Al Maali School	G7 Science EoT3 Exam Coverage 2023-2024	Name:……

Question	1

Q1- Conclude that continentals were once joined, from the evidence of matching coastlines of Africa and South America and how they can fit together like puzzle pieces, give evidence and clues used to test and support Alfred Wegener's hypothesis.
Textbook, figures, investigation- 10, 11, 12

1-What do you notice about the shapes of the continents inclluding the continental shelves? What do you think the apparent fit of the continent suggests?

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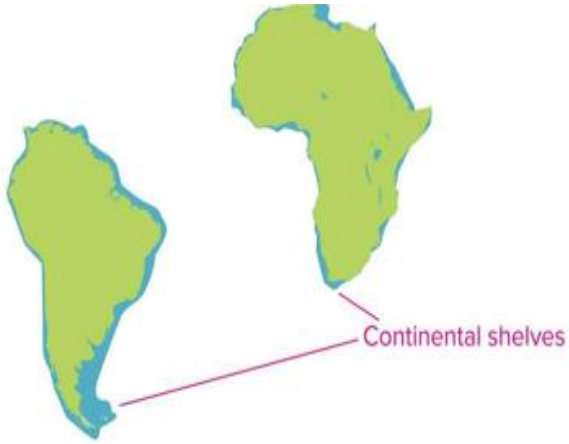

2-What was Pangaea?

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3-Describe Wegener's continental drift hypothesis?

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4-What evidence and clues used to test ane support Alfred Wegner's hypothesis?

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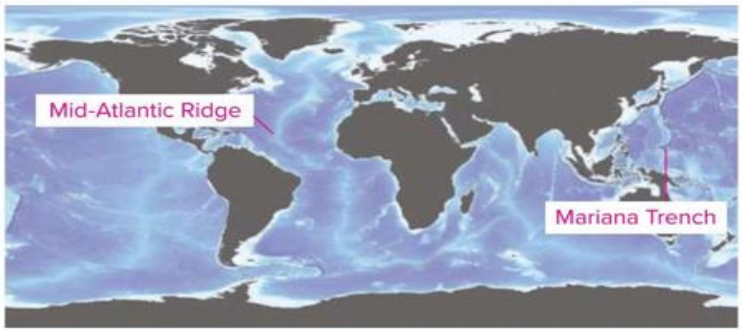
Question	2

Q2- Analyze the ocean topographic map by identify, classify and interpret various features visible on the ocean floor. Textbook, investigation, figures. 30, 32, 33

Examine the map. The different colors indicate changes in water depths. Light blue indicates shallower depths, dark blue indicates deeper depth. The land regions are shaded in black.



1-What is the light blue linear features that run along the ocean floors?

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2-What are ocean trenches?

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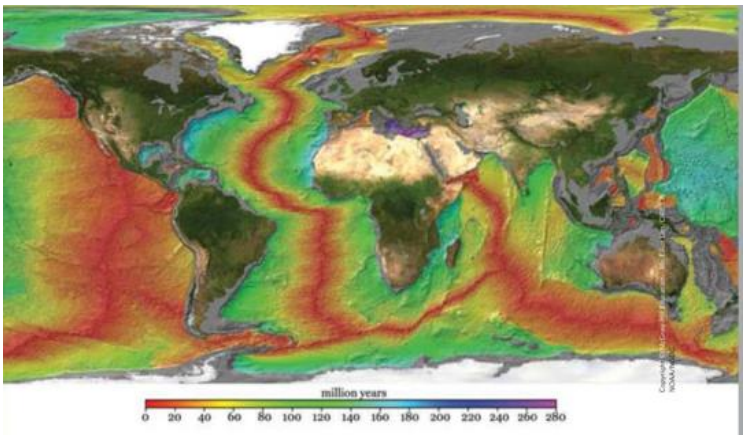
Scientists were able to determine the age of the ocean floor and create isochron maps. An isochron map is an imaginary line on a map that shows points that have the same age, they formed at the same time.



3-What pattern do you observe?

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4-In general, where is the youngest crust located?

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5-Compare the isochron map to the topographic map of the seafloor. Which seafloor features are associated with the young crust? What can infer form this?

