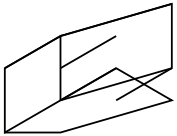
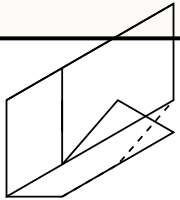
Push Tasks - 3D Reasoning

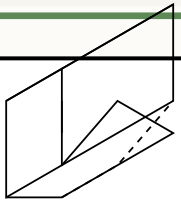


1. 2x2x2 hidden cubes?

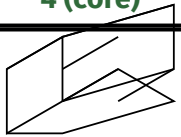
4 (core)



3. 5 visible + 2 hidden = ?

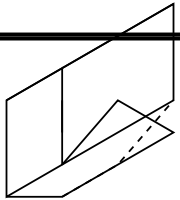


5. Prove >5 cubes needed.

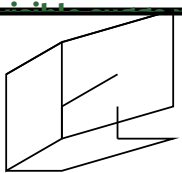


2. Painted faces on 2x2x2?

24 faces (6 faces × 4



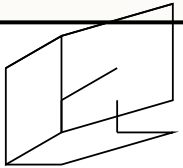
4. Mental 7-cube L shape hidden?



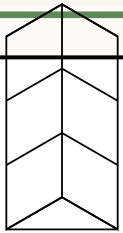
6. Volume 8, layers?

2 layers of 4

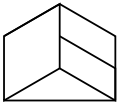
Push Tasks - 3D Reasoning



7. Volume 12, height 3, base area?

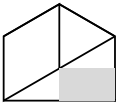


9. Volume 6 tower config?



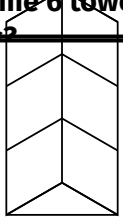
11. Prove 5 cubes.

3 base + 2 stack = 5

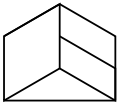


8. 1+1 hidden = total?

3



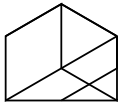
10. 5 cubes, 1 hidden =



12. Remove corner cube effect?

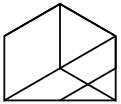
Volume drops to 4

Push Tasks - 3D Reasoning



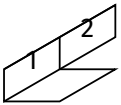
13. 3x3x2 total?

18



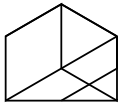
15. Painted 3 faces = corners?

8 corner cubes



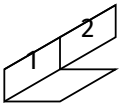
17. Formula explanation.

n(n+1)/2 per layer



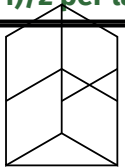
14. 3x3x2 hidden?

6



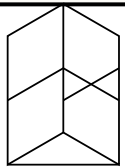
16. Width=3 height=3 depth=2 cubes?

12 (3+2+1 × 2)



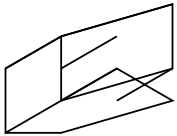
18. Height 5, volume 5 = 1x1x5?

Push Tasks - 3D Reasoning



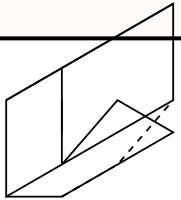
19. 4 cubes × 1.5cm = ?

6 cm

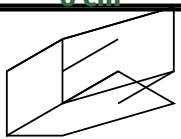


21. 2x2x3 hidden?

4

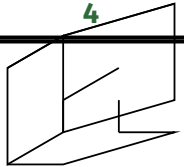


23. Bottom 4, top 2 total?



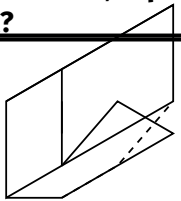
20. 12 cubes dimensions?

3x2x2



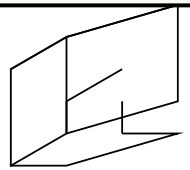
22. Volume 7, 3 hidden shape.

Base 4 + top 3 with 2



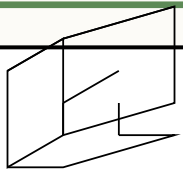
24. Bottom 3x2=6, top 2x1=2 total?

Push Tasks - 3D Reasoning



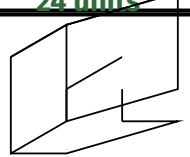
25. 2x2x2 surface area?

24 units^2



27. 1 painted face in 2x2x2?

0 (every cube has >1 face exposed)



26. 0 paint in 2x2x2?

0 (no interior cubes in