**Chapter 17**

**Stars and Solar System**

1. Two friends observe a bright object in the sky at night that was not twinkling. One friend says that object is a star and other says it is a planet, who is correct among the two and why?
2. Name an ancient astronomical observatory built by Maharaja Jai Singh of Jaipur. Write down why was this built by him?
3. The school organises a star-gazing program on a clear cloudless night. Note down the various stars and planets that are observed in the sky.
4. Fill in the blanks
5. A faint band of light running across the heavens is the \_\_\_\_\_\_\_\_\_\_\_.
6. The word planet is of Greek origin and means\_\_\_\_\_\_\_\_\_.
7. We sometimes observe bright lines of light flashing across the sky for very short duration, we call these as \_\_\_\_\_\_\_\_\_ stars.
8. \_\_\_\_\_\_\_\_ are very hot and huge heavenly objects made up of very hot gases.
9. The \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ is the third brightest star in the night sky.
10. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is group of stars that appears to form recognisable pattern.
11. On a full moon day the \_\_\_\_\_\_\_ lies between the moon and the \_\_\_\_\_.
12. \_\_\_\_\_\_\_\_\_\_ is the brightest object in the sky after the sun and the moon.
13. \_\_\_\_\_\_\_\_\_ are relatively small and icy celestial bodies revolving around sun.
14. State whether given statements are true/ false
15. A geostationary satellite appears to remain fixed with particular point on the earth.
16. Ceres is the smallest of the asteroids discovered till date.
17. Venus is even hotter than mercury though it is relatively further away.
18. The Earth appears blue and green from outer space as the light is reflected from the mountain.
19. The moon is our nearest neighbour in space and is a natural satellite of the earth.
20. Multiple choice questions
21. The Jovian planets are very large in size and are made up of \_\_\_\_\_\_\_\_.
22. Solid and rocky surface b) largely of gases c) largely of fluids d) none
23. \_\_\_\_\_\_\_\_ is known as the morning or evening star.
24. Venus b) Mercury c) Earth d) Jupiter
25. On a full moon day
26. Earth lies between the moon and the sun b) Moon lies between the earth and the sun c) Sun lies between the earth and the moon
27. The colour of the star is determined by its \_\_\_\_\_\_\_\_\_\_\_\_.
28. Surface temperature b) nature of the surface c) size
29. Define the following terms
30. Shooting stars
31. Orbit
32. Planet
33. Constellations
34. Solar system
35. Photosphere
36. Give reasons for the following
37. Even though mercury is nearer to the sun Venus is hotter than mercury.
38. It is difficult for water to exist in liquid state on Mars.
39. The northern hemisphere of Uranus remains in a four –decade long period of darkness.
40. Comets are visible only when they are near the sun.
41. Hailey’s comet is known as periodic Comet.
42. The moon appears to change shape.
43. India’s maiden mission to a planet X launched on 5 November 2013 by ISRO, was significant step in furthering the country’s space ambition.
44. Name the planet X
45. Write two features of this planet.
46. Which 2 conditions make it impossible for water to exist in liquid state on this planet?
47. Name its two natural satellites.
48. I saw full moon on a particular day. After how many days will I be able to see full moon again?
49. What makes it possible different phases of moon on different days?
50. Planets never collide with each other while revolving around the sun, why?
51. Name the following
52. Star nearest to the earth
53. Brightest star in the night
54. Star present in the northern hemisphere and appears to be fixed in one position
55. A constellation having 7 stars, four of these appear to be arranged as quadrilateral.
56. Name the astronaut who was first one to land on moon.
57. Largest asteroid
58. Artificial satellite
59. Why are the geostationary satellites known as equatorial orbits?
60. What makes the meteors shine brilliantly like fireballs?
61. What makes Uranus appear to have blue-green colours?
62. A year on Jupiter is much longer than that on earth, why?
63. State the conditions found on earth that makes it possible for life to sustain and exist on earth.
64. Name the planet other than earth that has green house effect. What happens on the planet because of this effect?
65. Why Pluto is no longer considered a planet?
66. Draw a diagram of Ursa Major and Cassiopenia.
67. Why does pole star appear to have fixed position?
68. Draw a diagram of the solar system showing the relative position of all the planets with respect to objects.
69. Complete it

A day on any planet is equals to time taken by it to complete its \_\_\_\_\_\_\_\_\_\_\_ around its axis and a year on the other hand equals to time taken by planet to complete one \_\_\_\_\_\_\_\_\_\_\_ in its \_\_\_\_\_\_\_\_ around the sun.

