

**GS FOUNDATION (2023-24) WORKSHEET 14**  
**&**  
**CSAT FOUNDATION 1.0 (2023-24) WORKSHEET 16**  
**CUBES AND DICE**

1. Two positions of a dice are shown below. Identify the number at the bottom when the top is '3'.



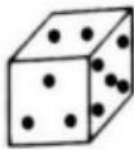
(i)



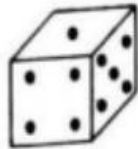
(ii)

- A. 2
- B. 4
- C. 5
- D. 6

2. What number of dots will be there on the face opposite to the face that contains 2 dots?



(i)



(ii)

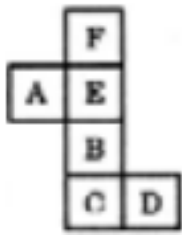
- A. 1
- B. 3
- C. 4
- D. 6

3. If 2 is at the bottom, which number is on top?



- A. 5
- B. 3
- C. 1
- D. 6

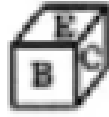
4. What is the correct cube upon folding following paper?



(1)



(2)

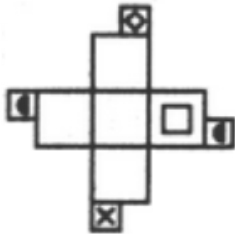


(3)



(4)

5. Choose the box that is similar to the box formed from the given sheet of paper.



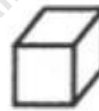
(1)



(2)



(3)



(4)

- A. 1, 2 and 3 only
- B. 2 and 3 only
- C. 1, 3 and 4 only
- D. 2, 3 and 4 only

6. Choose the box that is similar to the box formed from the given sheet of paper.





(1)



(2)



(3)



(4)

- A. 1 and 3 only
- B. 2,3 and 4 only
- C. 2 only
- D. 3 and 4 only

**For Q. 7 to 13:** A cube is painted with red, green and yellow colour on all the six faces such that opposite faces have the same colour. Now it is cut into 216 identical smaller cubes.

7. How many of these smaller cubes have all the three colours on them?

- A. 26
- B. 12
- C. 16
- D. 8

8. How many of these smaller pieces have red colour on them?

- A. 50
- B. 64
- C. 72
- D. 48

9. How many of the smaller pieces have only red colour on them?

- A. 24
- B. 28
- C. 32
- D. 16

10. How many pieces do not have a yellow colour on them?

- A. 150
- B. 80
- C. 144
- D. 180

11. How many smaller pieces have green and yellow colour on them?  
A. 32  
B. 40  
C. 36  
D. 24
12. How many of the smaller pieces have green and yellow but do not have Red?  
A. 24  
B. 16  
C. 12  
D. 18
13. How many of these smaller pieces have exactly one colour on them?  
A. 56  
B. 72  
C. 96  
D. 108

**Solutions:**

1. C  
2. A  
3. D  
4. B  
5. D  
6. C  
7. D  
8. C  
9. C  
10. C  
11. D  
12. B  
13. C