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6-How does the age of the seafloor change as you move away from these features? What can you conclude from this evidence?……

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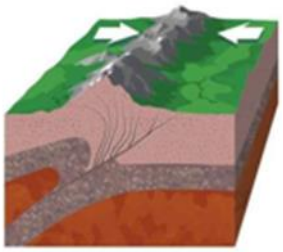
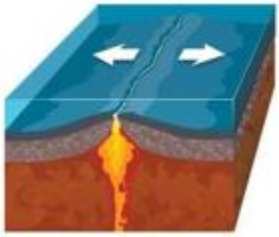
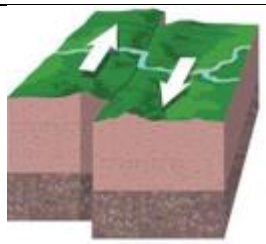
Question	3

Q3- Compare and contrast between plate boundaries according to: shape, movement, and location. Textbook, lab, investigation, table, figures. 48, 49, 52, 64

1-Compare between the different types of boundaries by completing the following table.

			
Name of the boundary			
Movement (motion)			
Location **Shape** **Example of a result of this type of plate motion** **Scale of example**			

Q3-Compare types of volcanoes and Explain how volcanic landscapes form and differentiate types of volcanoes on Earth and Hot spots Textbook, lab, investigation, table, figures 56, 58, 59

1-What is volcano?.....

2-how do you think volcanoes change Earth's surface?

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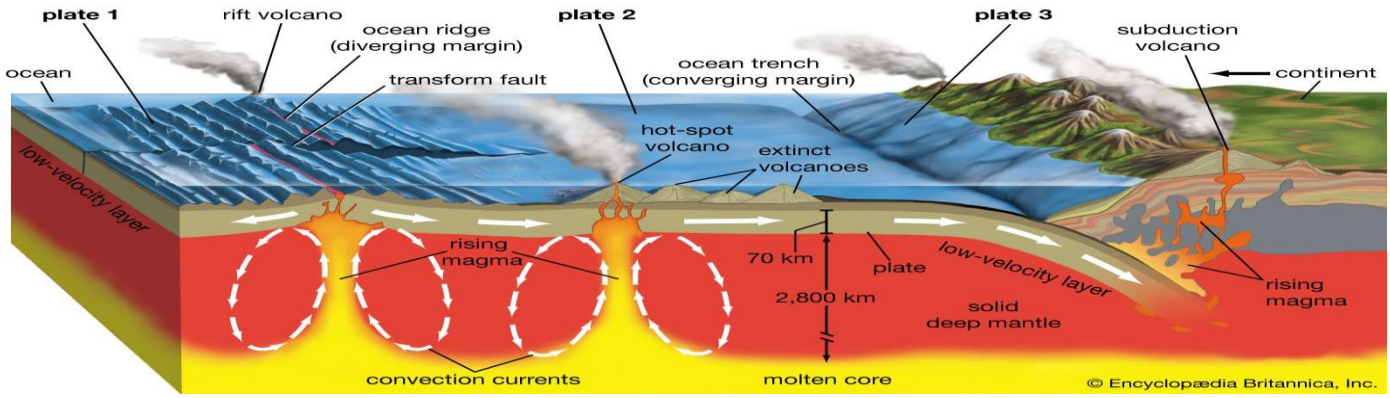
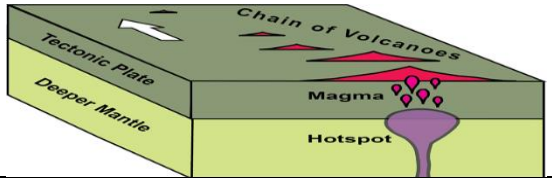


Types of volcanoes

Types of volcanoes	At Convergent boundary		At Divergent boundary	In middle of plate boundaries Hot spot volcano
	Ocean-ocean plates	Ocean-continental plates		
	Oceanic plates converge and one plate subducts	Oceanic plate subducts under a continental plate	As the seafloor slowly spreads apart along mid-ocean ridges, lava erupts into the rift formed by separating plates	forms over rising column of magma called **a mantle plume** in the middle of a tectonic plate
How volcanic landscapes form	These volcanoes emerge as islands. A curved line of volcanoes that forms parallel to plate boundary called **volcanic arc**	**Volcanic arc** form on land where an oceanic plate subduct under a continental plate	more than 60% of all volcanic activity on earth occurs along mid ocean ridges. This lava takes the form of giant pillow called **pillow lava** Eruptions tend to be nonexplosive.	A volcano form above the plume. The tectonic plate continues to move, and **a chain of volcanoes forms.** If they get large enough, the become islands such as the Hawaiian islands.



