**Chapter 3**

**The Surface and Interior of the Earth**

1. Make a model of volcano with flowing lava.
2. Collect some different rocks and try to classify them into Metamorphic, Sedimentary and Igneous rock with the help of teacher.
3. Fill in the blanks
4. The surface of the earth constitutes great \_\_\_\_\_\_\_\_\_\_ of physical feature.
5. The\_\_\_\_\_\_\_\_ is the shaking and trembling of earth’s surface.
6. The interior of earth is made up of three layers –the Crust, the \_\_\_\_\_\_\_\_ and the core.
7. The cooling and solidification of magna can take place inside the earth leading to formation of intrusive \_\_\_\_\_\_\_\_ rocks.
8. A rock has single or a combination of several \_\_\_\_\_\_\_\_\_\_\_ in addition to the mass of earth material.
9. Minerals are identified on the basis of their colour, \_\_\_\_\_\_\_\_\_\_ and lustre.
10. Beneath the\_\_\_\_\_\_\_\_\_ is a very thick layer of rocks called the Mantle.
11. Igneous rocks are also called \_\_\_\_\_\_\_\_\_\_\_\_\_ rocks as they were formed first over the earth’s surface.
12. Multiple choice questions
13. There are \_\_\_\_\_\_\_\_\_ main types of seismic waves.
14. 3 b) 2 c) 4 d) 5
15. The innermost part of the earth is
16. Crust b) Mantle c) core d) none of the above
17. The rock known as primary rocks are
18. Sedimentary b) Igneous c) metamorphic d) none of the above
19. \_\_\_\_\_\_\_\_\_\_\_ rocks are stratified rocks.
20. Sedimentary b) Igneous c) metamorphic d) none of the above
21. The mineral known as the hardest substance is
22. Graphite b) Diamond c) Lead d) Bauxite
23. Give one word or technical term for the following
24. A scientist who study earth:
25. The level of the Ocean surface between the level of mean high tide and low tide:
26. A wave of energy generated by an earthquake:
27. Rocks that are originally igneous or sedimentary get changed in character and appearance due to heat and pressure are :
28. The hot material that flows out of cracks in earth
29. What is mean sea level?
30. On what is our knowledge about earth’s interior based on?
31. What is an earthquake? Where is its origin located?
32. How is P-wave different from S-wave?
33. Name the three layers of the earth.
34. Write a short note on the crust.
35. Differentiate Mantle from the Core.
36. What are rocks?
37. What is thickness of core? What is it rich in?
38. What happens when solid rock into molten state?
39. What happens to lava when it comes out?
40. Name the three types of rocks. Give 2 example of each type
41. Why are igneous rock known as primary rocks? How are they formed?
42. How are sedimentary rocks formed?
43. Why are sedimentary rocks known as stratified rocks?
44. Coal, oil and natural gas are known as fossil fuel, justify
45. How igneous and sedimentary rocks get transformed into metamorphic rocks?
46. What are minerals? How are they identified?
47. Complete the cycle

Sedimentary rock

Sediment

Volcanic Eruption

**Chapter4**

**Air around Us**

1. In many cities in India when you get up in the morning you see lot of smoke. Write a paragraph on what is causing it and how does it affect the human beings
2. This winter most of the north and north-western India is experiencing a severe cold wave. With help of internet or newspaper make a table showing the temperature of a city in the above mentioned area for last week of December 2020 .
3. Fill in the blanks
4. \_\_\_\_\_\_\_\_\_\_\_\_ is very important of all living organisms.
5. \_\_\_\_\_\_\_\_\_\_\_\_\_ is the densest layer of the atmosphere.
6. Total absence of water vapours and dust particles in \_\_\_\_\_\_\_\_\_ prevents formation of cloud in this layer.
7. \_\_\_\_\_\_\_\_\_\_\_ is second major gas in volume which makes up 21% of the air.
8. \_\_\_\_\_\_\_\_\_\_\_\_\_ has property to absorb heat and increases temperature of atmosphere.
9. The smoke particles when combine with fog form \_\_\_\_\_\_\_\_.
10. The pressure of air is measured using \_\_\_\_\_\_\_\_\_\_\_.
11. Wind always flows from \_\_\_\_\_\_\_\_\_\_\_ pressure to \_\_\_\_\_\_\_\_\_ pressure area.
12. Multiple choice questions
13. The densest layer of the atmosphere is
14. Troposphere b) Stratosphere c) mesosphere d) Thermosphere
15. Special form of oxygen called ozone is found in
16. Mesosphere b) Ionosphere c) Stratosphere d) Thermosphere
17. \_\_\_\_\_\_\_\_\_\_\_ gas is released during respiration.
18. Oxygen b) nitrogen c) Carbon dioxide d) Ozone
19. As we go higher on the mountain ear pop because of
20. Decrease in temperature b) decrease in air pressure c) increase in air pressure d) a and b
21. The wind always flows from
22. High pressure to low pressure b) low pressure to high pressure c) at same pressure d) none of the above
23. Match the following

|  |  |
| --- | --- |
| Column A | Column B |
| State of atmospheric condition over a long period that covers large area | Ozone |
| Flow or movement of air | Ionosphere |
| Lower layer of Thermosphere full of ions | Stratosphere |
| Layer with clean and calm air | Wind |
| Acts as a filter and absorbs UV rays | Climate |

1. What is atmosphere?
2. What will happen on earth if there is no air?
3. Name the four layers of atmosphere.
4. Why is weather continuously changing in Troposphere?
5. Why is temperature low in high mountains?
6. What helps the aircrafts to fly in lower layer of Stratosphere?
7. What is tropopause?
8. What are ill effects of smog?
9. State the importance of ozone layer found in stratosphere.
10. Name the layer where meteors burn.
11. What enables the Radio waves to be sent in thermosphere?
12. Name the major gases found in air up to an altitude of 90 km above earth.
13. How is the level of oxygen and carbon dioxide maintained in air?
14. Increase in carbon dioxide leads to global warming, explain
15. Name 3 major pollutants of air.
16. State the major causes of air pollution and its effects.
17. Why do ears pop on going up the mountain or on travelling in air?
18. Differentiate weather from climate.
19. What is wind? Explain the phenomenon of monsoon.
20. With diagram briefly explain the mechanism of rainfall.
21. What will happen if rainfall is scarce or low?