Atomic Energy Education Society – Distance Learning Programme

Class – **VIII** Subject – **Mathematics**

Chapter – **7**: **CUBES AND CUBE ROOTS**

 **Worksheet -2 (Module 2/3)**

1. **Fill in the blanks** :
2. The least number to be multiplied by 9 to make it a perfect cube is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The least number by which 72 should be divided to make it a perfect cube is \_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Each prime factor appears \_\_\_\_\_\_\_\_\_\_\_\_ times in its cube.
5. If *a* ends in 9, then *a3*ends in \_\_\_\_\_\_\_\_\_\_\_.

**Do as directed**:

1. Find the smallest number by which 243 must be multiplied to obtain a perfect cube.
2. Is 675 a perfect cube? If not, find the smallest number by which 675 must be multiplied to obtain a perfect cube.
3. Find the smallest number by which 128 must be divided to obtain a perfect cube.
4. Is 192 a perfect cube? If not, find the smallest number by which 192 must be divided to obtain a perfect cube.
5. If one side of a cube is 15m in length, find its volume.
6. Check whether 15625 is a perfect cube by using prime factorisation.
7. Using prime factorisation, check whether 9720 is a perfect cube.
8. Write 512 as the sum of consecutive odd numbers.
9. How many consecutive odd numbers will be needed to obtain 133?
10. Express 93 as the sum of consecutive odd numbers.
11. Write the prime factorisation of cube of 15.

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