Question	4

Q4- Complete the rock cycle and relate types of rocks (sedimentary, Igneous and Metamorphic) together through the processes of weathering. Textbook, investigation, summarize it. 118, 119, 122

1-Define rock cycle?

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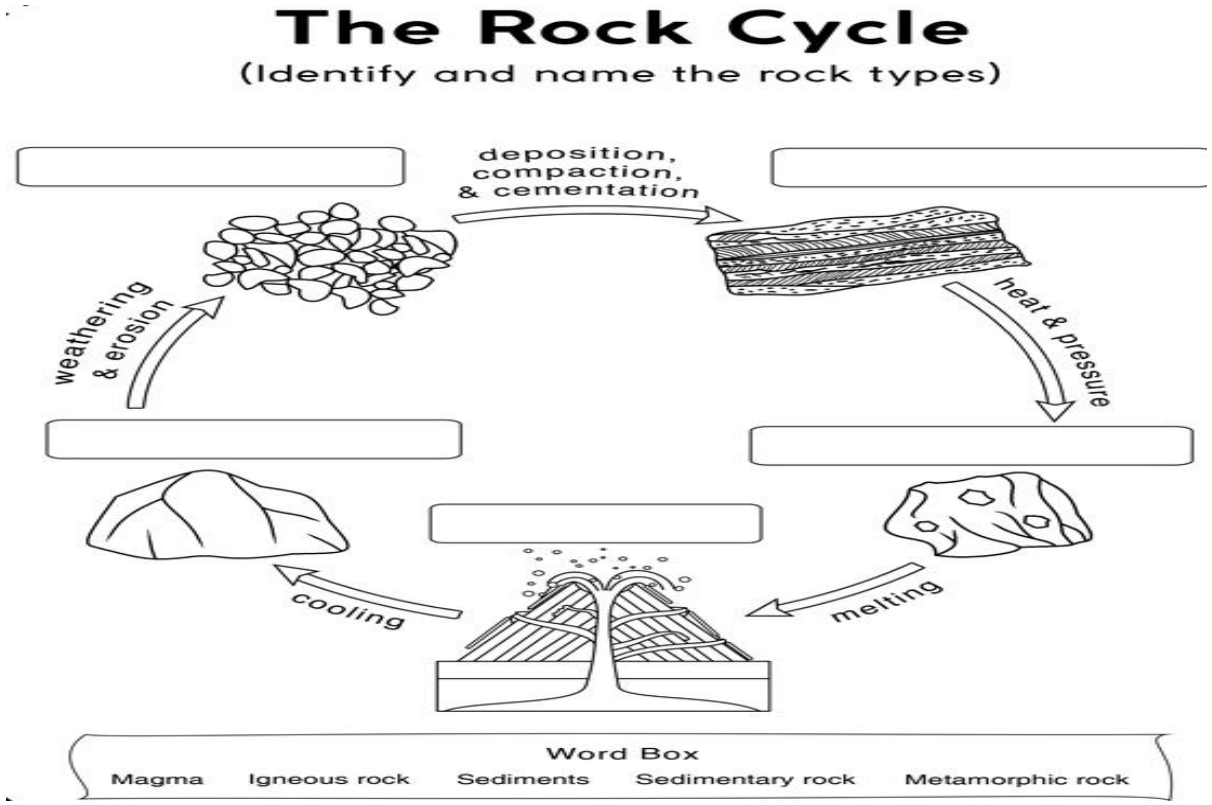
2-The energy that drives these forces is derived from the ……..….. and ……

3- Complete the diagram using the word box.



4- How to relate types of rocks (sedimentary, Igneous and Metamorphic) together through the processes of weathering?

