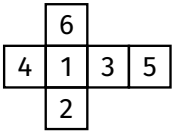
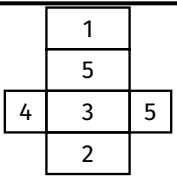
Push Tasks - Nets and SA



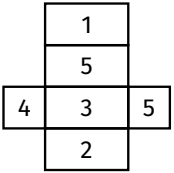
1. Invalid arrangements?

e.g. 4 in a row with 2 on same side



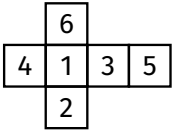
3. 3 pairs face areas?

15, 10, 6 each x 2



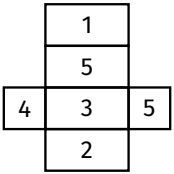
5. Max SA for V=96?

1x1x96 = 386 cm^2

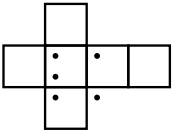


2. Why some fail?

Overlap when folded



4. Min SA for V=96?



6. Opposite sums to 7?

Standard: 1-6, 2-5, 3-4

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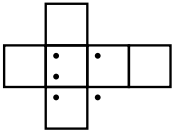
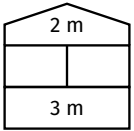


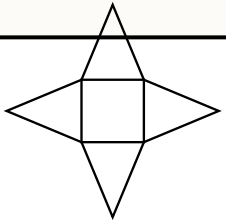
7. Different die net?

Any valid cube net

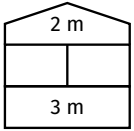


9. Different net?

Swap triangle positions

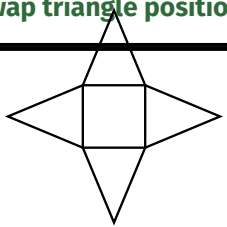


11. Pyramid SA: base 25, tri 15 each?

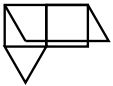


8. Triangles isosceles?

Two equal sides by



10. Triangles congruent?



12. Right triangle prism net?

Rectangles + 2 triangles

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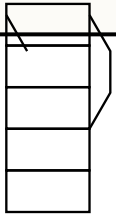
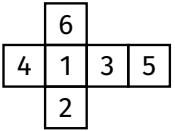


13. Hex prism SA side 2, len 5?

15. Why 4 triangles?

4 triangular faces

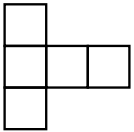


17. Shortest surface path?

Unfold net, draw line

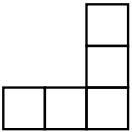
14. Tetrahedron nets?

2 distinct nets



16. V=12 no top SA?

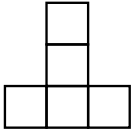
Depends on dimensions



18. L as cube net?

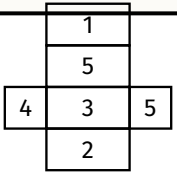
Only with 6th square

Push Tasks - Nets and SA



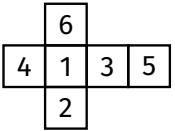
19. 2 non-box pentominoes?

I and X pentominoes



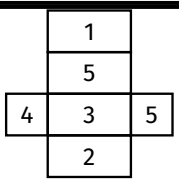
21. 4x6x4 min paper proof?

Closest to cube

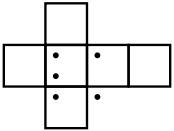


23. Shortest path?

Draw net, straight line

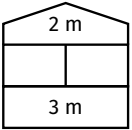


20. 1x1x96 max paper?



22. Min colours?

3 (opposite faces same)



24. Ribbon on faces?

3.8 m on faces

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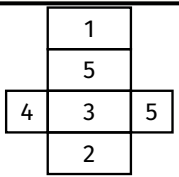
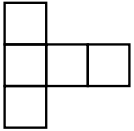


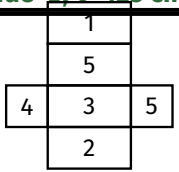
25. SA=150, side then V?

Side=5, V=125 cm^3



27. Open-top max volume?

Depends on card size



26. 8x3x2 wrap cost $0.05/$cm^2$?