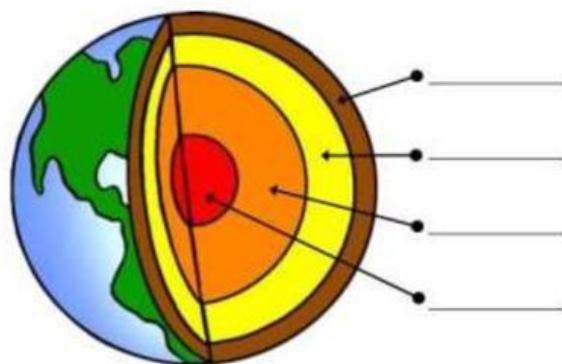


**Topic: Effect of Geosphere**

Vocabulary	Definition	Arabic	Picture
<b>Hot spot</b>	an area where molten rocks appear near the surface of the Earth	بقعة ساخنة: منطقة تظهر فيها الصخور المنصهرة بالقرب من سطح الأرض	
<b>Landslide</b>	when large amounts of rock and soil quickly move downhill due to gravity	انهيار أرضي: انهيار يحدث عندما تتحرك كمية كبيرة من الصخور والتربة بشكل مفاجئ إلى الأسفل بسبب الجاذبية الأرضية	
<b>Humus</b>	nonliving animal or plant material that adds nutrients to the soil and helps plants grow	الذبال: مواد حيوانية أو نباتية غير حية تعتبر مواد مغذية للترابة وتساعد النباتات على النمو	
<b>Minerals</b>	natural solid substances found in the Earth's layers	المعادن: مواد طبيعية صلبة توجد في طبقات الأرض	
<b>Soil</b>	a mixture of sand, clay, minerals, and humus that forms slowly over time as rocks break down	الترابة	

Q1 : Label layers of earth :



1. which is the rocky outermost layer that we live on?

.....

2. Which layer is made of hot, molten rock that flows?

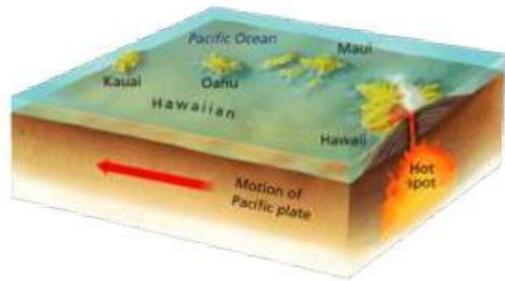
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3. Which layer is the hottest and made of solid, iron rock?

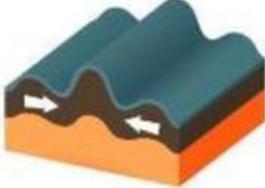
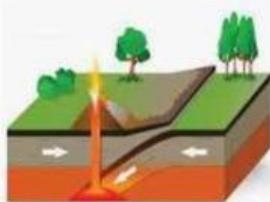
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## **Q2: Answer the questions :**

1. What is geosphere ? .....
2. What is molten rock ? .....
3. What is State of rocks in the crust ? .....
4. What is State of rocks in the mantle? .....
5. What is State of rocks in the inner core? .....
6. When mantle rises close to earth's surface is called .....
7. Which of the island is newly formed? .....
8. Which of the island is the older? .....
9. How does new islands are formed? .....



## **Q3: complete the table below.**

	Folded mountain	Fault block mountain	Volcano mountain
picture			
How is it form?			
Force on plates			
Direction of plates motion			
example			

## **Q4: Define the following terms:**

a) Geosphere :- \_\_\_\_\_.

b) Minerals “-” \_\_\_\_\_.

c) Humus “-----

**Q5: Complete the following sentence :**

Soil is made of -----, -----, ----- and -----.



**Q6: Complete the following table**

	Forest soil	Desert soil	Grassland soil
Amount of humus			
Minerals			
Growing of crops			

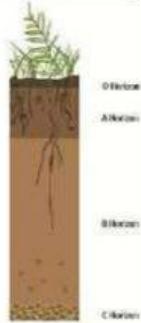
**Q7: Number the statements in order from 1 to 4 to explain how soil forms.**

----- Rain, wind, and plants slowly break down rocks to form sediments.

