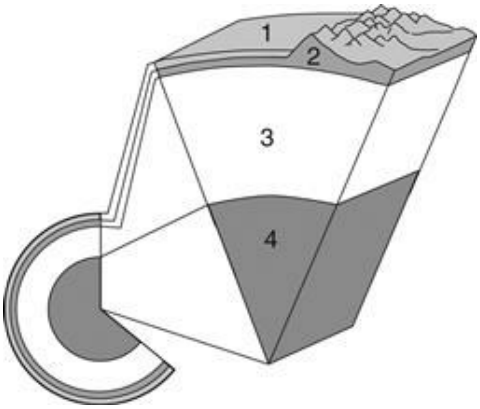
TEST NAME: **Lithosphere**
TEST ID: **194714**
GRADE: **06**
SUBJECT: **Life and Physical Sciences**
TEST CATEGORY: **School Assessment**

Student: _____

Class: _____

Date: _____

1. **A cross section of Earth is shown below.**



Which labeled part is thought to be composed primarily of iron and nickel?

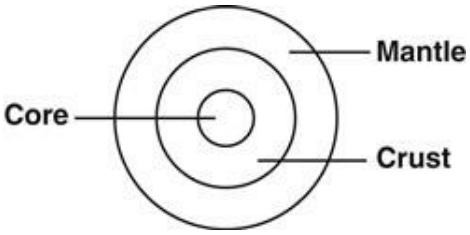
A. 1
B. 2
C. 3
D. 4

2. **Earth is made of different layers that have varying characteristics. Which is the thickest layer?**

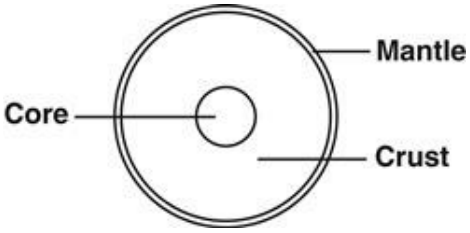
A. the mantle
B. the inner core
C. the outer core
D. the crust

3. **Which model best represents the internal structure of Earth?**

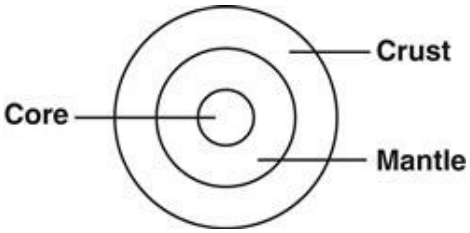
A.



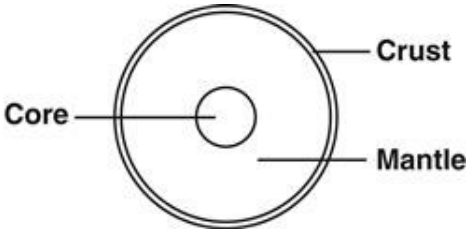
B.



C.



D.



4. **Which section of Earth is composed primarily of liquid metal?**

A. crust
B. mantle
C. outer core
D. inner core

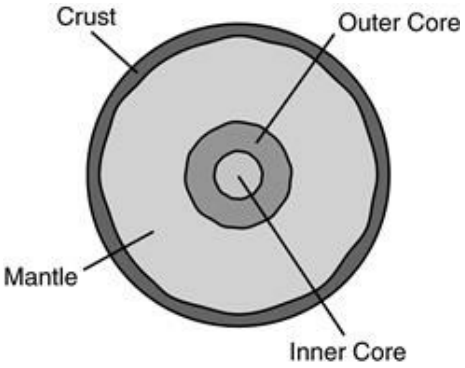
5. **The core of Earth is divided into two layers. The outer core is made of**

A. basaltic rocks.
B. silicate rocks.
C. solid iron and nickel.
D. molten iron and nickel.

6. **A student uses clay to construct a model of Earth. Which layer of the model should be the thinnest layer?**

A. the layer representing the mantle
B. the layer representing the outer core
C. the layer representing the inner core
D. the layer representing the crust

7. **The picture shows a model of the internal structure of Earth.**



Which evidence best supports this model?