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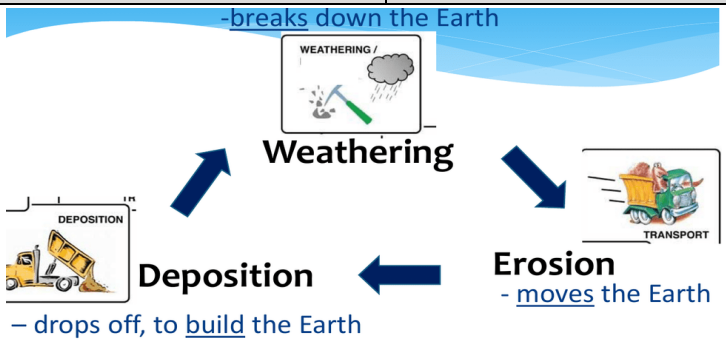
Question	5

Q5-List the processes that change Earth's surface (Weathering, erosion, deposition) and conclude how water and wind play a significant role in changing the Earth's surface and assign examples of land features resulted from these processes. textbook, figures, investigation 76, 80, 84, 85, 87, 88, 90, 92



1-What processes are responsible for changing Earth's surface?

process			
Definition			

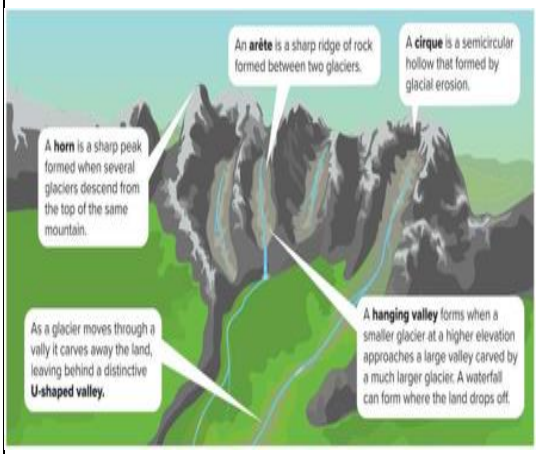
2- Briefly explain the factors that change the Earth's surface in the following figures.

A……..… **B……..**

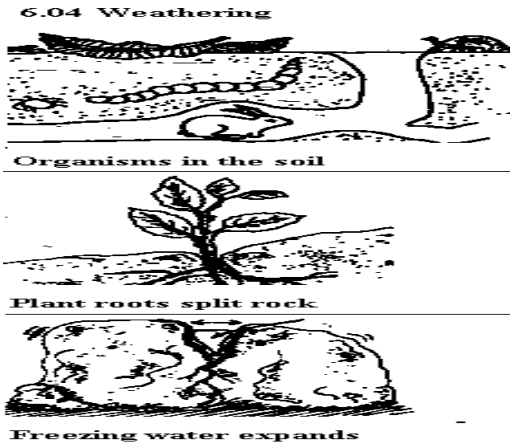
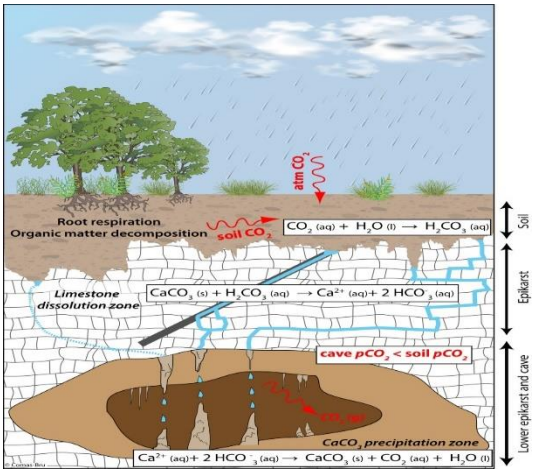
……. **……..**

……. **……**

Land features of erosion and deposition

Erosion factor	water	Wind	glacier
Land features by erosion	V-shaped valley meanders 	Arches  Scoured and sandblasted rock  Abrasion	Grooves- Horn- U-shaped valley Arete- Cirque- Hanging valley 
Land features by deposition	Delta	Sand dunes  Loess 	Till

Q5-Compare between chemical & physical change. textbook, figures, investigation -73

	Physical weathering	Chemical weathering
Definition		
Examples		

1. **Describe** how water, wind, and ice can change Earth's surface through the processes of weathering, erosion, and deposition.

Water	
Wind	
Ice	