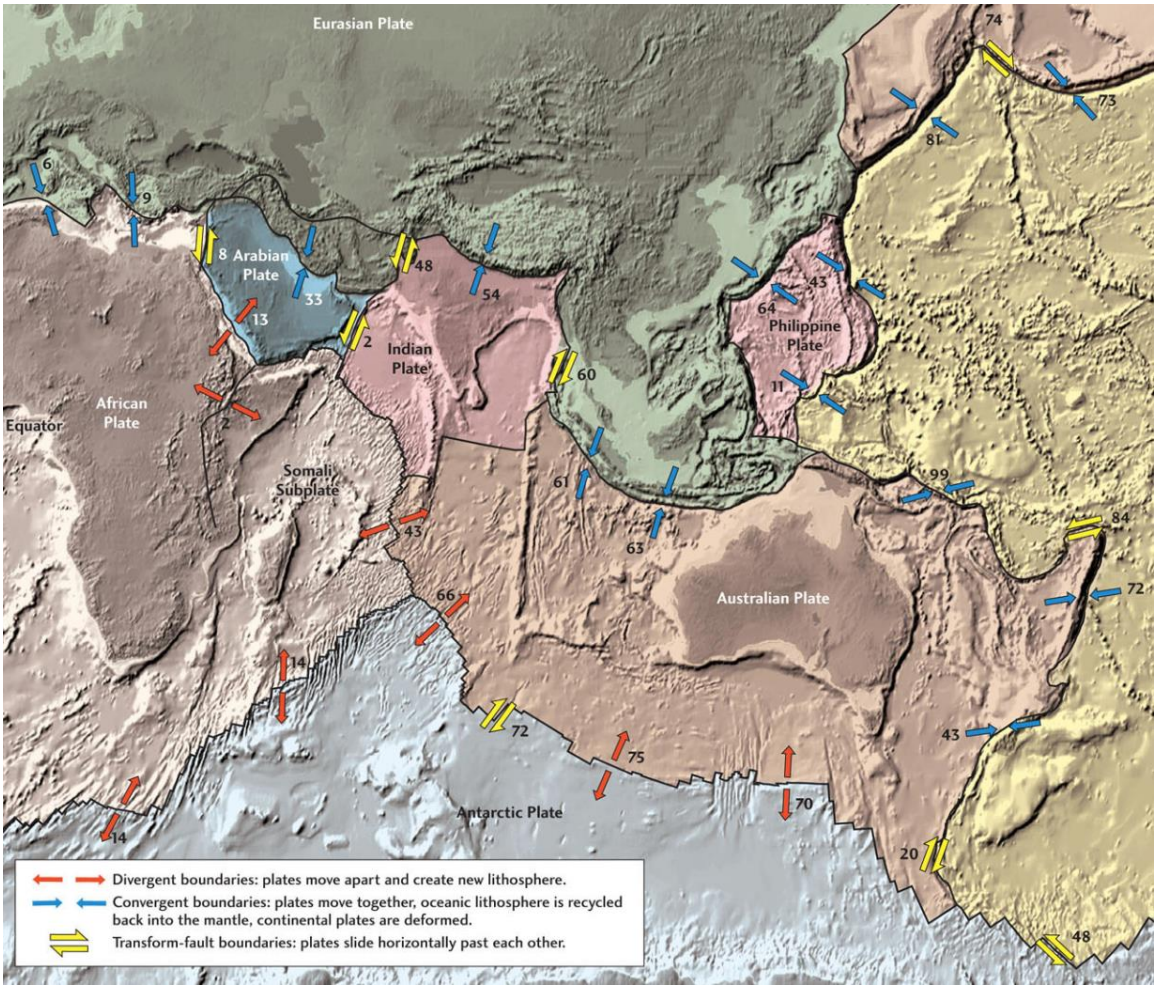


Figure 2: Part of Earth's tectonic plates mosaic. The arrows show the relative movement (in mm/a) of two plates at the respective point along their boundary. Grotzinger/Jordan, 8th edition, page 28

Q2. Refer to Figures 1 and 2 above. (Answers should short)

a) On the map above, what is the fastest rate of relative movement for any of the plate boundary locations? Include units.

b) What are the names of the **two tectonic plates** bounded at this fastest location? What type of plate boundary is it?

c) In your own words, explain the **five geologic processes** that occur along convergent plate boundaries. Choose from these: type of plate movement, type of stress, mountain building, volcanism, earthquakes. You may need a chromebook.

d) In your own words, explain the **three geologic processes** that occur along transform plate boundaries. Choose from these: type of plate movement, type of stress, mountain building, volcanism, earthquakes. You may need a chromebook.

e) Name **one geologic process** that is missing at transform-fault boundaries. Hint: It is either plate movement, stress, mountain building, volcanism, or earthquakes. You may need a chromebook.