

CUBE AND CUBOID

Direction (1 to 7):- After colouring a cube of $4 \times 4 \times 4$ cm. side with yellow. After that it cut into 1cm small side cubes. Then answer the following question?

1. How many total number of small cubes are there?
 (a) 16 (b) 64
 (c) 8 (d) 27
2. Total number of small cubes are on three surface coloured—
 (a) 64 (b) 8
 (c) 16 (d) 25
3. How many small cubes which are two surface coloured?
 (a) 24 (b) 36
 (c) 48 (d) 64
4. How many small cubes we have which atleast are two surface painted?
 (a) 64 (b) 36
 (c) 32 (d) 1
5. Number of small cubes which are coloured with single surface?
 (a) 24 (b) 36
 (c) 48 (d) 64
6. Number of colourless cubes are?
 (a) 8 (b) 27
 (c) 25 (d) 4
7. Number of cubes which is atleast one surface coloured?
 (a) 64 (b) 8
 (c) 56 (d) 16

Direction (8 to 14):- A bigger cubes of $9 \times 9 \times 9$ cm size is coloured all surface with green. After that it is cut into three inches small cubes. Give the following answer?

8. Total number of small cubes are?
 (a) 27 (b) 729
 (c) 216 (d) 36
9. Number of small cubes which have three surface painted?
 (a) 9 (b) 3
 (c) 8 (d) 27
10. Number of small cubes with two surface coloured?

- (a) 8 (b) 12
 (c) 27 (d) 729

11. Number of small cubes with atleast two surface coloured?
 (a) 20 (b) 12
 (c) 27 (d) 8
12. Number of small cubes which are only one side coloured?
 (a) 8 (b) 12
 (c) 6 (d) 26
13. Total number of small colourless cubes are?
 (a) 6 (b) 12
 (c) 27 (d) 1
14. Number of small cubes which are atleast one surface coloured?
 (a) 27 (b) 26
 (c) 20 (d) 1

Direction (15 to 21):- $7 \times 7 \times 7$ cm. size of a cube is coloured with red. After coloured it is cut into 1cm side of small cubes?

15. Total number of small cubes?
 (a) 343 (b) 64
 (c) 216 (d) 49
16. Three surface coloured cubes are?
 (a) 6 (b) 8
 (c) 7 (d) 49
17. Number of small cubes which are coloured with two surface?
 (a) 56 (b) 150
 (c) 125 (d) 60
18. Number of small cubes which are coloured with atleast two surface?
 (a) 60 (b) 150
 (c) 68 (d) 16
19. Number of small cubes which are only one side coloured?
 (a) 150 (b) 60
 (c) 343 (d) 49
20. Total number of colourless cubes?
 (a) 150 (b) 125
 (c) 49 (d) 7
21. Number of small cubes which are atleast one

surface coloured?

- (a) 343 (b) 125
(c) 218 (d) 8

Direction (22 to 26):- After coloring a big cube yellow, it is divided into 216 equal small cubes.

22. How many small cubes could be achieved with three surface coloured?

- (a) 6 (b) 64
(c) 8 (d) 1

23. How many colourless cubes could be got—

- (a) 216 (b) 8
(c) 64 (d) 1

24. Only one side coloured cubes are—

- (a) 64 (b) 96
(c) 48 (d) 216

25. How many cubes will be with two surface coloured—

- (a) 48 (b) 64
(c) 96 (d) 8

26. How many cut will be required to divided the big cubes into equal small cubes—

- (a) 96 (b) 48
(c) 3 (d) 15

Direction (27 to 31):- Total area of a big cube is 1536 sq. cm. It is divided in such a way as that the area of one surface of small cubes is 4sq. cm.

