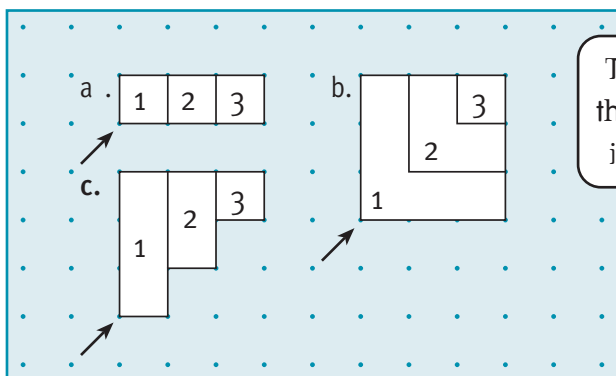


Winning Ways

You need: multilink cubes, isometric dot paper

ACTIVITY

Rawinia has to make a new winners' stand for the school sports day. She has drawn up 3 possible plans:



The numbers shown on the plans give the height, in cubes, of each level.



1. Rawinia makes models of the 3 stands, using multilink cubes. How many cubes does she need for each?
2. Draw an isometric drawing of each stand, looking at it from the direction shown by the arrow.
3. Stand **a** uses the fewest cubes, but Rawinia realises that if she makes this design, the winner could find it difficult to get to the top step when the second- and third-placed people are in position. Rawinia thinks stand **b** uses too many cubes.

She asks you to design a better stand: one that leaves space for people to get to the next level while keeping the number of cubes to a minimum.

Make a 3-dimensional (3-D) model of your winners' stand, using multilink cubes.

4. Draw the bird's-eye view and an isometric view of your stand. Comment on its features, including the number of cubes used, its accessibility, and its appearance.