----- Bacteria and fungi break down dead plants and animals, adding humus to the soil.

----- Animals move to mix the sediments.

----- Humus adds nutrients to the soil to help plants grow.



1. Which of these would you be doing if you are interacting with the geosphere?

- A)rock climbing
- B)swimming
- C)riding in an airplane
- D)sailing

2. Anna goes to the same beach with her family every summer. This year she noticed that the beach was smaller than last year. What might have caused the beach to change over the years?

- A)A volcano erupted and lava flowed over the beach.
- B)The cold weather caused the beach to change.
- C)Wind and water eroded the beach.
- D)Oxygen in the air reacted with the sand.

3. .... is very hot, solid rock made mostly of iron. ( **core, crust, mantle** )

4. Which of the following is *not* part of Earth's geosphere?

- A) mountains
- B) soil
- C) rivers
- D) volcanoes

5. Explain what happens to the different Earth systems when a volcano erupts on an island.

.....

.....

.....

.....

6. Which of the following is not a contributing cause of a mudslide?

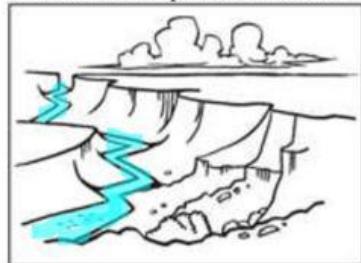
- A) heavy rains
- B) the pull of gravity
- C) hot, dry weather
- D) water absorbing in the soil

7. What is the name of the thin layer of solid rock that makes up the outermost part of Earth?

- A) core
- B) crust
- C) mantle
- D) biosphere

8. Different types of soil have different ..... , like color. ( **property , character** )

9. Below is a picture of a canyon.



Which best explains how the canyon may have formed?

- A) A volcanic eruption formed the canyon.
- B) The canyon was formed by animals and plants.
- C) Erosion from flowing water formed the canyon.
- D) Humans carved the canyon out of a mountain using small tools.

10. The Hawaiian Islands were formed when one of Earth's moving plates passed over a \_\_\_\_.

- A) natural bridge
- B) mineral deposit
- C) mountain
- D) hot spot

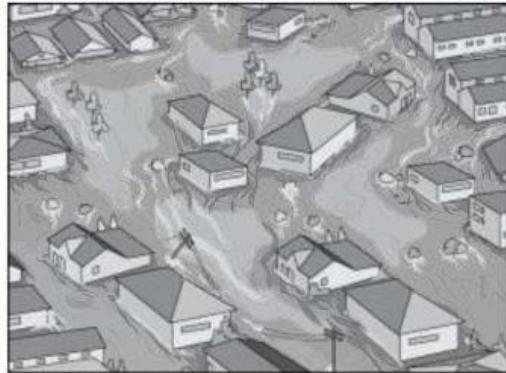
11. A(n) ..... volcano is one that had erupted recently. ( **active , dormant, extinct** )

12. Mountain building occurs as a result of Earth's plates moving in ..... [ **same direction, different direction** ]

13. Which **two** earth systems interact to cause landslides?

- A) geosphere incorrect
- B) biosphere
- C) atmosphere
- D) hydrosphere

14. Identify two of Earth's systems in this photo and explain how they are interacting.



1....., 2.....

15. Earth's outer core is made of Blank\_\_\_\_\_.

- A) solid rock
- B) liquid rock
- C) solid metal
- D) liquid metal

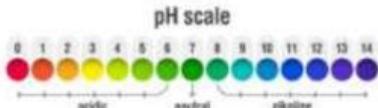
16. Ali completed investigation to find how soil affect pH of water. The table shows the below result.

Substance	pH of water
Water	7
Water + sand	5
Water + potting soil	6

Write a conclusion about the observation.

.....  
.....

A student measured the pH of three different soil samples as recorded below:



pH of Sample A	7
pH of Sample B	5.2
pH of Sample C	8

17. Which sample is alkaline? .....

18. which sample is neutral? .....