27. How many small cubes can be made from the big cubes?

- (a) 8 (b) 512
(c) 196 (d) 64

28. The area of one surface of the bigger cubes?

- (a) 512 cm (b) 196 cm
(c) 256 cm (d) 64 cm

29. The area of total surface of small cubes is?

- (a) 64 cm² (b) 24 cm²
(c) 48 cm² (d) 512 cm²

30. Length of one side of the larger cubes is?

- (a) 16 cm (b) 24 cm
(c) 2 cm (d) 48 cm

31. How many cuts are required to divided the large cubes into small cubes?

- (a) 24 (b) 64
(c) 8 (d) 21

Direction (32 to 36):- A bigger cubes of size $3 \times 3 \times 3$ cm. is coloured opposite pair of surface by red, green and yellow respectively? Finally it divide small cubes of 1cm side?

32. Number of small cubes which must have mandatory all three surface coloured (red, green and yellow)?

- (a) 6 (b) 8
(c) 27 (d) 9

33. Number of small cubes which have two surface coloured with red and green?

- (a) 4 (b) 8
(c) 27 (d) 26

34. Number of small cubes which are coloured atleast yellow or atleast green?

- (a) 27 (b) 20
(c) 12 (d) 1

35. Number of small cubes which are coloured with only yellow?

- (a) 20 (b) 8
(c) 2 (d) 6

36. Total number of small cubes which have atleast one surface green?

- (a) 64 (b) 18
(c) 27 (d) 26

Direction (37 to 41):- A cubes of $8 \times 8 \times 8$ cm. side is coloured opposite surface with red, green and yellow. After that cubes is cut into two cm small cubes.

37. Number of small cubes which have three surface coloured with red, green and yellow?

- (a) 64 (b) 8
(c) 32 (d) 56

38. Number of small cubes which have two surface coloured with red and yellow?

- (a) 8 (b) 16
(c) 4 (d) 32

39. Number of cubes which are coloured by atleast red and yellow?

- (a) 16 (b) 24
(c) 64 (d) 32

40. Number of small cubes coloured with only green?

- (a) 32 (b) 16
(c) 8 (d) 20

41. Number of small cubes which have atleast one surface green?

- (a) 64 (b) 8
(c) 32 (d) 56

Direction (42 to 64):- A bigger cubes of $5 \times 5 \times 5$ cm. size coloured opposite pair of surface with red, green and yellow respectively. After that cube is cut into 1cm. small cubes. Then give the following answers.

- 42.** Number of small cubes which have two surface coloured and colours are red and yellow.
(a) 20 (b) 125
(c) 44 (d) 12
- 43.** How many cubes which have atleast green and yellow colour?
(a) 20 (b) 44
(c) 30 (d) 54
- 44.** Number of small cubes with one side coloured.
(a) 20 (b) 54
(c) 44 (d) 50
- 45.** Number of small cubes which coloured with only yellow.
(a) 8 (b) 60
(c) 18 (d) 54

- 46.** Number of small cubes which have atleast one side gree.
(a) 60 (b) 18
(c) 54 (d) 50

Direction (47 to 50):- A cube of $7 \times 7 \times 7$ cm. side is coloured with red, green, yellow, Black, pink and violet. Then it is cut into 1cm. small cubes.

- 47.** Total number of small cubes.
(a) 343 (b) 243
(c) 49 (d) 729
- 48.** Number of small cubes which have three side coloured.
(a) 343 (b) 8
(c) 64 (d) 60
- 49.** Number of small cubes which have two side coloured.
(a) 49 (b) 64
(c) 60 (d) 27
- 50.** Number of small cubes which are atleast two surface coloured.
(a) 60 (b) 64
(c) 65 (d) 68

ANSWERS

1. (b)	6. (a)	11. (a)	16. (b)	21. (c)	26. (d)	31. (d)	36. (b)	41. (c)	46. (d)
2. (b)	7. (c)	12. (c)	17. (d)	22. (c)	27. (b)	32. (b)	37. (b)	42. (d)	47. (a)
3. (a)	8. (a)	13. (d)	18. (c)	23. (c)	28. (c)	33. (a)	38. (a)	43. (a)	48. (b)
4. (c)	9. (c)	14. (b)	19. (a)	24. (b)	29. (b)	34. (c)	39. (a)	44. (b)	49. (c)
5. (a)	10. b)	15. (a)	20. (b)	25. (a)	30. (a)	35. (c)	40. (c)	45. (c)	50. (d)