A. evaluations of seismic data
B. direct observations of the layers
C. samples of rocks from the layers
D. explanations of the rock cycle

8. **The interior of Earth is made up of several physically different layers. The solid layer of Earth that moves over a viscous layer is called the**

A. core.
B. crust.
C. asthenosphere.
D. atmosphere.

9. **Between 40 and 50 million years ago, the landmass on the Indian plate collided with the landmass on the Eurasian plate. What formed when these landmasses collided?**

A. the Grand Canyon
B. the Great Plains
C. the Himalayan Mountains
D. the Mariana Trench

10. **Lithospheric plates have moved to form land formations on the Earth's surface. Which land formation occurs as a result of the plates folding upon one another?**

A. an earthquake
B. a mountain range
C. a river
D. a volcano

11. **An oceanic plate subducts under a continental plate. Which of these landforms most likely results from the interaction of these plates?**

A. volcanic mountains
B. transform boundaries
C. continental shelves
D. normal faults

12. **Which type of evidence would a geologist need to support plate tectonic theory?**

A. plant fossils that are similar in size
B. the weathering and erosion of coastlines
C. new crust formed by the sea floor spreading
D. rocks with different physical appearances

13. **Which diagram shows the relative direction of tectonic plate movement that forms rift zones?**

A.
B.
C.
D.

14. **Which geologic process most likely caused the formation of the Mount St. Helens Volcano?**

A. converging boundaries
B. diverging boundaries
C. transform faults
D. rift zones

15. **Which best explains the cause of the geysers formed in Yellowstone National Park?**

A. erosion
B. earthquakes
C. volcanic activity
D. artesian springs

16. **Which event most likely takes place as the result of crustal movement along transform boundaries?**

A. earthquakes
B. volcanic activity
C. mountain building
D. trenches

17. **How do the nutrients necessary for plant growth get into the soil?**

A. The soil absorbs sunlight.
B. Water filters through the soil.
C. Organic matter is decayed in the soil.
D. The soil is exposed to air.

18. **The table shows some of the characteristics of the soil in an area of land.**

Characteristics

Surface Area	Soil Color	Soil Content	Texture
Flat	Dark brown	Humus, sand, and clay	Gritty

Which characteristic of this area indicates that the soil was formed as a result of the interaction between organisms and their environment?

A. The area is flat.
B. The soil color is dark brown.
C. The soil contains humus.
D. The soil feels gritty.

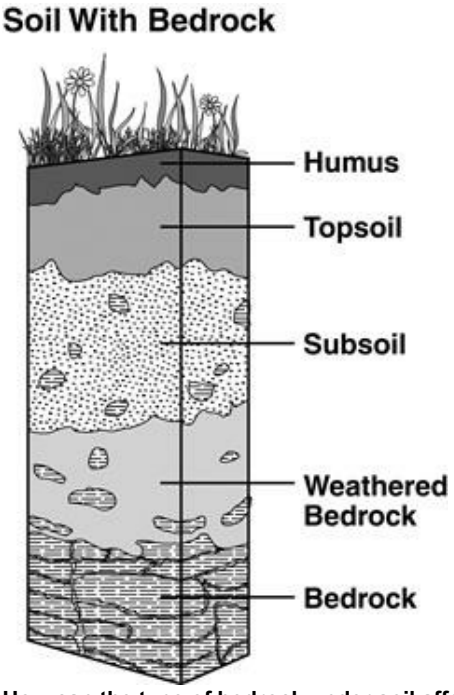
19. **Which soil component has the least capacity for holding water?**

A. silt
B. clay
C. sand
D. humus

20. **Soil color is closely related to its content. Which element causes soil to appear red?**

A. iron
B. silicon
C. calcium
D. magnesium

21. **This diagram shows a layer of bedrock under topsoil.**



How can the type of bedrock under soil affect the characteristics of the soil?

A. by preventing soil erosion
B. by absorbing excessive rainwater
C. by contributing small rock particles to the soil
D. by providing surface area for nutrient accumulation

22. **Soil that drains slowly most likely has a high amount of**

A. ash.
B. sand.
C. clay.
D. peat.

23. **A glacier retreats leaving bare rocks. Lichens begin to live on the rocks. The lichens produce an acid that starts to break down the rocks. How will this process affect the environment?**

A. It will put acid into the lakes and ponds.
B. It will begin the process of building soil.
C. It will prevent the carbon cycle from occurring.
D. It will prevent bacteria from invading the ecosystem.

24. **Soil will pack down over time which decreases the ability of the soil to hold water. Which animals would best help the soil hold water?**

A. earthworms making tunnels under the surface
B. cattle making depressions with their hooves
C. horses making trenches when they gallop
D. sheep pulling up plants by their roots

25. **What most likely happens to soil when crops are not rotated from year to year?**

A. The soil nutrients are depleted.
B. The soil fertility increases.
C. The soil becomes more porous.
D. The soil erodes less rapidly.