1. 1. A cube is painted on all its faces and then cut into 64 smaller cubes. How many smaller cubes will have exactly 2 faces painted?  
   (A) 12  
   (B) 18  
   (C) 24  
   (D) 30
2. 2. A cube is painted on all its faces and then cut into 125 smaller cubes. How many smaller cubes will have exactly 1 face painted?  
   (A) 48  
   (B) 54  
   (C) 60  
   (D) 66
3. 3. A cube is painted on all its faces and then cut into 216 smaller cubes. How many smaller cubes will have no faces painted?  
   (A) 64  
   (B) 80  
   (C) 96  
   (D) 112
4. 4. A cube is painted on all its faces and then cut into 343 smaller cubes. How many smaller cubes will have exactly 2 faces painted?  
   (A) 60  
   (B) 72  
   (C) 84  
   (D) 96
5. 5. A cube is painted on all its faces and then cut into 512 smaller cubes. How many smaller cubes will have exactly 3 faces painted?  
   (A) 6  
   (B) 8  
   (C) 12  
   (D) 16
6. 6. A cube is painted on all its faces and then cut into 1000 smaller cubes. How many smaller cubes will have exactly 1 face painted?  
   (A) 384  
   (B) 432  
   (C) 480  
   (D) 528
7. 7. A cube is painted red on all its faces and then cut into 729 smaller cubes. How many smaller cubes will have no faces painted?  
   (A) 243  
   (B) 275  
   (C) 301  
   (D) 343
8. 8. A cube is painted on all its faces and then cut into 1728 smaller cubes. How many smaller cubes will have exactly 2 faces painted?  
   (A) 120  
   (B) 132  
   (C) 144  
   (D) 156
9. 9. A cube with side 15 cm is painted on all faces and cut into smaller cubes of side 3 cm each. How many smaller cubes will have exactly 3 faces painted?  
   (A) 6  
   (B) 8  
   (C) 12  
   (D) 24

10. A cube with side 12 cm is painted on all faces and cut into smaller cubes of side 2 cm each. How many smaller cubes will have exactly 1 face painted?  
(A) 96  
(B) 108  
(C) 120  
(D) 132