1. What causes the summer and winter on the earth?

**Chapter 18**

**Earthquake**

1. A student was reading an article and he read there is pacific ring of fire on the earth. He was very confused and went to his teacher to understand what exactly is this pacific ring of fire? Using the information from net suggest what answer did he get from his teacher
2. Rahul was sitting on a table chair and writing something. Suddenly he felt his chair was rocking and paper on which he was writing was moving away. Can you say what natural phenomenon is occurring? What precautions should be taken by him?
3. Fill in the blanks
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a non-artificial event that is not due to humans.
5. \_\_\_\_\_\_\_\_ and cyclones are meteorological phenomena.
6. An \_\_\_\_\_\_\_\_\_\_\_ is a sudden tremor or movement of earth’s crust.
7. \_\_\_\_\_\_\_\_ are smaller earthquakes that happen in the same place where large earthquakes occur.
8. When earthquake occur beneath the ocean floor. Such earthquakes can lead to \_\_\_\_\_\_\_\_.
9. The outermost layer of earth is broken into number of plates known as \_\_\_\_\_\_\_ plates.
10. The point of origin of the earthquake, is the point at which tension is released, as its \_\_\_\_\_\_\_\_\_\_\_\_.
11. \_\_\_\_\_\_\_\_\_ is instrument used to find source of seismic waves.
12. \_\_\_\_\_\_\_\_\_ scale is used to measure the strength of earthquake.
13. State whether given statements are true or false
14. Geologists use instrument such as[[1]](#endnote-2) seismometer to find out source of seismic waves.
15. The earthquake strike suddenly and violently with warning.
16. All the buildings in seismic zones need to be designed so that they can withstand major tremors.
17. Earthquakes cannot cause floods and landslides.
18. Major earthquakes usually do not occur alone.
19. Define the following
20. Earthquake
21. Foreshocks
22. Tectonic plates
23. Seismometer
24. epicentre
25. Multiple choice questions
26. Which one of them is a geological phenomenon?
27. Thunderstorm b) volcanic eruption c) earthquake
28. A sudden tremor or movement of the earth’s crust that lasts for very short time is\_\_\_\_.

a)Earthquake b) Volcano c) Tremor d) Focus

C. Which of them is not a damaging effect caused by earthquake?

a) can cause damage to buildings, bridges, dams b) may cause great loss f life c) can cause floods and landslides d) may cause volcanic eruptions

D. Which magnitude of earthquake is generally not felt but recorded on seismometer?

a) 8.5 b) 2.5 c) 6 d) 7

1. Give reasons for the following
   1. In the seismic zone tall buildings should have their fire-fighting system in order.
   2. If inside a building when earthquake occurs should stay in the building.
   3. We hear news about earthquakes only once in a while even though they occur all the time.
   4. The tectonic plates are moving around slowly- just a few millimetres every year.
2. Differentiate between meteorological and geological phenomena.
3. Name the natural geological phenomenon we cannot predict.
4. Major earthquakes usually do not occur alone, explain.
5. List the damaging effects caused by earthquakes.
6. When did major tsunami occur in Indian Ocean?
7. When do tremors occur on the earth?
8. What is the cause of an earthquake?
9. What happens when the tectonic plates try to slide past each other?
10. What gives rise to seismic waves?
11. How is epicentre different from focus?
12. What is a Richter scale? If there is increase of three in magnitude on the scale what happens?
13. How can people living in seismic zone reduce or minimise the damage caused by earthquakes?
14. What precautions people living inside a building take during earthquake?
15. List safety precautions should be taken after earthquake.

1. [↑](#endnote-ref-2)